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ORIGINAL ARTICLE

Turkish version of International Hip Outcome Tool (IHOT-12T): validity and reliability study

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Purpose: The aim of this study was to evaluate the reliability and validity of the Turkish version of International Hip Outcome Tool in patients with hip joint pathology.
Method: International Hip Outcome Tool was translated and culturally adapted from English into Turkish. Cross-cultural adaptation was performed in several steps, including translation, back-translation, expert review and pre-testing. The final version was evaluated for reliability and validity a clinical study of 120 patients with hip joint pathology. Patients completed sociodemographic questionnaire form, the International Hip Outcome Tool and the Short-Form 36. Test-retest and internal consistency analyses were used to determine the reliability. To determine test-retest reliability, 60 patients completed the International Hip Outcome Tool on a second time within 1-week period were calculated to assess reliability. Construct validity and criterion validity analyses included Intraclass correlation coefficient and Cronbach alpha were performed to determine the validity.
Results: The test-retest correlation coefficient was 0.89 ($p<0.05$) and the Cronbach alpha value for internal consistency analysis was 0.901. Factor analysis revealed that Turkish version of the International Hip Outcome Tool has 3 components. The intraclass correlation coefficient was 0.91 demonstrating good test-retest reliability. It was observed with these results that there are good level correlations between International Hip Outcome Tool and the subgroups of Short-Form 36.
Conclusion: The Turkish version of the International Hip Outcome Tool is a valid and reliable tool for measuring physical functioning and health-related quality of life in younger, physically active, patients with hip pathology.
Key words: Hip injuries, Outcome assessment (Health care), Reproducibility of results.

Uluslararası Kalça Sonuç Aracı (UKSA- 12) Anketi'nin Türkçe uyarlaması: geçerlik ve güvenirlik çalışması

Amaç: Bu çalışmanın amacı kalça patolojili hastalarda Uluslararası Kalça Sonuç Aracı Anketi'nin Türkçe geçerlik ve güvenirliğini değerlendirmekti.
Yöntem: Uluslararası Kalça Sonuç Aracı Anketi'nin İngilizce'den Türkçe'ye çevirisi ve kültürel adaptasyonu yapıldı. Kültürler arası adaptasyon, çeviri, geri çeviri, uzman görüşü ve ön test olmak üzere birkaç adımda gerçekleştirildi. Anketin son hali geçerlik ve güvenirlik çalışması için kalça eklemi patolojisi olan 120 hastaya uygulandı. Hastalar sosyodemografik soru formu, Uluslararası Kalça Sonuç Aracı ve Kısa Form 36'yı tamamladı. Güvenirliği belirlemek için test-tekrar test ve iç tutarlılık analizleri kullanıldı. Test-tekrar test güvenirliğini belirlemek için, 60 hastaya Uluslararası Kalça Sonuç Aracı bir hafta içinde ikinci kez uygulanarak güvenirlik hesaplandı. Geçerliği belirlemek için yapı ve ölçüt geçerliği analizleri, sınıf içi korelasyon katsayısı ve Cronbach alfa belirlendi.
Bulgular: Test-tekrar test korelasyon katsayısı 0.89 ($p<0.05$) ve iç tutarlılık analizi için Cronbach alfa değeri 0.901 idi. Faktör analizi, Uluslararası Kalça Sonuç Aracı anketinin Türkçe versiyonunun 3 bileşene sahip olduğunu ortaya koydu. Sınıf içi korelasyon katsayısı değeri 0.91 olup test-tekrar test güvenirliği iyiydi. Bu sonuçlarla Uluslararası Kalça Sonuç Aracı ile Kısa Form-36 alt grupları arasında iyi düzeyde bir korelasyon olduğu görüldü.
Sonuç: Uluslararası Kalça Sonuç Aracı kalça eklemi patolojisi olan genç ve aktif bireylerin sağlıkla ilişkili yaşam kalitesinin ve fiziksel fonksiyonun değerlendirilmesinde geçerli ve güvenilir bir ölçüm aracıdır.
Anahtar Kelimeler: Kalça yaralanmaları, Sonuç değerlendirmesi (Sağlık hizmeti), Sonuçların tekrarlanabilirliği.

