Portuguese Translation and Cross-Cultural Adaption of the Banff Patella Instability Instrument

Tradução e adaptação transcultural para a língua portuguesa do Questionário Banff para Instabilidade Patelar

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Abstract

Objective To translate into Brazilian Portuguese and to cross-culturally adapt the Banff Questionnaire for Patellar Instability.

Methods The translation and cross-cultural adaptation followed the linguistic validation process proposed by international guidelines, which consists of six steps: translation, synthesis, back-translation, review by an expert committee, pretest, and final report presentation to the authors of the original questionnaire. Literate patients with recurrent patellar instability, older than 12 years of age, who signed the informed consent form or had it signed by a legal guardian were included in the study. Patients with neurological or systemic comorbidities were excluded from the study.

Results A total of 62 patients (18 males and 44 females) were included in the study. Discrepancies observed during the processes of translation and harmonization of the back-translations were modified with no need for reformulation. No pretest version replacements were required.

Keywords ► patellar dislocation ► quality of life ► surveys and questionnaires ► transcultural adaptation ► translation

Study developed at the Orthopedics and Traumatology Department, Escola Paulista de Medicina, Universidade Federal de São Paulo, São Paulo, SP, Brazil.
Introduction

Patellar instability is an important knee condition not only because of its incidence – in the United States, annual estimates are 29/100 thousand people in the general population, reaching 77/100 thousand people in some risk groups – but also for recurring in most patients, in rates ranging from 17% to 70% in selected groups. In addition, it essentially affects the youngest, most active members of society, with a peak incidence between the ages of 15 to 19 years, resulting in an economic impact regardless of the proposed treatment method.

Although common during sports activities, atraumatic mechanisms are reported in individuals with predisposing conditions. Patellar instability is sometimes accompanied by limitations regarding recreational or sports activities, and reduced quality of life. Since patellar instability is a multifactorial condition, it can be managed with several therapeutic options according to the patient’s anatomical features and individual presentation.

The assessment of the therapeutic outcomes using clinical and radiographic criteria alone may underestimate the impact of the disease on the daily life of the patient. The health status should take into consideration the influence of the clinical condition in different daily life, work, recreation, sports and social scenarios. The assessment instruments to address the therapeutic effectiveness and impact on the quality of life have been designed to broaden our understanding regarding health care outcomes.

Questionnaires such as the Kujala and International Knee Documentation Committee Subjective Knee Evaluation Form (IDKC) are already established in the literature as tools for this kind of clinical application. While the IKDC assesses a wide variety of knee conditions, the Kujala questionnaire is more specific to patellofemoral joint disorders, since it specifically documents patellofemoral pain. Even so, the daily subjective limitations experienced by these patients might not be fully understood, hindering the evaluation of the clinical interventions.

Hiemstra et al. developed the Banff Questionnaire for Patellar Instability to assess the quality of life of these patients in terms of symptoms and functional, social, and economic activities. The present study aimed to translate and cross-culturally adapt the Banff Questionnaire into Brazilian Portuguese.

Methodology

The present study was initiated after approval by the Ethics in Research Committee under number CAAE 70130717. Data was collected from the Knee Group outpatient clinic of our institution. Literate patients with recurrent patellar instability, older than 12 years of age, who signed the informed consent form or had it signed by a legal guardian were included in the present study. Patients with neurological or systemic comorbidities were excluded from the study.

Sample size was calculated based on the number of variables analyzed, as recommended in the literature, and set at a minimum of 62 patients, that is, twice the number of questions contained in the Banff instrument.

Conclusion

The Banff Questionnaire for Patellar Instability has been successfully translated and cross-culturally adapted into Brazilian Portuguese, so it can be used to assess patients with patellar instability who speak this language.
In total, 62 patients with recurrent patellar instability participated in the present study. The diagnosis was established by a history of at least two episodes of patellar dislocation observed by the patient or third parties, along with the findings of the clinical examination and imaging tests, as described by Brattsroem.20

The translation and cross-cultural adaptation of the Banff Questionnaire for Patellar Instability into Brazilian Portuguese followed the internationally accepted linguistic validation process described by Guillemin et al.21 and modified by Beaton et al.22,23 Linguistic validation aims to generate a translation that is both equivalent to the original text and comprehensible by the target population. The method used in the present study is described below (Figure 1).

