

# The validity and reliability of the Turkish version of the Revised Fibromyalgia Impact Questionnaire

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**Abstract** The Revised Fibromyalgia Impact Questionnaire (FIQR) attempts to address the limitations of the Fibromyalgia Impact Questionnaire (FIQ). As there is no Turkish version of the FIQR available, we aimed to investigate the validity and reliability of a Turkish translation of the FIQR in Turkish female fibromyalgia (FM) patients. After translating the FIQR into Turkish, it was administered to 87 female patients with FM. All of the patients filled out the questionnaire together with a Turkish version of the FIQ, hospital anxiety and depression scales (HADS), short form-36 (SF-36). The tender-point count (TPC) was also calculated from tender points identified by thumb palpation. One week later, FM patients filled out the Turkish FIQR at their second visit. The test–retest reliability of the Turkish FIQR questions ranged from 0.714 to 0.898. The test and retest reliability of total FIQR score was 0.835. Cronbach's alpha was 0.89 for FIQR visit 1 (the first assessment) and 0.91 for FIQR visit 2 (the second assessment), indicating acceptable levels of internal consistency for both assessments. The total scores of the FIQR and FIQ were significantly correlated ( $r=0.87$ ,  $P<0.01$ ). Significant correlations for construct validity were also obtained between the

FIQR total and domain scores and the FIQ, the HADS and the subscales of the SF-36 (FIQR total versus SF-36 physical component score and mental component score were  $r=-0.63$ ,  $P<0.01$  and  $r=-0.51$ ,  $P<0.01$ , respectively). The Turkish FIQR is a reliable and valid instrument for measuring health status in FM, showing sufficient reliability and construct validity. It may be utilized for both clinical practice and research use in the Turkish-speaking population in place of FIQ, since its Turkish version has problems in the wording, omissions, concepts, and scoring from the original FIQ.

**Keywords** Fibromyalgia · Health assessment · Quality of life · Reliability · Revised Fibromyalgia Impact Questionnaire · Turkey · Validation

## Introduction

Fibromyalgia (FM) is a chronic pain condition that is estimated to affect 2–7% of the general population. It has been reported that more than 90% of these patients are women [1, 2]. Because of the complexity of FM, the identification of the syndrome is still based on the classification criteria rather than diagnostic criteria established by the American College of Rheumatology (ACR) [3]. Symptoms, such as sleep disturbance, fatigue, stiffness, anxiety, and depressive symptoms are frequently associated with FM [4]. Patients with FM had a health status burden that was greater in magnitude compared to those with health conditions that are widely accepted as impairing [5]. Therefore, it is of great significance, from financial, ethical, and clinical perspectives, to improve outcomes for this group. There are currently no generally accepted objective clinical findings, radiographic abnormalities, or laboratory tests to assess the presence of FM and to measure FM severity. Therefore, validated question-

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naires measuring patients' subjective responses have continued to be important in the evaluation of FM patients so far.

A comprehensive assessment of the multiple symptom domains associated with FM and the impact of FM on multidimensional aspects of function should form a routine part of the care of FM patients. The functional limitations and disability of FM have been evaluated by different questionnaires. The Fibromyalgia Impact Questionnaire (FIQ) was first published in 1991, and it has been one of the most used questionnaires in clinical practice and research for the evaluation of the functional limitations and disability of FM [4, 6].

FIQ has been cited in over 300 articles and validated through its use in over 250 studies so far and translated into many languages, including Turkish [7, 8]. The Turkish FIQ was shown as a valid instrument for measuring health status in FM, showing sufficient reliability and construct validity [8]. However, over the 19 years since original FIQ publication, problems in regard to some aspects of its wording, omissions, concepts, and difficult scoring algorithm have become apparent [6, 7, 9].