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Hip joint pathology is the most common clinical entity related to chronic hip pain, loss of mobility and functional limitation. Hip joint pathology symptoms which was mainly related to femoroacetabular impingement (FAI), acetabular labral tears, ligamentum teres tears and chondral damage in young adults.[1] The diagnosis of these pathologies may be a challenge due to the anatomical structure and biomechanical properties of the hip joint and the stresses that were exposed to during the function.[2] Sometimes, misidentification of symptoms related to hip joint pathology is delaying the diagnosis process.[3] A cross sectional study showed the prevalence of radiological FAI findings in asymptomatic adult population, who aged 18–65 years, was 29.6% in Turkey.[4]

Most of hip disorders can be identified with a detailed history, physical examination and imaging methods.[5,6] There are a large number of questionnaires that can be used to reveal the effects of hip pathology on patients' life and determined the effects of rehabilitation. Harris Hip Score (HHS), the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), Hip Disability and Osteoarthritis Outcome Score (HOOS), Oxford Hip Score (OHS), Lequesne Index of Severity for Osteoarthritis of the Hip (LISOH), and American Academy of Orthopaedic Surgeons (AAOS) Hip and Knee Questionnaire are widely used for this purpose.[7]

However, these questionnaires which were primarily developed for an older population used for measurement in patients with hip and/or groin pain. Patients who are younger than 50 should also be evaluated, as physical activity performance goals differ between younger and older people.[7] It has also been noted that items included in these questionnaires do not sufficiently address physical activities of younger people.[8]

When the literature was investigating it was seen that the IHOT-33 was developed to measure the physical function and health related quality of life in young, active patients with hip disorders and to measure the effect of treatment of this disease. An English-language questionnaire was recently developed by Mohtadi et al. in 2012. This questionnaire proved to be valid and reliable in measuring physical functioning and health-related quality of life among younger, physically active patients with hip pathology.[9,10]

Based on the IHOT-33, Griffin et al. developed a short version of the International Hip Outcome Tool (IHOT-12).[11] IHOT-12 consists of 12 questions and 4 subgroups (symptoms and functional limitations, sports and recreational activities, job-related concerns, social, emotional, and lifestyle concerns) that are answered by placing a mark on a 100-mm Visual Analogue Scale, with each question subsequently scored between 0 (significantly impaired) and 100 (no problems at all). The average score of all completed questions yields the final score for the IHOT-12. Higher scores reflect better physical functioning and health-related quality of life. This questionnaire is one of the health-related patients-reported outcomes (HR-PROs). HR-PROs have been used increasingly, and they are rapidly becoming the golden standard when measuring the effects of treatment for different conditions. HR-PROs are widely used to evaluate the effectiveness of treatment or to compare different interventions in clinical trials. They are questionnaires completed by patients to measure perceptions of their general health or their health in relation to a specific illness or condition. Before an HR-PRO can be used for research or in a clinical setting, it must be standardised, validated and tested for reliability.[12]

The IHOT-12 has been translated into Swedish, German, Portuguese, Dutch and Japenese.[13-17] The aim of this study was to cross-culturally adapt the IHOT-12 for Turkish speaking patients.

In Turkey, there is a need for a questionnaire that measures health-related quality of life and physical functioning in younger patients with hip pathologies. Therefore, the aim of this study was to translate and cross-culturally adapt the English version of the IHOT-12 into Turkish and to determine the psychometric properties of the IHOT-12 in terms of reliability and validity.