1. Translation: the translation started after obtaining the authorization to use the questionnaire by the authors of the original article, the review of the questionnaire items and organization of the material and the data collection flow, that is, the “Preparation” process. The 32 questions, instructions, answer options and other items from the original questionnaire in English were independently translated into Portuguese by 2 Brazilian orthopedic surgeons fluent in both languages, resulting in 2 translated texts (Banff VT1 and Banff VT2).

2. Synthesis: both versions were compared by an expert committee, resulting in “Banff Version T12” (Banff VT12).

3. Back translation: the Banff VT12 was back translated by two native English speakers who were also fluent in Portuguese, and blinded as to the original questionnaire and with no knowledge of the subject. The aim of this stage was to find conceptual translation errors and gross inconsistencies from the previous steps and to generate two “back-translated versions” (Banff VRT1 and Banff VRT2).

4. Expert committee review: a new meeting including the third and fourth translators and the same expert committee was held to search for inconsistencies and check correspondences between the back-translated texts (Banff VRT1 and Banff VRT2), the initial translation (Banff VT12), and the original questionnaire. The harmonization of discrepancies, seeking semantic, idiomatic, experiential, and conceptual equivalence between the texts, resulted in a “Banff Brazilian Prefinal Version” (in Portuguese, “Banff Versão Brasileira Pré-Final”, VBPF). This text consolidated all information produced so far in an easily understandable instrument used at the pretest with the sample from the study.

5. Pretest: this step was carried out at the Knee Group’s outpatient clinic at Hospital São Paulo, Orthopedics and Traumatology Department, Escola Paulista de Medicina, Universidade Federal de São Paulo (UNIFESP), using the “Banff VBPF” and a probing technique:21 after the application of the questionnaire, each patient was individually surveyed for clarity, understanding and acceptability of each item from the instrument. Doubts or suggestions would require an item reformulation to be discussed with the committee; otherwise, we would proceed to the last step.

6. Presentation of the final version to the authors of the original questionnaire: reports prepared during all steps of the process were submitted along with discrepancies and the committee consensus on each Banff VBPF item. The main author of the original questionnaire approved this version with no suggestions or changes. The Banff VBPF was then renamed “Banff Brazilian Final Version” (in Portuguese, “Banff Versão Brasileira Final”, VBF).

Results

The pretest occurred from June 2018 to August 2019 at the aforementioned Knee Group’s outpatient clinic. The study included a total of 62 patients with a mean age of 29.2 years (standard deviation: 11.6 years), ranging from 12 to 57 years old. Most patients (44 subjects; 70.69%) were female, whereas 18 (29%) were male. The Banff scores are summarized in Table 1.

During the reconciliation of VT1 and VT2, the expert committee found a total of 22 discrepant items in 32 questions, 19 discrepant items in 32 answers, and 18 discrepant items in 21 information, title or instruction sentences from the original questionnaire. Emphasizing the need to maintain the equivalence, as proposed by Guillemin et al.,21 each item was individually analyzed by the committee in an attempt to reach a consensus at the synthesis stage and maintain the features from the original version.

The VT12 questionnaire was back translated, resulting in the two English texts shown in Figure 1, called VRT1 and VRT2. During the harmonization, the semantic, idiomatic, experiential, and conceptual cross-cultural equivalences22 of each item regarding its original version were analyzed; no reformulation by the committee was required when the concordance index among its 5 members was higher than 80%.24

Only one analysis was required by the expert committee. The back-translated versions resulted in 26 discrepant items in 32 questions, 29 discrepant items in 32 answers, and 20 discrepant items in 21 information, title, or instruction sentences. All discrepancies were resolved, resulting in the VBPF. The committee pointed out the need for some adaptations in the VBPF to maintain both the equivalence to the original version and the instrument comprehension by the Brazilian population with no change in the analyzed measures. A summary of this process is exemplified in Table 2.

There was no record of questions, answers or other items which were not understood by the evaluated patients regarding the linguistic validation during the pretest. Therefore, the VBPF was submitted, with no need for reformulation, to the author of the original questionnaire together with a report of the adaptations made throughout the process. The author of the original questionnaire approved this version with no suggested modifications; as such, the VBPF became the Banff Questionnaire for Patellar Instability – Brazilian Version, available in Annex 1.