The Revised Fibromyalgia Impact Questionnaire (FIQR) was developed by Bennett et al. [7] recently in an attempt to correct the limitations of the FIQ while retaining the essential properties of the original instrument [4, 7, 10]. They developed an online and paper-equivalent version of the questionnaire (FIQR). The basic domain structure of the original instrument of the FIQR in terms of function, overall impact, and severity of symptoms that are characteristic of FM are the same as in the FIQ. However, modified function questions and the questions that measure dyscognition, tenderness, balance, and environmental sensitivity, which were not part of the original FIQ, were added in the FIQR. Furthermore, some of the problems in the wording, omissions, concepts, and scoring of the original FIQ were corrected in the FIQR. All questions are graded on a 0–10 numeric scale.

Because of socio-economic and cultural differences in Turkey, female FM patients are generally housewives. Therefore, questions such as “work missed,” “drive a car,” and “job ability” in the Turkish FIQ have usually been left unmarked. This problem causes limitations and difficulties to accurately evaluate the results of the total and domain Turkish FIQ scores. Because some of the female patients answer mentioned questions and others do not, this may cause confusing results in clinical practice and research. Modified questions of the FIQR eliminate this negativeness, as well as problems in the wording, omissions, concepts, and long scoring procedure of the original FIQ. Complexity of FM syndrome necessitates us to evaluate the effects of FM on all of the domains thought to be important [11, 12]. Therefore, a valid, reliable, wide-scope, easy-to-use, and easy-to-score instrument is needed in clinical practice and research studies to communicate in the same terms while measuring the

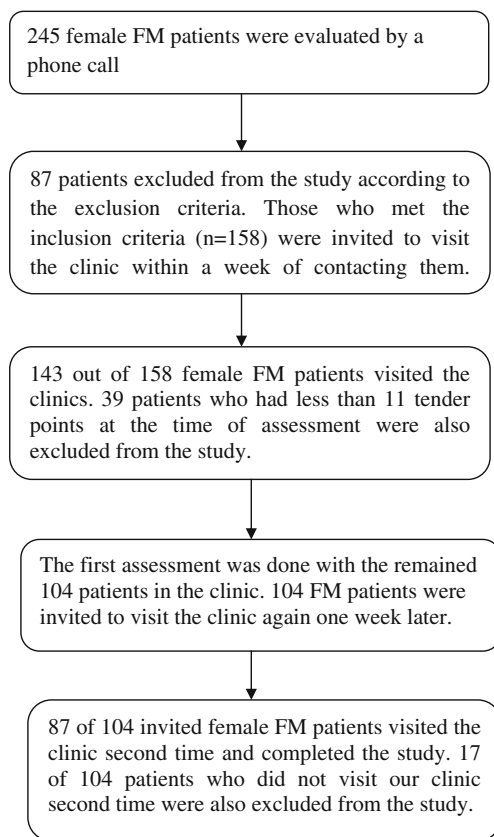
status, progress, and outcome of patients with FM, and to compare the results of different trials [7]. FIQR also has advantages over FIQ to assess impact of FM on nearly all of the domains considered important and to compare the results of studies using the older version with studies using the revised version [7].

For these reasons, and also because there is no Turkish version of the FIQR available, we sought to assess the validity and reliability of the FIQR for use among patients with FM in Turkey.