METHODS

Patients

One hundred twenty patients with hip joint pathology were performed in the study in Muğla Sıtkı Koçman University, Orthopaedics and

Traumatology Unit. If they had been or were being treated for hip dysplasia, were treated conservatively for osteoarthritis of the hip, underwent a hip arthroscopy due to osteoarthritis of the hip, were treated with a total or partial hip replacement due to osteoarthritis of the hip, were on the waiting list for a partial or total hip replacement, were treated for avascular necrosis of the femoral head with a total or partial hip replacement, or were treated for a traumatic hip fracture by means of a total or partial hip replacement in between March 2016 and December 2016. The patients who were eligible for the study were referred by orthopaedic surgeons. This study was performed in accordance with the ethical standards as laid down in the 1964 Helsinki Declaration of Ethics Principles. The necessary permission and approval for conducting the study were received from Muğla Sıtkı Koçman University, Faculty of Health Sciences Ethics Committee with the decision number 17/ 2016/22-2. The sample size could be calculated as 2 to 20 patients per item for validity and reliability studies according to literature.[18] We planned to have 10 patients for each item in the questionnaire and a total of 120 patients (12*10). The eligibility criteria were (1) 18-60 years of age, (2) diagnosis of any hip joint pathology by orthopaedic surgeon (3) ability to read and write Turkish and (4) confirm to join in the study. Participants were excluded if they exhibited any of the following criteria: (1) any neurological deficit such as stroke, (2) cognitive impairment, (3) hip pain which referred pain from the back or knee and (4) insufficient command of the Turkish language.

Demographic characteristics of patients were recorded. All patients received and completed the following questionnaires: Turkish version of IHOT-12 (IHOT-12T) and Turkish version of the Short-Form 36 Health Survey (SF-36).[19]

Translation of IHOT-12

The adaptation of the IHOT-12 to Turkish was performed in several steps, as proposed by Beaton et al.[20] These guidelines consist of 5 stages: translation, synthesis, back translation, evaluation by a team of experts, and pre-testing of the translated questionnaire. The original version was translated into Turkish by three of the authors who native speaker Turkish and have English as their second language. Except one of the authors are experienced in working in physiotherapy area. The three translations were then synthesised into a Turkish version by an expert panel of ten experts. The synthesised version, the result of consensus among the panel, was back-translated into English by a native English-speaking person, and the translation was subsequently compared with the original version by the same panel. They checked the English and Turkish translations again to control the meaning differences and mismatches and the questionnaire was finally created. They decided to change "recreational activities" as "leisure time activities", and "aware of" as "reveal itself". Because these terms were not clearly by participants. It is difficult to be understood of these words in the known using of Turkish language. This version was used to pilot study before final version. Through this process, it was determined that no specific cultural adaptations, other than translation, were necessary to accommodate cultural differences. A pilot study was done validity of the pre-final Turkish version which was applied to 15 patients with hip joint pathologies. After testing the pre-final version in a group of patients with various hip joint pathologies and determining that no changes were needed, the pre-final version was adopted as the final version of the Turkish IHOT-12. (Appendix)

Measuring instruments

International Hip Outcome Tool-12 (IHOT-12)

The English IHOT-12 is a valid and reliable disease specific questionnaire that evaluates physical function and health-related quality of life in a younger patient population (< 60 years) with hip joint pathology.[11] Differently to the IHOT-12, the Turkish IHOT-12 consists of 11 questions that are answered by placing a mark on a 100 mm visual analogue scale (VAS), with each question subsequently scored between 0 (significantly impaired and 100 (no problems at all). The average score of all completed questions yields the final score for the Turkish IHOT-12. Higher scores reflect better physical functioning and health-related quality of life.[15]

Short-Form 36 Health Survey (SF-36)

The SF-36 is a generic questionnaire that assess health status and health related quality of life (HRQoL).[21] A valid and reliable Turkish version is available (16). SF-36 contains 36 questions, divided into 8 dimensions: 1. physical functioning, 2. social functioning, 3. role

limitations due to physical problems, 4. role limitations due to emotional problems, 5. mental health, 6. vitality, 7. pain, and 8. general health. For each subscale a sum score is calculated and converted into a 100-point scale. The questions are answered using a Likert scale. Scores for each subscale range from 0 (poor) to 100 (good health).[21]