Discussion

There is an increased concern in the literature not only to improve patient satisfaction but to develop outcome measures for a specific population or clinical condition.25 Since patellar instability is a multifactorial condition,1–10,26–28 it
requires appropriate tools to compare different treatment strategies. —*Figure 2* summarizes the instruments for the assessment of patellar instability as reported by Hiemstra et al.\textsuperscript{25}

These data reveal that some questionnaires used for many years to assess patellofemoral joint disorders focus on characterizing other knee conditions, often emphasizing items not necessarily observed in this type of injury. In total, 60 of...
the 100 points of the Lysholm score, for instance, which was translated and validated for the Portuguese language, measure pain and instability, making it unsuitable for an estimate of anterior pain. Although widely used in patients with a previous history of patellar dislocation, the Kujala questionnaire, “Scoring of Patellofemoral Disorders”, also translated and culturally adapted into Portuguese, has only 1 in 13 questions directed specifically at patellar instability.

The Banff Patella Instability Instrument (BPII) was first published in Canada, in 2013, by Hiemstra et al., in an attempt to fill the void of the lack of a specific questionnaire to assess patellar instability in the templates of “Patient-Reported Outcome Measures”. The 32 questions belonging to 5 different domains were listed by a modified Ebel method, performed by an international group of experts, to identify which specific outcome measures were most relevant for patellar instability. Since the weight attributed to each answer is similar among different items, the final score consists of the average value of all answers from all five domains, and a higher final score reflects a better quality of life. As such, the Banff

| Question | Original Text (BPII) | Translation (VT12) | Changes for VBPF | Comment |
|----------|---------------------|--------------------|------------------|---------|
| 1a       | “...severity of the 'giving way' episodes?” | “...episódios em que a rótula (patela) sai do lugar? (Gravidade)” | “...episódios em que a rótula sai do lugar? Qual a gravidade dos episódios de deslocamento?” | Expression with no idiomatic equivalent in Portuguese. To keep it understandable to the Brazilian population and preserve its conceptual equivalence, the term “dislocation” was avoided, using “kneecap out of place” (“rótula sai do lugar”) and “displacement” (“deslocamento”) |
| 3        | “...stiffness”       | “joelho duro”       | “joelho duro”     | Although the committee believed that the most appropriate semantic equivalence would be “rigidez” (Portuguese for “stiffness”), the expression “joelho duro” (“hard knee”) had the same conceptual equivalence but greater understanding. So, it was kept in the VBPF |
| 9        | “...sudden twisting and pivoting movements or changes in direction” | “...movimentos de giro/rotação repentinos ou movimentos de mudanças de direção repentinos” | “...movimentos rotacionais ou de mudanças bruscas de direção” | Attempt to simplify the terms from translation VT12, maintaining its conceptual equivalence |
| 14       | “...knee ‘giving way’” | “...joelho ‘sair do lugar’” | “...rótula (patela) sair do lugar” | Expression with no idiomatic equivalence in Portuguese. “joelho” (“knee”) from translation VT12 was replaced by “rótula (patela)” (“patella”) because, according to the committee, the translated term suggested the idea of the entire knee dislocating, instead of the patella alone |
| 28       | “...to psychologically ‘come to grips’?” | “...superar psicologicamente” | “...superar psicologicamente” | Expression with no idiomatic equivalence in Portuguese, translated into an expression of similar conceptual equivalence, which was kept in the VBPF |

Table 2 Cross-cultural adaptation of selected Banff Patella Instability Instrument (BPII) items
questionnaire can assess the quality of life of patients with patellar instability in a more comprehensive way.\(^7\)

Even though the Norwich Patella Instability Score\(^32\) was introduced because of a similar demand and context to the BPII to analyze outcome measures in patients with patellar instability, it focuses on characterizing physical symptoms generated by the clinical presentation. The weight attributed to its 19 items obeys a complex algorithm: the maximum score for items referring to activities that most commonly generate instability symptoms is lower, whereas activities that do not generate these same symptoms for most patients, except those with more severe instabilities, receive more points. Thus, a high final score indicates greater degrees of instability, and, therefore, worse function.

Only a fraction of the patellar instability questionnaires available in the literature was validated at any of the nine possible spheres as recommended by the Consensus-based Standards for the Selection of Health Status Measurement Instruments (COS-MIN).\(^33,34\) The BPII was analyzed per several psychometric properties, including content validity, internal consistency and reliability,\(^18\) and construct and criterion validity.\(^7\)

In 2016, the BPII underwent a factor analysis and item reduction,\(^34\) resulting in the BPII 2.0, with 23 items divided into the same 5 domains as its first version. This reduction was partly due to the fact that many patients did not answer all the questions; in addition, it constitutes an attempt to adapt these questions to the pediatric population. The author of the original questionnaire reported, via e-mail, that the BPII 2.0 is associated with a smaller number of unanswered questions.