## Materials and methods

### Patient selection

We selected only female FM patients for the present study because we did not get sufficient numbers of male FM patients for the study in our outpatient and inpatient university hospital records. Initially, a list of 245 female FM patients aging 18–50 years old who were recorded in physical medicine and rehabilitation and rheumatology outpatient clinics in the University Hospital were evaluated by a phone call. Patients were excluded if they had severe depression, were receiving antidepressive drugs for the last 6 weeks, were pregnant, had less than 11 tender points, and were unable to read or write. Those who met the inclusion criteria ( $n=158$ ) were invited to visit the clinic within a week of being contacted. One hundred forty three out of 158 female FM patients accepted our invitation and visited the clinics. They were examined for the FM symptoms and clinical findings to confirm the diagnosis. Thirty nine patients who had less than 11 tender points at the time of assessment were also excluded from the study. The first assessment was done with the remaining 104 patients in the clinic. Before all of the questionnaires were given to the patients, the terms and the means of “anxiety” and “depression” were explained briefly to the patients by a study researcher (but not in the second visit). Then, all patients filled out the Turkish FIQR, FIQ, short form-36 (SF-36), and hospital anxiety and depression scales (HADS) at their first clinic visit. They were invited to visit the clinic again 1 week later. However, only 87 of 104 invited female FM patients visited the clinic the second time and filled out the Turkish FIQR at their second visit. Seventeen of 104 patients who did not visit our clinic the second time were also excluded from the study. Figure 1 shows the flow of participants into the study. Those who completed the study ( $n=87$ ) were those patients who were diagnosed with FM according to the ACR criteria within the last 8 years [3]. Demographic and clinical characteristics, including age, education level, duration of symptoms, and tender-point count (TPC) of FM patients who completed the study were also recorded.



**Fig. 1** Flow chart of the patient selection

## Measures

### Turkish version of FIQ

The Turkish version of the FIQ consists of 10 items, as in the original FIQ [7, 8]. The first item contains 10 questions on daily living activities, each of which is scored in a Likert format from 0 (always able to do) to 3 (never able to do). The scores are added and divided by the number of valid scores to yield one score for physical functioning. Item 2 is the number of days (0–7) the patient felt good during the past week. Item 3 asks for the number of days off work during the past week. Items 4–10 (ability to do job, pain, fatigue, morning tiredness, stiffness, anxiety, and depression) are measured by 100-mm visual analogue scales. The scores of each item are standardized on a scale ranging from 0 to 10, with higher scores indicating greater impairment. The 10 sub-items are added together and divided by the number of valid scores to yield one physical-functioning score. The Turkish FIQ was filled out by the patients only in their first visit.

### Turkish translation of the FIQR and its scoring

FIQR was translated into Turkish by a bilingual English teacher at Yuzuncu Yil University, Van, Turkey, and a study

researcher, after permission was obtained from Dr. Robert M. Bennett, Fibromyalgia Research Unit, Oregon Health & Science University, Portland, OR, USA. It was then translated back into English by another bilingual English teacher and a bilingual medical doctor at the university who had no prior knowledge about the instrument and the trial. No local arrangement was needed and made in the Turkish translation of the original FIQR. When comparing the original and the back-translation, we found no difference.

The Turkish translation of the revised FIQR has 21 individual questions as in the original FIQR [7]. All questions are based on an 11-point numeric rating scale of 0 to 10, with 10 denoting the worst possible condition. The FIQR is divided into three linked sets of domains as in the original FIQR: (a) “function” contains 9 questions versus 11 in the FIQ Turkish version, (b) “overall impact” (contains 2 questions, as in the FIQ Turkish version) but the questions now relate to the overall impact of FM on functioning and the overall impact symptom severity, and (c) “symptoms” (contains 10 questions versus seven in the FIQ Turkish version). The summed score for function (range 0 to 90) is divided by 3, the summed score for overall impact (range 0 to 20) is not changed, and the summed score for symptoms (range 0 to 100) is divided by 2. The total FIQR Turkish version score is the sum of the three modified domain scores. The Turkish FIQR was filled out by the patients in both visits.

### Hospital anxiety and depression scale

The Hospital Anxiety and Depression Scale (HADS) is a self-report scale designed to screen for the presence of depression and anxiety disorders in medically ill patients, including FM patients [13]. It is appropriate for the use in both community and hospital settings and contains 14 items rated on four-point Likert-type scales. Two subscales assess depression and anxiety independently (HADS-Dep and HADS-Anx, respectively). It has been validated in Turkish [14]. The Turkish HADS was assessed only in the first visit.