Statistical analysis

Statistical Package for Social Sciences (SPSS), (SPSS version 22.0; Chicago, IL) was used in the analysis of the collected data. Patient characteristics were analysed by means of descriptive statistics. The level of significance was set at $p<0.05$. The first administration of the Turkish IHOT-12 data was used to assess internal consistency using Cronbach's alpha ranging from 0.70 to 0.95 was considered to be adequate. Test-retest reliability analysis was done by Pearson correlation coefficient included the first and the second administration of the Turkish IHOT-12 data. Cut-off values according to Domholdt were used to indicate extent of association (0.00 to 0.25, very weak; 0.26 to 0.49, weak; 0.50 to 0.69, moderate; 0.70 to 0.89, strong; 0.90 to 1.00, very strong).[22] Validity of the Turkish of IHOT-12 score was provided by determining its relationship with the SF-36 scores. Pearson correlation coefficients were calculated to assess validity for normally distributed variables.

Reliability

All patients who completed Turkish version of the IHOT-12 were used to assess internal consistency. Test-retest analysis was used the reliability of Turkish version of the IHOT-12. Studies of test-retest reliability for HRQoL questionnaires have used varying intervals, which ranged from 10 minutes to 1 month, between test application. However, it has been seen the most preferred interval ranging is from 2 days to 2 weeks in literature.[23] The Turkish version of the IHOT-12 was applied and then re-applied after 3 days. We selected "3 days" as a time for retest administration in our study because we thought that the time was too short for major clinical changes in patients. Test re-test reliability analysed with Intraclass Correlation Coefficient (ICC).

The interval between the tests was decided by considering the questionnaire according to VAS, the possibility of biased response, the absence of major changes in the patient's clinical condition and the planned surgical dates of the patients evaluated before surgery.

Validity

Construct validity of the Turkish IHOT-12 was assessed by determining Pearson correlation coefficients correlation between the SF-36 scales. Kaiser-Meyer Olkin (KMO) and Barlett's Test of Sphericity (BTS) analysis were used to determine the suitability of the sample for factor analysis.

RESULTS

Translation process and testing

The IHOT-12 was successfully translated into Turkish and culturally adapted to Turkish culture. Pre-testing did not reveal any difficulties.

Demographic characteristics

A total of 120 patients with hip joint pathologies (55 female and 65 male) were included in the study. The mean age of the participating patients was 48.75±7.10 years, the mean height was 1.66±0.08 m, the mean body weight was 72.99±7.99 kg and the mean Body Mass Index (BMI) was 26.61±3.7 kg/m².

42.2% of the patients were housewives, 22.4% were artisan, and 19.2% were civil servants. In terms of education level, 25.8% of the patients are primary school and 3.3% are university graduates. It was determined that 69.2% of the patients participating in the study had no chronic disease. It was seen that the descriptive characteristics of the patients did not affect the correlation between the questionnaires. Information on the descriptive characteristics of the patients is given in Table 1.

Reliability

The internal consistency of the first assessment of the IHOT-12T was excellent with a Cronbach's alpha of 0.901. This value indicated that IHOT-12T had excellent of internal consistency. The dimensions of Cronbach alpha were symptom and functional limitations (α= 0.970), social, emotional and life style (α= 0.875), and sports and recreational activities (α= 0.835) in subscale (Table 2). Sixty patients completed the IHOT-12T twice for testing the reproducibility. Second test was performed 3 days after the first one. Test re-test reliability scores of the questions changed

between 0.30 and 0.90. Test re-test reliability score of total score was excellent (ICC= 0.94) (Table 3).