Several psychometric properties of the BPII 2.0 were tested and added to its validation process, including a multicenter study of the validation of the BPII 2.0 to the Pedi-IKDC,\(^35\) with moderate correlation, and a cross-cultural validation for the German language targeting the German, Austrian and Swiss populations.\(^36\) In addition, the BPII 2.0 is being validated into Dutch, Spanish, Finnish and French.\(^25\)

Even after establishing a consensus, the committee had doubts in some questions from the final Portuguese translation regarding the acceptability of certain grammatical constructions (such as, “quanto medo”, regarding the intensity of fear) by the target population. Nevertheless, all questions were understood by all participants during the pretest, with no suggestions of changes. Another limitation of the present study was to carry out only the translation and cross-cultural adaptation of the Banff Questionnaire for Patellar Instability. Since the validation is a complex, iterative process, further studies are required to increase the representative sample of the Brazilian population, and our group is working on that.

**Conclusion**

The BPII has been successfully translated and cross-culturally adapted into Brazilian Portuguese, enabling its application to assess the quality of life of patients with patellar instability in Brazil.

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There was no financial support from public, commercial, or non-profit sources.

**Conflict of Interests**

The authors have no conflict of interests to declare. Dr. Galvão reports a pending patent on “Questionário Banff para Instabilidade Patelar Versão Brasileira”.

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PORTUGUES TRANSLATION OF THE BANFF QUESTIONNAIRE FOR PATELLAR INSTABILITY

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ANNEX 1

QUESTIONÁRIO BANFF PARA INSTABILIDADE PATELAR VERSÃO BRASILEIRA

Nome do paciente (nome completo)__________________________________________
Data (dia/mês/ano):_________________________ Sexo:________________________
Telefone para contato:___________ E-mail para contato______________________

Qual o joelho responsável pelas suas queixas?
[ ] Direito [ ] Primeira consulta [ ] Pós-operatório (6 meses)
[ ] Esquerdo [ ] Dia da cirurgia [ ] Pós-operatório (1 ano)
[ ] Ambos [ ] Pós-operatório (3 meses) [ ] Pós-operatório (2 anos)
[ ] Outro:________________________

INSTRUÇÕES

Responda as questões abaixo considerando os últimos três meses, a respeito do estado atual, função, atividades do dia-a-dia e sensação de insegurança que o seu joelho proporciona por conta da instabilidade patelar (rótula que sai do lugar). Para cada uma das questões abaixo haverá uma linha contínua de 0 a 100. Por favor, indique com um “risco” (“/”) sobre o ponto que mais se aproxima de sua resposta para cada uma das situações solicitadas.

Este é um exemplo:

Este é um bom questionário?

0 ____________________________ 100
Inútil Excelente

Caso você posicione o “/” no meio da linha, isto indica que o questionário é de qualidade moderada, pois a resposta se encontra no meio do caminho entre “Inútil” e “Excelente”. Já se a sua resposta representar o extremo de cada situação, é importante você posicionar o “/” no início (“Inútil”) ou no final da linha (“Excelente”), refletindo a sua condição.

Annex 1 Banff Questionnaire for Patellar Instability, Brazilian Version.
SEÇÃO A: SINTOMAS E QUEIXAS FÍSICAS
As primeiras quatro questões estão relacionadas a SINTOMAS E QUEIXAS FÍSICAS

1) A respeito da função geral do seu joelho, quão problemáticos são os episódios em que a rótula sai do lugar?

Marque o “/” à direita do final da linha caso você não esteja apresentando nenhum episódio de deslocamento da rótula neste período. Esta pergunta tem duas partes: (1.a) e (1.b)

1.a) Qual a gravidade dos episódios de deslocamento?

0 _______________________________ 100

Episódios

muito graves

Episódios

pouco graves

1.b) Qual a frequência dos episódios de deslocamento?

0 _______________________________ 100

Sempre

Nunca

acontecem

acontecem

2) Quanto de desconforto ou dor você sente no joelho durante uma atividade prolongada (por exemplo, acima de 30 minutos)?

0 _______________________________ 100

Dor

Sem

intensa

dor

3) Sobre a função do seu joelho envolvido, quanto você se incomoda com a perda de movimento do joelho ou com ficar com o “joelho duro”?

0 _______________________________ 100

Muito

Nada

incomodado

incomodado

4) Considerando a função do seu joelho e sua relação com a força muscular: quão fraco é o seu joelho?