### Medical outcome survey—short form

It is important to understand the health status burden of people with FM. Health status data quantify impairments in physical, mental, and social functioning. Short Form Health Survey (SF-36) has been widely used worldwide in studies to assess the health status burden of people with FM. Quality of life was assessed by utilizing the Short Form Health Survey (SF-36), which has also been translated and validated in Turkish [15]. We used the validated Turkish version (SF-36 version 2) of this questionnaire, which includes two main domains, the physical component score (PCS) and the mental component score (MCS), and multiple, variable scales measuring physical functioning, pain, social functioning, general mental

health, energy, fatigue or vitality, and the patient's global conception of his own health condition. Higher scores represent better functioning. The Turkish SF-36 was assessed only in the first visit.

#### Tender-point count

Tender-point examination was carried out by applying a uniform amount of manual finger pressure, until the fingernail bed blanched, on each of nine paired anatomical locations. Definite tenderness at any point was considered present if some involuntary verbal or facial expression of pain was noted or if a wince or withdrawal was observed. The TPC was calculated by summing the number of these tender points. The TPC were done only in the first visit of assessment to confirm diagnosis. The study was performed in accordance with the principles of the Declaration of Helsinki, and the protocols were approved by the University Ethics Committee.

#### Statistical analysis

Test–retest reliability was assessed using Spearman rank correlations, and internal consistency was evaluated with Cronbach's alpha coefficient of reliability. Construct validity was evaluated by Spearman correlation coefficient correlating the FIQR total score with the FIQ total score, the TPC, the SF-36 main domains and all of the subscales, HADS anxiety, and depression scores. Statistical analysis was performed using SPSS for Windows (version 13.0; SPSS, Chicago, IL, USA).

#### Results

Characteristics and clinical properties of the patients are shown in Table 1. The mean age of the 87 female FM patients, represented as mean (SD) was 34.3 (10.2) years (ranging between 18 and 50 years), the mean disease duration was 53.4 (38.2) months (ranging between 3 and 96 months), and the mean education duration was 9.2 (4.3) years (ranging between 5 and 15 years). Total TPC was 14.8 (3.6) (ranging between 11 and 18). FIQR total, function, overall, and symptom values, represented as mean (SD), were 55.22 (21.96), 14.94

**Table 1** Demographic data of FM patients

Number of patients who completed the study	87
Gender (female/male)	87/0
Age in years (mean(SD))	34.3 (10.2)
Education in years (mean(SD))	9.2 (4.3)
Disease duration in months (mean (SD))	53.4 (38.2)
TPC	14.8 (3.6)

(6.52), 11.26 (5.34), and 29.44 (9.17), respectively, for the first visit. They were 57.16 (22.48), 15.15 (7.24), 11.44 (5.52), and 30.73 (9.36), respectively, for the second visit. Values were very close for both assessments (Table 2). FIQ total, function, overall, and symptom values, represented as mean (SD), were 51.35 (14.32), 4.07 (2.21), 8.14 (3.24), and 39.32 (8.78), respectively, for visit 1 (Table 2).

Spearman correlation coefficients between FIQR total, function, overall, symptoms scores, and study questionnaires were calculated for testing construct validity (Tables 3 and 4). The total scores of the FIQR and FIQ were closely correlated ( $r=0.87$ ,  $p<0.01$ ), and each of the three domains of the Turkish FIQR was also correlated well with the three related FIQ domains ( $r=0.67$  to  $0.85$ ,  $P<0.01$ ) (Table 3). The FIQR total, function, overall, and symptoms scores showed significant correlations with the other study measures (FIQ, HADS depression and anxiety scales, TPC) (Table 3), and also significant inverse correlations with quality of life (assessed by SF-36) domains and items (Table 4). FIQR total vs SF-36 PCS and MCS were significantly correlated ( $r=-0.63$ ,  $P<0.01$ , and  $r=-0.51$ ,  $P<0.01$ , respectively). Cronbach's alpha was 0.89 for FIQR in the first visit and 0.91 for FIQR in the second visit, indicating acceptable levels of internal consistency for both assessments. The test–retest reliability was between 0.714 and 0.898 for the each Turkish FIQR item (Table 5). FIQR total score test–retest reliability value was 0.835 (Table 5).

