

## Validity and reliability of Arabic version of the ID pain screening questionnaire in the assessment of neuropathic pain

Amani Abu-Shaheen<sup>1</sup>, Humariya Heena<sup>1</sup>, Shehu Yousef<sup>1</sup>, Sarfaraz Khan<sup>1</sup>,  
Muhammad Riaz<sup>2</sup> and Abdullah Nofal<sup>3</sup>

<sup>1</sup>King Fahad Medical City, Saudi Arabia

<sup>2</sup>University of Leicester, United Kingdom

<sup>3</sup>King Saud University Medical City, Saudi Arabia

**Introduction:** Diagnosis of neuropathic pain (NP) can be challenging. The ID Pain (ID-P) questionnaire, a screening tool for NP, has been translated in several languages and is widely used. However, ID-P validation process has not been done in the Arab population. The ID-P tool appears to accurately indicate the presence of neuropathic component of pain. This simple tool, which can be self-administered, could be of immense use in primary care settings. Thus, the aim of this study was to develop an Arabic version of ID-P and assess its validity and reliability in detecting neuropathic pain.

**Methods:** The original ID-P was translated in Arabic language and administered to the study population. The adaptation procedure was monitored by a seven-member expert panel including two specialists in pain management, an expert in methodology, an expert in clinical research, and an expert in linguistics. Patients were divided into two groups. First group included patients diagnosed with NP by a pain specialist in pain clinics as per the guidelines established by the IASP, whereas the second study group included patients with nociceptive pain (NocP). The Arabic version of the ID-Pain was administered twice to the study population, by the same investigator. Reliability of the Arabic version

was evaluated by percentage observed agreement, and Cohen's kappa; and validity by sensitivity, specificity, correctly classified, and receiver operating characteristic (ROC) curve. Physician diagnosis was considered as the gold standard for comparing the diagnostic accuracy.

**Results:** The study included 375 adult patients (153 [40.8%] with NP; 222 [59.2%] with nociceptive pain). Overall observed percentage agreement and Cohen's kappa were >90% and >0.80, respectively. Median (range) score of ID-P scale was 3 (2±4) and 1 (0± 2) in the NP group and NocP group, respectively ( $p < 0.001$ ). Area under the ROC curve was 0.808 (95% CI, 0.764±0.851). For the cut-off value of  $\geq 2$ , sensitivity was 84.3%, specificity was 66.7%, and correct classification was 73.9%. Thus, the Arabic version of ID-P showed moderate reliability and validity as a pain assessment tool.

**Conclusions:** This article presents the psychometric properties of the Arabic version of ID Pain questionnaire. This Arabic version may serve as a simple yet important screening tool, and help in appropriate management of neuropathic pain, specifically in primary care centers.

aabushaheen@kfmc.med.sa