0 _______________________________ 100

Muito

Sem

fraco

fraqueza

Annex 1 (continued).
SEÇÃO B: QUEIXAS RELACIONADAS AO TRABALHO

As questões abaixo se relacionam à sua profissão ou vocação e se referem à sua funcionalidade no trabalho e qualquer queixa relacionada ao trabalho. Caso você seja um estudante em tempo integral ou trabalhe no seu domicílio, considere esta atividade como a sua profissão. Também pode ser considerado nesta seção qualquer trabalho temporário extra. Leve em conta os últimos três meses para responder as perguntas abaixo.

Se você é DESEMPREGADO por outras razões que NÃO RELACIONADAS AO SEU JOELHO, marque um “X” nesta linha: ________________

5) Quanto de dificuldade você encontra, por conta do seu joelho, para realizar movimentos de mudança de direção ou de rotação do corpo sobre o joelho? (Marque o “/” no início da linha à esquerda se você se encontra incapaz de trabalhar devido ao seu joelho)

0 _________________________________ 100

Completamente Não me gera

incapaz limitações

6) Quanto de dificuldade você encontra, por conta do seu joelho, para realizar movimentos de agachamento no seu trabalho? (Marque o “/” no início da linha à esquerda se você se encontra incapaz de trabalhar devido ao seu joelho)

0 _________________________________ 100

Muita Sem
dificuldade dificuldade

7) Quanto você se preocupa em perder dias de trabalho devido a problemas ou novas lesões no joelho? (Marque o “/” no início da linha à esquerda se você se encontra incapaz de trabalhar devido ao seu joelho)

0 _________________________________ 100

É um problema Não me

extremamente preocupa

significante

8) Quanto você se preocupa em perder aulas no colégio, faculdade ou ainda tempo de trabalho devido ao seu tratamento do joelho?

0 _________________________________ 100

É um problema Não me

extremamente preocupa

significante

Annex 1 (continued).
SEÇÃO C: ESPORTES/ATIVIDADES RECREACIONAIS/COMPETITIVAS

As questões abaixo se referem a ATIVIDADES RECREACIONAIS E PARTICIPAÇÃO EM ESPORTES OU COMPETIÇÕES. Elas relacionam suas habilidades em participar destas atividades e como estas são influenciadas pelo seu problema do joelho. Considere os últimos três meses para responder estas questões.

9) Quanto de limitação você apresenta para movimentos rotacionais ou de mudanças bruscas de direção?

0 ___________________________ 100
Totalmente Sem
limitado limitações

10) Quanto você se preocupa com o fato de que atividades esportivas ou recreacionais possam piorar o estado do seu joelho?

0 ___________________________ 100
Muito Sem
preocupado preocupações

11) Qual é o seu nível atual de performance nas atividades recreacionais ou esportivas, comparando com a performance antes da lesão?

0 ___________________________ 100
Totalmente Sem
limitado limitações

12) Considerando as atividades ou esportes que você se envolve hoje, quanto as suas expectativas mudaram devido ao estado do seu joelho?

0 ___________________________ 100
Diminuiram Não diminuíram
completamente nada

13) Você tem que praticar suas atividades esportivas ou recreacionais com cuidado? (Marque o “/” no início da linha à esquerda se você se encontra incapaz de praticar atividades esportivas ou recreacionais devido ao seu joelho)

0 ___________________________ 100
Sempre pratico Nunca pratico
com cuidado com cuidado

14) Quanto de medo você tem de sua rótula (patela) sair do lugar durante atividades esportivas ou recreacionais?

0 ___________________________ 100
Muito medo Sem medo

Annex 1 (continued).
15) Você se preocupa com condições do ambiente, como um campo ou solo molhado, ou ainda uma quadra rápida, ou então com o tipo do piso do ginásio, quando está envolvido com suas atividades esportivas ou recreacionais? (Marque o “/” no início da linha à esquerda se você se encontra incapaz de praticar atividades esportivas ou recreacionais devido ao seu joelho)

| 0 | 100 |
|---|---|
| Muito | Nada |
| preocupado | preocupado |

16) Você se frustra quando pensa no seu joelho ao considerar a realização de atividades recreacionais ou esportivas?

| 0 | 100 |
|---|---|
| Extremamente | Não me |
| frustrado | sinto frustrado |

17) Qual é o grau de dificuldade para você “dar o máximo de si” nas atividades esportivas ou recreacionais? (Marque o “/” no início da linha à esquerda se você se encontra incapaz de praticar atividades esportivas ou recreacionais devido ao seu joelho)

| 0 | 100 |
|---|---|
| Extremamente | Não sinto |
| difícil | dificuldade |

18) Você sente medo ao praticar esportes de contato? (circule o item “N. S. A.” - Não Se Aplica – à direita da linha, caso o motivo pelo qual você não pratica esportes de contato não seja o seu joelho)

| 0 | 100 |
|---|---|
| Muito | Sem |
| medo | N.S.A. |

As questões abaixo se relacionam aos dois principais esportes ou atividades recreacionais que você realiza. Por favor escreva estas duas atividades em ordem de importância.