The mean time of the patients to complete the Turkish FIQR was 2.4 min for the first visit and 2.2 min for the second visit 2. Scoring took about 1 min.

#### Discussion

The current study shows that the Turkish FIQR is a valid, reliable, and easy to use and score measure in assessing patients with FM.

Construct validity of Turkish translation of FIQR was evaluated by correlating the FIQR total, function, overall, and

**Table 2** Mean FIQR and FIQ domain and total scores

	Visit 1 Mean (SD)	Visit 2 Mean (SD)
FIQ total score	51.35 (14.32)	Not determined
FIQ function	4.07 (2.21)	Not determined
FIQ overall	8.14 (3.24)	Not determined
FIQ symptoms	39.32 (8.78)	Not determined
FIQR total score	55.22 (21.96)	57.16 (22.48)
FIQR function	14.94 (6.52)	15.15 (7.24)
FIQR overall	11.26 (5.34)	11.44 (5.52)
FIQR symptoms	29.44 (9.17)	30.73 (9.36)

**Table 3** FIQR total, function, overall, and symptoms scores construct validity: Spearman's rank correlation coefficients between the FIQR total, function, overall, symptoms scores, and the HADS and TPC ( $n=87$ )

	FIQ, total	FIQ function	FIQ overall	FIQ symptom	HADS dep	HADS anx	TPC
FIQR total score	0.87*	0.66*	0.70*	0.83*	0.28*	0.17**	0.46*
FIQR function	0.86*	0.67*	0.68*	0.69*	0.26*	0.15**	0.44*
FIQR overall	0.88*	0.63*	0.70*	0.81*	0.25*	0.16**	0.46*
FIQR symptoms	0.86*	0.61*	0.67*	0.85*	0.31*	0.18**	0.49*

\* $p < 0.01$ , correlation significant at 0.01 level (two-tailed); \*\* $p < 0.05$ , correlation significant at 0.05 level (two-tailed)

symptom items with the FIQ, HADS, the TPC, and the subscales of the SF-36. Substantial correlations between the FIQR total, function, overall, and symptom items and the FIQ, HADS, the TPC, the subscales of the SF-36 were found. The substantial and significant correlations of FIQR domains and total scores with other corresponding outcome measures in this study demonstrate satisfactory construct validity in the psychological, symptoms, function, and quality of life components of the Turkish translation of FIQR. The total scores of the Turkish FIQR and FIQ were closely correlated ( $r=0.87$ ,  $P < 0.001$ ). Each of the three domains of the Turkish FIQR was correlated well with the three related FIQ domains ( $r=0.67$  to  $0.85$ ,  $P < 0.01$ ). These results are very close to the results of Bennett et al. [7], who reported the correlation 0.88 for the total scores of the FIQR and FIQ and the correlation from 0.69 to 0.88 for the three domains of the FIQR and the three related FIQ domains. The relationship between TPC and the Turkish FIQR was 0.46 in this study. It is higher than that of Sarmer et al. [8], who reported a relationship of 0.31 between the Turkish FIQ and TPC. The Turkish FIQR total score and each of the three FIQR domains were correlated with all of the SF-36 subscales. FIQR total vs SF-36 PCS and MCS were significantly correlated. The correlation between FIQR total and SF-36 PCS and MCS were  $r=-0.63$ ,  $P < 0.01$ , and  $r=-0.51$ ,  $P < 0.01$ , respectively. This correlation of the Turkish FIQR with quality of life component assessed by SF-36 were also higher than that of Sarmer et al. [8], who reported  $r=0.43$

for the Turkish FIQ assessed by Health Assessment Questionnaire (HAQ). These results indicate that the Turkish FIQR has a better construct validity than the Turkish FIQ, which will further strengthen the use of FIQR over the FIQ.