Validity

Kaiser-Meyer-Olkin (KMO) value was examined first in the factor analysis of the basic components. KMO was used to determine the adequacy of the sample for factor analysis. KMO was 0.859. The significance of the square test statistic obtained as a result of Barlett Sphericity value is an indication that the data come from variable normal distribution. The Bartlett Sphericity value was significant ($\chi 2(55)= 1312.503$; $p<0.01$). The results of the factor analysis revealed that the IHOT-12T consists of three components with 82.821% explained variance. There were moderate to high correlations between IHOT-12T scores and subgroups of SF-36 ($p<0.01$).) (Table 4).

Table 1. Demographic specifications and clinics of subjects (N=120).

	Mean±SD
Age (year)	48.75±7.10
Body mass index (kg/m²)	26.61±3.7
	n (%)
Gender (Female/Male)	55/65 (46/54)
Diagnosis	
Coxalgia	22 (18.3)
Coxarthrosis	14 (11.7)
Traumatic femoral fracture	44 (36.7)
Acetabular fracture	24 (20.0)
Avascular necrosis of femur head	7 (5.8)
Developmental dysplasia of the hip	9 (7.5)
Dominant extremity (Right/Left)	108/12 (90/10)
Affected extremity (Right/Left)	73/47 (61/39)
Educational level	
Only literate	6 (5)
Primary school	67 (55.8)
High school	43 (35.9)
University	4 (3.3)
Employment status	
Housewife	53 (44.2)
Civil servant	23 (19.2)
Artisan	27 (22.4)
Worker of farmer	13 (11)
Retired	4 (3.2)
Comorbidity	37 (30.8)

DISCUSSION

We translated and culturally adapted the IHOT-12 into Turkish, and evaluated the validity and reliability of the Turkish version in younger patients with hip pathology. From present study it can be concluded that the English IHOT-12 has been successfully translated and culturally adapted into Turkish.

The total score of IHOT-12T is calculated average of all VAS scores. All questions are answered according to the perception of patients. Thus, it provides a great advantage to evaluate the minimal change in our treatment program. Most of the questionnaires used in the clinic are Likert type. This situation limits and forces to make choice to patient. However, when patients answer by placing a mark on a 100 mm VAS, they feel more independent for describing his/her emotions. Additionally, IHOT-12T which includes 11 questions. Therefore, the number of questions is another advantage as well as. It seen obviously that IHOT-12T can be answered in a short time in the clinic and academic studies.

It was decided that IHOT-12 is compatible with the Turkish language, and it is reliable and valid with this study. Griffin et al., who are developers' original version, found Cronbach alpha value of 0.89 for internal consistency.[11] Cronbach alpha value of IHOT-12 was 0.901 in Turkish version. IHOT-12T internal consistency value shows similarity with the original version. It can be concluded that the original version of IHOT-12 has been successfully translated and culturally adapted into Turkish in the present study. There are some validity studies of IHOT-12 to other languages. In literature the Dutch version of the IHOT-12 (IHOT-12NL) showed good internal consistency with a Cronbach alpha of 0.96.[16] Cronbach alpha value of the Swedish version of the IHOT-12 (IHOT-12S) was 0.89.[13] Cronbach alpha value of IHOT-12 was 0.90 in Japanese version (IHOT-12J).[17] The German version of IHOT-12 showed excellent internal consistency with a Cronbach alpha of 0.94.[14] The subgroups dimensions of Cronbach alpha values were symptom and functional limitations (0.970), social, emotional and life style (0.875) and sports and recreational activities (0.835) in Turkish version of IHOT-12. Test retest indicates consistency between two evaluations

Table 2. Internal consistency analysis of the Turkish version of International Hip Outcome Tool (IHOT-12T).

	Items	Cronbach's alpha value
Symptom and functional limitations	4	0.970
Social, emotional, and life style	4	0.875
Sports and recreational activities	3	0.835
Total score	11	0.901

Table 3. Test-retest reliability of the Turkish version of the IHOT-12 questions.