1. 

2. 

19) Quanto de limitação você encontra quando pratica o esporte ou atividade recreacional listado como número 1? (Posicione o “/” no início da linha à esquerda se você se encontra incapaz de praticar esportes ou atividades recreacionais devido ao seu joelho)

| 0 | 100 |
|---|---|
| Extremamente | Sem |
| limitado | limitações |

20) Quanto de limitação você encontra quando pratica o esporte ou atividade recreacional listado como número 2? (Posicione o “/” no início da linha à esquerda se você se encontra incapaz de praticar esportes ou atividades recreacionais devido ao seu joelho)

| 0 | 100 |
|---|---|
| Extremamente | Sem |
| limitado | limitações |

Annex 1 (continued).
SEÇÃO D: ESTILO DE VIDA

As questões abaixo lidam com seu estilo de vida em geral e devem ser consideradas fora do ambiente de trabalho e de esportes ou atividades recreacionais. São relacionadas ao seu joelho no que diz respeito a instabilidade patelofemoral (rótula que sai do lugar).

21) Você se preocupa com problemas de segurança em geral (como ao carregar uma criança pequena, jardinagem...) no que diz respeito ao seu joelho com instabilidade patelofemoral?

| 0 | Extremamente | 100 |
|---|---------------|-----|
|   | preocupado    |     |

| 0 | Completamente | 100 |
|---|---------------|-----|
|   | limitado      |     |

22) Quanto da sua habilidade de se exercitar e se manter em forma esteve limitada devido ao seu problema no joelho?

| 0 | Completamente | 100 |
|---|---------------|-----|
|   | limitado      |     |

23) Quanto do seu prazer na sua vida foi limitado pelo seu problema no joelho?

| 0 | Completamente | 100 |
|---|---------------|-----|
|   | limitado      |     |

24) Com que frequência você se dá conta do seu problema no joelho?

| 0 | O tempo       | Nunca |
|---|---------------|-------|
|   | todo          |       |

25) Considerando o seu estilo de vida, quanto você se preocupa com o seu joelho em relação às atividades que você e sua família realizam?

| 0 | Extremamente  | Não me |
|---|---------------|--------|
|   | preocupado    | preocupo |

26) Você teve que modificar seu estilo de vida para evitar atividades que pudessem machucar o seu joelho?

| 0 | Modifiquei    | Não    |
|---|---------------|--------|
|   | completamente | modifiquei |

Annex 1 (continued).


SEÇÃO E: SOCIAL E EMOCIONAL

As questões abaixo consideram suas atitudes e sentimentos e a maneira que eles se relacionam com seu joelho com instabilidade patelofemoral (rótula que sai do lugar). Considere os últimos três meses.

27) Quanto você se incomoda com o fato de não ser mais competitivo por conta do seu problema no joelho? (Marque “/” ao final da linha à direita, para além do 100 se suas necessidades competitivas estão sendo alcançadas. Marque o “/” ao início da linha, sobre o 0 se você não tiver necessidades competitivas)

0 ........................................................................ 100

Extremamente Nada
incomodado incomodado

28) Você apresentou alguma dificuldade para superar psicologicamente os problemas relacionados ao seu joelho?

0 ........................................................................ 100

Dificuldade Sem qualquer
extrema dificuldade

dificuldade

29) Com que frequência você se sente apreensivo ou com medo em relação ao seu joelho?

0 ........................................................................ 100

O tempo Em nenhum
todo momento

30) Quanto você se incomoda por uma falta de confiança no seu joelho?

0 ........................................................................ 100

Extremamente Sem nenhum
incomodado incômodo

31) Se você pudesse quantificar, quanto de medo você tem de desenvolver uma nova lesão no mesmo joelho envolvido?

0 ........................................................................ 100

Muito medo Sem medo
algum

Obrigado por completar este questionário.