The test–retest reliability of the Turkish FIQR items ranged from 0.714 to 0.898 and the test and retest reliability of total FIQR score was 0.835. These results are also more favorable than those of Sarmer et al. [8], who reported 0.810 for test–retest reliability for the Turkish FIQ total score. No test–retest reliability of original FIQR was performed on the online participants by Bennett et al. [7]. These results indicate that the Turkish FIQR has a better test–retest reliability than the Turkish FIQ.

Internal consistency of the Turkish FIQ was found as 0.72, 0.73 by Sarmer et al. [8]. Internal consistency of the Turkish translation of FIQR was found to be higher for both assessments (0.89 for FIQR visit 1 and 0.91 for FIQR visit 2), indicating acceptable levels of internal consistency for both assessments. This level of consistency of the Turkish FIQR is close to that reported by Bennett et al. [7], who reported internal consistency of 0.95. These results of the Turkish FIQR indicate that the subscales of the instrument measure the same construct. These results also show that the Turkish FIQR has a better internal consistency than the Turkish FIQ, which will further strengthen the use of FIQR over the FIQ. This higher level of internal consistency of the Turkish FIQR than the Turkish FIQ may be due to the lack of cultural

**Table 4** Spearman's correlations of the Turkish FIQR domains with subscales of the 36-item short form health survey

	SF-36 domains (summary)		SF-36 health survey items							
	PCS	MCS	PF	PR	BP	GH	VT	SF	RE	MH
FIQR total score	-0.63*	-0.51*	-0.69*	-0.53*	-0.66*	-0.54*	-0.52*	-0.55*	-0.42*	-0.48*
FIQR function	-0.76*	-0.48*	-0.78*	-0.52*	-0.59*	-0.50*	-0.43*	-0.44*	-0.33*	-0.36*
FIQR overall	-0.58*	-0.47*	-0.63*	-0.50*	-0.61*	-0.49*	-0.49*	-0.52*	-0.43*	-0.42*
FIQR symptom	-0.55*	-0.56*	-0.53*	-0.48*	-0.65*	-0.52*	-0.53*	-0.57*	-0.46*	-0.54*

\* $p < 0.01$

PCS physical component score, MCS mental component score, PF physical functioning, RP role functioning difficulties caused by physical problems, BP bodily pain, GH general health, VT vitality, energy, SF social functioning, RE role functioning difficulties caused by emotional problems, MH mental health

**Table 5** Mean values and standard deviation of each Turkish FIQR item (scale 0–10) and the total FIQR score (scale 0–100) and test–retest reliability coefficients (Spearman's) for the Turkish FIQR

FIQR item	Visit 1	Visit 2	Spearman's coefficient
	Mean (SD)	Mean (SD)	
Comb hair	2.20 (1.92)	2.41 (2.23)	0.728*
Walk for 20 min	4.83 (3.61)	5.25 (4.12)	0.782*
Prepare a meal	4.42 (3.67)	4.16 (3.23)	0.734*
Clean floors	5.73 (3.45)	5.47 (3.92)	0.746*
Carry a bag of groceries	5.23 (2.84)	5.56 (3.14)	0.854*
Climb a flight of stairs	5.42 (3.23)	5.78 (3.04)	0.846*
Change bed sheets	5.77 (3.86)	5.45 (3.36)	0.898*
Sit for 45 min	5.64 (3.67)	5.44 (3.20)	0.849*
Go shopping for groceries	5.78 (3.69)	5.48 (3.96)	0.719*
Can't achieve goals	5.53 (2.64)	5.28 (2.92)	0.714*
Feel overwhelmed	5.48 (3.16)	5.32 (3.27)	0.844*
Pain rating	6.23 (2.24)	5.92 (2.82)	0.857*
Energy rating	6.56 (2.85)	6.32 (2.47)	0.821*
Stiffness rating	6.44 (2.88)	6.68 (2.45)	0.869*
Sleep quality	7.14 (2.92)	7.34 (2.74)	0.723*
Depression level	4.82 (3.67)	4.54 (3.37)	0.787*
Memory problems	6.13 (2.72)	6.43 (2.98)	0.841*
Anxiety level	4.23 (3.41)	4.41 (3.23)	0.872*
Tenderness level	7.32 (2.76)	7.57 (2.42)	0.732*
Balance problems	5.27 (3.12)	5.02 (2.94)	0.867*
Environmental sensitivity	6.54 (2.96)	6.38 (3.08)	0.743*
FIQR total	55.22 (21.96)	57.16 (22.48)	0.835*