Questions	Intraclass Correlation Coefficient	95% Confidence Interval
Question 1	0.86	0.70-0.89
Question 2	0.86	0.83-0.87
Question 3	0.90	0.80-0.87
Question 4	0.89	0.84-0.89
Question 5	0.30	0.10- 0.92
Question 6	0.80	0.20- 0.95
Question 7	0.79	0.34-0.94
Question 8	0.80	0.55-0.90
Question 9	0.85	0.35-0.94
Question 10	0.69	0.58-0.92
Question 11	0.72	0.42-0.94
Question 12	0.70	0.51-0.90
Total score	0.94	0.91-0.96

Table 4. Correlations between subgoups of the Short-Form 36 and the Turkish version of International Hip Outcome Tool (IHOT-12T).

	Turkish version of International Hip Outcome Tool (IHOT-12T)		
	Symptom and functional limitations r	Social, emotional and life style r	Sports and recreational activities r
Short-Form 36			
Physical functioning	0.408*	0.184	0.238*
Pain	0.310*	0.030	0.316*
Social Functioning	0.427*	0.409*	0.301*
General health	0.163	0.793*	0.128
Role limitations due to emotional problems	0.058	0.107	0.137
Mental health	0.156	0.098	0.124

r: Pearson correlation coefficients. * $p<0.05$.

over time. IHOT-12T was applied again three days later for test-retest reliability. Test–retest value was determined as 0.89 in IHOT-12T.

SF-36 scales which was proven to have reliable and valid Turkish version, were used in finding out about the validity of the scale. Construct validity was evaluated by defining hypotheses about the magnitude of the

relationship between the IHOT-12T and SF-36. All hypotheses were confirmed with good construct validity. We compared the IHOT-12T with subscale dimensions of SF-36 to test the construct validity, using Pearson's correlation coefficient. IHOT-12T/ Symptom and functional limitations were demonstrated to have a positively and statistically significant correlation with SF-36/ Physical functioning score (0.408) and SF-36/Pain score (0,310). IHOT-12T/ Social, emotional and life style were demonstrated to have a positively and statistically significant correlation with SF-36/ General health score (0.793) and SF-36/ Social functioning score (0.409). IHOT-12T/ Sports and recreational activities were demonstrated to have a positively and statistically significant correlation with SF-36/ Social functioning score (0.301) and SF-36/ Physical functioning score (0.238).

The IHOT12 has been translated into other languages by used various measure instruments. In original study, Griffin et al. showed that the IHOT-12 excellent agreement with the IHOT-33.[11] In Portuguese version study was carry out similar to original study.[15] Steven et al. has been evaluated correlations between the IHOT-12NL and subscales of the RAND 36-item Health Survey, HOOS, and Tegner Activity Scale in Dutch version study.[16] In Swedish validation study, correlations between IHOT-12S scores and Copenhagen Hip and Groin Outcome Score (HAGOS) and EuroQol-5D scores has been investigated.[13] Baumann et al. has been evaluated correlations between German version of IHOT-12 and Hip Outcome Score, Modified Tegner Activity Scale and EuroQol-5D.[14] In Japanese version study was examined the correlations between SF-36 subscales and IHOT-12J.[17]

The interclass correlation coefficients for each question item in both evaluations of the IHOT-12T ranged from 0.30 to 0.90, with the exception of question 5. The Cronbach alpha value ranged from 0.747 to 0.888, was demonstrated reliability. In original version of IHOT-12 consisted of 12 items and 4 factors. Question 5 assesses the a few function by asking," How much trouble do you have pushing, pulling, lifting, or carrying heavy objects at work?" This question has no criteria for determining the factor. It should be at least two questions for factor load in Turkish version. Therefore, this item was removed from the IHOT-12T. Factor analysis showed that the IHOT-12T consist of 3 subscales, symptom and functional limitations (items 1-4), social, emotional and life style (items 8,9,10,12) and sports and recreational activities (items 6,7,11). In the study by Jonasson et al., factor analysis showed that the IHOT-12S consisted of 2 subscales "physical function" and "symptoms".[13] And the other study by Stevens et al., factor analysis showed that the IHOT-12NL consisted of 1 construct.[16] In German and Portuguese version studies have been not indicated factor analysis outcomes.[14,15] Similarly, in Japanese version study were not also considered.[17]

