Convergent and Known-Group Validity of the Start Musculoskeletal Tool Among Patients with Neck Pain

Fatoye F[1], Mbada C[1], Afolabi S[2], Gebrye T[1], Fatoye C[1], Adje M[3], Karstens S[3]

[1]Manchester Metropolitan University, Manchester, UK; [2]Obafemi Awolowo University, Ile-Ife, Nigeria, [3]University of Luebeck, Trier, Germany

Introduction

- Clinicians require brief, practical tools to help identify musculoskeletal (MSK) condition subgroups requiring targeted intervention.
- STarT MSK tool was developed to aid risk-stratification for future disability among patients with MSK conditions, but it still has limited validation.

Purpose

- To investigate the convergent and known-group validity of the STarT MSK tool among patients with neck pain.

Methods

- Fifty-five consenting patients with neck pain attending the outpatient physiotherapy and orthopedic clinics at a Nigerian tertiary institution participated in this study.
- Validity of the STarT MSK tool was tested with pain catastrophising, long-term disability, and kinesiophobia using the Pain Catastrophizing Scale (PCS), Orebro Musculoskeletal Pain Questionnaire (Short) (OMPQS), and Tampa Scale of Kinesiophobia (TSK), respectively.
- Socio-demographic information were also obtained.
- Data were analysed using descriptive and inferential statistics at $p < 0.05$ alpha level.

Results

- The mean age of the respondents was 45.7 ± 14.7 years.
- Rates for low, medium and high risks for future disability were 38.2%, 41.8% and 20% respectively.
- There was no significant association between STarT MSK tool risk-stratification and OMPQS score ($X2 = 6.40$; $p = 0.170$).
- STarT MSK tool showed significant convergent validity with rumination subscale of the PCS ($p = 0.030$) and the OMPQS ($p = 0.02$).
- There was no known-group validity for STarT MSK tool based on age ($p = 0.26$) and gender ($p = 0.20$).

Conclusions

- The STarT MSK tool had fair to good validity with tools assessing psychosocial consequences of chronic pain and long-term disability among patients with neck pain but was not influenced by variations in socio-demographic parameters.
- The STarT MSK tool could therefore be used for diagnostic purposes by clinicians in the field.

Reference

Hill, J. C., Dunn, K. M., Main, C. J., & Hay, E. M. (2010). Subgrouping low back pain: a comparison of the STarT Back Tool with the Örebro Musculoskeletal Pain Screening Questionnaire. European journal of pain, 14(1), 83-89.

Contact:
Professor Francis Fatoye
BSc, MSc (SportMed), MSc, PhD, MBA,
Department of Health Professions,
Manchester Metropolitan University, M15 6GX, UK,
Email: f.fatoye@mmu.ac.uk