\* $p < 0.001$ 

adaptations required during the translation of the Turkish FIQ. For example, “walk several blocks,” “do yard work,” and “drive a car,” are the items of the FIQ that are unsuitable for Turkish patients because females are generally housewives in Turkey and walking distance is expressed in meters, kilometers, or length of time for walking in our country.

In this study, although Turkish and English are distant languages, the translation and adaptation of the FIQR into Turkish language did not require any cultural adaptation; all items could be translated with vocabulary equivalence. However, anxiety and depression terms are not originally Turkish. These terms were translated into Turkish language almost unchanged as “anksiyete” and “depresyon” in the last century. According to our clinical experience on Turkish population, more patients are familiar with the terms and the meanings of “depression” and “anxiety,” but some of the patients were still confused about the terms and meanings of “anxiety” and “depression.” Therefore, the terms “anxiety” and “depression” were explained briefly to the patients by a study researcher before all the questionnaires

were given in the first visit (but not in the second visit). We do not think this affected the time for the patients to answer the questionnaire and self administration since the mean patient completion time of the Turkish FIQR was 2.4 min for the first visit and 2.2 min for the second visit. This brief explanation in the first visit in this study would not have had any impact on clinical use or self administration of this scale since a minority of the Turkish population are unfamiliar with the term “anxiety.” In addition, Sarmer et al. [8] administered the Turkish FIQ to the patients without any explanation about anxiety or depression and found that the Turkish FIQ was reliable and valid. Therefore, we think there is no need for this brief explanation in clinical practice and research while administering the scale.

The most important reason for lack of use of the FIQ in clinical practice by clinicians in Turkey and other countries seems to be the perceived difficulty in administering it, omissions, and a long and difficult scoring procedure [16, 17]. Bennett et al. [7] showed that the FIQR has good psychometric properties, discriminates between FM patients and patients with rheumatoid arthritis, systemic lupus erythematosus, and major depressive disorder, and takes just less than 2 min to complete and approximately 1 min to score. They also stated that the FIQR has a good correlation with the original FIQ, thus making it possible to compare the results of studies using the older version with studies using the revised version [7]. The mean patient completion time of the Turkish FIQR was 2.4 min for visit 1 and 2.2 min for visit 2, and scoring took about 1 min for both assessments, which is a very acceptable amount of time for a clinician or a researcher. Patients were 0.2 min faster for completion of the questionnaire for visit 2. This might be due to familiarity of the patients with the questions in the second visit. However, mean completion time of our patients is a little longer than that of Bennett et al. [7]. This might be due to the lower reading habits of the patients in the current study.

Limitations of the current study are (a) small sample size ( $n=87$ ), which inevitably leads to limited statistical power, and (b) Turkish translation of FIQR has not been validated for men. However, the data were sufficient to demonstrate the usefulness of the Turkish version of the FIQR instrument.

In conclusion, we suggest that the Turkish version of the FIQR is a reliable and valid instrument for the assessment of disease severity in FM. It may be used easily for both clinical practice and research use in the Turkish-speaking population in place of FIQ since its Turkish version has problems in the wording, omissions, concepts, and scoring from the original FIQ.

