Validation of GHQ-12 for assessing psychological distress in chronic low back pain patients

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Objective.– Assessment of psychological well being and screening for psychological distress are of key importance for low back pain patients. The GHQ-12 was developed to identify psychological distress in primary care settings. Therefore, screening and assessing patients affected by disabling chronic low back pain with GHQ-12 should be of interest in current practice and in clinical research to indicate or optimize multidisciplinary programs and therapeutic strategies. However, psychometric properties of GHQ-12 have not been evaluated in the specific indication of chronic low back pain patients. This lack of data validation prompted us to conduct a validity study of the GHQ-12 for assessing psychological distress in chronic low back pain patients.

Patients and methods.– The study involved a population of patients undergoing functional restoration for chronic low back pain and replication was done in another. Assessments were done twice at 1-week interval before functional restoration and at 1-month follow-up. Intraclass coefficient correlation was used for test-retest reliability (good if > 0.7). Construct validity entailed convergence with the Beck depression inventory, the Quebec back pain disability scale and the Dallas pain questionnaire, using baseline values and Spearman’s coefficient (moderate and high if r ≥ 0.35 and 0.5, respectively). Responsiveness was assessed using Wilcoxon’s test and effect size. P value was set at 0.05.

Results.– Two hundred and thirty-nine patients were first included. The intraclass coefficient correlation was 0.74 indicating good reliability of the GHQ-12. High convergences of the GHQ-12 were observed with the Beck depression inventory and subscales of the Dallas pain questionnaire for anxiety and depression, and for sociability. Moderate convergences were observed with the Quebec back pain disability and subscales of the Dallas pain questionnaire for daily activities, and for leisure and occupation. The score of GHQ-12 changed after functional restoration (P < 0.0001, effect size 0.61). Improved patients had better results than non-improved (P < 0.0001). Results were replicated in 166 other patients.

Discussion.– We provide validation of the GHQ-12 for assessing psychological distress in chronic low back pain patients. The tool is suitable to use in current practice and in clinical trials. Furthermore, since generic, it could be useful for decision making in transversal perspectives.

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African adult norms of box&block test

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Introduction.– The systematic and objective assessment of patients has become a major concern in rehabilitation to evaluate the efficacy of treatments, and to adapt them to the patients’ evolution. The box&block test (BBT) is largely used as an objective evaluation of gross manual dexterity [1]. The existing adult norms have been developed in a Western population (USA) [1]. The purpose of this study is to determine the norms of a specific sub-Saharan population, and to compare them to occidental norms.

Methods.– We recruited 692 Beninese subjects from 20 to 85 years old. Subjects did not have any pathology of the upper limbs, and lived in Cotonou City. These subjects were asked to perform the BBT, as described by Mathiowetz et al. [1].

Results.– The mean score of BBT is 77.2 ± 15.1 for female subjects and 75.5 ± 16.1 for male subjects (P < 0.001). The mean score is 80.1 ± 16.7 for the right hand and 72.6 ± 14.3 for the left hand (P < 0.05). The overall mean score of the right hand is higher for Beninese subjects than for American subjects [1], for both sex, although a significant difference is demonstrated in females only (P = 0.07 for males, P = 0.006 for females). On the contrary, the score obtained with the left hand is higher in American subjects, for both sex (P < 0.05).

Discussion and conclusion.– In the Beninese population, results show a higher manual dexterity for women and for the right hand. The right hand of Beninese women even show a higher dexterity than the right hand of American women, while the converse is observed for both sex on the left side.

These Beninese norms of the BBT helps to adapt this assessment tool to the African sub-Saharan populations.

Reference

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Communications affiliées

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Étude de la validité et la reproductibilité du test de Sorensen chez le lombalgie chronique

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Patients et méthode.– Il s’agit d’une étude cas-témoins à propos de 60 sujets : 30 patients lombalgiques chroniques et 30 sujets sains. L’examen clinique comportait un recueil des données anthropométriques, une appréciation de la souplesse pelvi-crânienne et des tests de performance physique (évaluation de l’endurance musculaire des muscles extenseurs [test de Sorensen] et fléchisseurs du rachis [test de Shirado]) et un test de marche de 6 minutes. Les validités de convergence et de divergence étaient étudiées à l’aide du coefficient de corrélation de Spearman. La reproductibilité était appréciée par l’étude du coefficient de corrélation intraclasse (CCI), ainsi que la méthode de Bland et Altman.

Résultats.– Les deux groupes étaient comparables concernant les paramètres pouvant influencer les forces des muscles du tronc. Les corrélations du score global du test de Sorensen avec l’endurance des muscles abdominaux (test de Shirado ; r = 0,43), l’âge (r = 0,46), l’échelle de