

## **Abstract**

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### **Psychometric properties of the French translation of the reduced KOOS and HOOS (KOOS-PS and HOOS-PS)**

#### **Objective.**

To evaluate the psychometric properties of the French KOOS-PS and HOOS-PS, specifically its feasibility, reliability, construct validity, and responsiveness.

#### **Methods.**

Consecutive outpatients consulting for primary knee or hip OA in a rheumatology department were included. During the initial assessment, patients were asked to complete the KOOS or HOOS questionnaire and the OsteoArthritis Knee and Hip Quality Of Life questionnaire (OAKHQOL). The patients were given a second KOOS or HOOS questionnaire to complete and return by mail two weeks later.

Feasibility was assessed by calculating the percentage of missing items and the floor and ceiling effects. Test-retest reliability was evaluated using the intra-class correlation coefficient (ICC). Convergent and divergent construct validity was determined by comparing the results of the KOOS-PS or HOOS-PS and OAKHQOL questionnaires using Spearman's rank test. Responsiveness was evaluated using data obtained in other hip or knee OA patients prior to and 1 month after intra-articular hyaluronic acid injection, using standardized response mean (SRM) and effect-size (ES).

#### **Results.**

Eighty seven patients with knee OA and 50 hip OA patients were included. The KOOS-PS and HOOS-PS scores were obtained for all patients as there was no missing items. Neither a floor nor a ceiling effect was observed. The ICC of KOOS-PS and HOOS-PS were 0.861 (0.763-0.921) and 0.859 (0.725-0.929), respectively. A strong or moderate correlation was observed, as expected, between KOOS-PS, HOOS-PS, and the OAKHQOL physical activities, pain, and mental health domains. A weak correlation was observed, as expected, between KOOS-PS, HOOS-PS, and the other OAKHQOL domains, except for a moderate correlation between the KOOS-PS and social functioning. The responsiveness was demonstrated with SRM and effect size of 0.80 and 0.51 (KOOS-PS), 1.10 and 0.62 (HOOS-PS), respectively.

**Conclusion.** The French versions of KOOS-PS and HOOS-PS are reliable, valid, and responsive questionnaires for capturing functional disability in people with knee and hip OA

**Key Words:** *Knee Osteoarthritis – Hip Osteoarthritis – Functional evaluation – KOOS-PS – HOOS-PS – OMERACT – OARSI – Cross-cultural adaptation – validity – reliability - responsiveness*

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## QUESTIONNAIRE KOOS-PS

DATE: \_\_\_\_\_ DATE DE NAISSANCE: \_\_\_\_\_

NOM: \_\_\_\_\_

### INSTRUCTIONS

*Ce questionnaire vous demande votre opinion sur votre hanche. Il nous permettra de mieux connaître ce que vous ressentez et ce que vous êtes capable de faire dans votre activité de tous les jours.*

*Répondez à chaque question. Veuillez cocher une seule case par question. En cas de doute, cochez la case qui vous semble la plus adaptée à votre cas.*

Les questions suivantes concernent ce que vous êtes capable de faire. Au cours des **huit derniers jours**, quelle a été votre difficulté pour chacune des activités suivantes ?

1. Sortir du lit

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Mettre vos chaussettes ou vos collants

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Vous relever d'une position assise.

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Vous pencher en avant pour ramasser un objet

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Tourner, pivoter sur votre jambe

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Rester à genoux

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Rester accroupi

Absente	Légère	Modérée	Forte	Extrême
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**\*\*\*Merci beaucoup d'avoir répondu à ce questionnaire\*\*\***