**Disclosures** None

## Appendix A. Turkish translation of the Revised Fibromyalgia Impact Questionnaire (FIQR)

### The Turkish version of the revised fibromyalgia impact questionnaire (FIQR)

#### Yeniden gözden geçirilmiş Fibromiyalji etki anketi (YFEA) Türkçe versiyonu

**Bölüm 1. Açıklamalar:** Aşağıdaki 9 sorunun her biri için fibromiyaljinizin, son yedi gün içinde sorularda belirtilen aktivitelerin her birini ne kadar güçlükle yapmanızı etkilediğini gösteren kutucuğu işaretleyiniz.

- |   |                       |                          |              |
|---|-----------------------|--------------------------|--------------|
| 1. Saçınızı tarama  | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 2. 20 dakika sürekli yürüme   | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 3. Evde yemek hazırlama   | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 4. Evde yerleri süpürme, yıkama veya temizleme                                | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 5. Marketten alınan eşyalarla dolu bir çantayı veya poşeti kaldırma ve taşıma | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 6. Bir kat merdiven çıkma   | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 7. Yatak çarşaflarını değiştirme  | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 8. 45 dakika bir sandalyede oturma  | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |
| 9. Markete alışverişe gitme   | Hiç güçlükle çekmeden | <input type="checkbox"/> | Çok güçlükle |

**Bölüm 2. Açıklamalar:** Aşağıdaki 2 sorunun her biri için son yedi gün içinde fibromiyaljinizin tam genel etkisini tanımlayan kutucuğu işaretleyiniz.

1. Fibromiyaljim, beni geçen hafta üstesinden gelmem gereken hedeflerimden alıkoydu.

Hiçbir zaman 
Her zaman

2. Fibromiyalji semptomları geçen hafta beni tamamen bunaltdı.

Hiçbir zaman 
Her zaman

**Bölüm 3. Açıklamalar:** Aşağıdaki 10 sorunun her biri için, son 7 gün içinde fibromiyalji semptomlarınızın şiddetini, yoğunluğunu en iyi belirten kutucuğu işaretleyiniz.

1. Lütfen ağrınızın şiddetini oranlayınız.

Ağrı yok 
Dayanılmaz ağrı

2. Lütfen enerji seviyenizi oranlayınız.

Enerjim çok 
Hiç enerjim yok

3. Lütfen tutukluğunuzun seviyesini oranlayınız.

Tutukluk yok 
Çok şiddetli tutukluk

4. Lütfen uyku kalitenizi oranlayınız.

Uykudan kalkınca dinlenmiş 
Uykudan kalkınca çok yorgun

5. Lütfen depresyonunuzun seviyesini oranlayınız.

Hiç depresyon yok 
Depresyon çok aşırı

6. Lütfen hafıza problemlerinizin seviyesini oranlayınız.

İyi hafıza 
Çok kötü hafıza

7. Lütfen anksiyetenizin seviyesini oranlayınız.

Anksiyöz değil  Çok aşırı anksiyöz

**8. Dokunmaya karşı acı-ağrı hassasiyetinizin seviyesini oranlayınız.**

Hassasiyet yok  Çok hassas

**9. Ruhsal denge problemlerinizin seviyesini oranlayınız.**

Dengesizlik yok  Aşırı derecede dengesizlik var

**10. Lütfen yüksek seslere, parlak ışıklara, kokulara ve soğuğa hassasiyetinizin seviyesini oranlayınız.**

Hassasiyet yok  Aşırı derecede hassas

**Puanlama:**

**Adım 1.** 3 bölümün (fonksiyon, genel, semptomlar) her biri için puanları topla.

**Adım 2. Bölüm puanlarını elde etmek için;** 1. bölümün puanını 3' e böl. 2. bölümün puanını 1'e böl (yani 2. bölüm puanı değişmeyecek) 3. bölüm puanını 2'ye böl.

**Adım 3. Yeniden gözden geçirilmiş fibromiyalji etki anketi toplam puanını elde etmek için;** Adım 2 de elde edilen bölüm puanlarını topla.

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