These results indicate that there are good level correlations between IHOT-12T and SF-36 subgroups. We found that the reliability and validity of the Turkish version of IHOT-12 is satisfying and can be used as a valid and reliable measure in patients with hip pathologies.

Limitations

A few limitations of this study should be addressed. This research is limited to a single unit. In the study, the evaluations related to IHOT-12T are limited to the patients' own declarations. The validity and reliability study of the questionnaire was performed in individuals with hip joint pathology not classified by reference to the original article.

Conclusion

The IHOT-12T is a reliable and valid instrument for measuring physical functioning and health-related quality of life of younger, physically active, patients with disorders of the hip joint. We believe that this HR-PRO is beneficial in evaluating of Turkish patients with hip pathologies.

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Appendix. The Turkish version of International Hip Outcome Tool (IHOT-12T).

Uluslararası Kalça Sonuç Aracı (UKSA-12)
Hastanın Adı: Taraf: Sol- Sağ
Protokol No:
Görüşme Tarihi: (görüşme tarihini veya aşağıdaki takip periyodunu tamamlayın)
Takip periyodu Ameliyat öncesi ya da _____ Haftalar / Aylar / Yıllar (gecikmeyi ekleyin ve birini daire içine alın)
Cevapladığınız soruya ilişkin görüşünüzü aşağıdaki çizginin üzerine dik bir çizgi koyarak açıkça belirtiniz.
Lütfen çizginizin gölgeli alan içinde yatay çizgiyi kestiğinden emin olunuz.

1. Genellikle kalça/kasığınızda ne kadar ağrınız var?
Aşırı ağrı — Hiç ağrı yok

2. Yere/zemine oturmak ve kalkmak sizin için ne kadar zor?
Aşırı zor — Hiç zor değil

3. Uzun mesafe yürümek sizin için ne kadar zor?
Aşırı zor — Hiç zor değil

4. Kalçanızdaki sürtünme, tutukluk veya kütleme sizi ne kadar rahatsız eder?
Aşırı rahatsız eder — Hiç rahatsız etmez

5. Ağır eşyaları itme, çekme, kaldırma ve taşıma sizi ne kadar rahatsız eder? (Ölçekten çıkarılmıştır.)
Aşırı rahatsız eder — Hiç rahatsız etmez

6. Spor veya boş zaman aktiviteleriniz sırasında durma/yön değiştirme sizi ne kadar endişelendirir?
Aşırı endişelendirir — Hiç endişelendirmez

7. Aktivite sonrası kalçanızda ne kadar ağrı hissedersiniz?
Aşırı ağrı — Hiç ağrı yok

8. Kalçanızdan dolayı çocuk kaldırmak veya kucaklamak sizi ne kadar endişelendirir?
Aşırı endişelendirir — Hiç endişelendirmez

9. Kalçanızdan dolayı cinsel aktivitenizde ne kadar sorununuz var?
(Bu benimle ilgili değildir)
Aşırı sorun — Hiç sorun yok

10. Kalçanızdaki özür ne kadar süreyle size kendini belli eder?
Sürekli belli eder — Hiç belli etmez

11. Arzu ettiğiniz form düzeyini koruma yeteneğiniz konusunda ne kadar endişelisiniz?
Aşırı endişeli — Hiç endişeli değil

12. Kalça probleminiz ne kadar dikkatinizi dağıtır?
Tamamen dağıtır — Hiç dağıtmaz