

## Testing the validity and reliability of the Arabic version of the pain detect questionnaire in the assessment of neuropathic pain

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**Introduction:** Neuropathic pain (NP) can cause substantial suffering and therefore, it must be diagnosed and treated promptly. Diagnosis of NP can be difficult and if made by an expert pain physician is considered the gold standard however, where expert help may not be easily available, screening tools for NP can be used. The pain detect questionnaire (PD-Q) is a simple screening tool and has been widely used in several languages. We developed an Arabic version of PD-Q and tested its validity and reliability.

**Methods:** The original PD-Q was translated into the Arabic language by a team of experts. The translated version of the PD-Q was administered to the study population, which included patients having moderate to severe pain for at least three months. Reliability of the Arabic version was evaluated by an intra-class-correlation coefficient (ICC) between pre- and post-measures and Cronbach's  $\alpha$  values. Validity was measured by receiver operating characteristic (ROC) curve. Expert pain physician diagnosis was considered as the gold standard for comparing the diagnostic accuracy.

**Results:** A total of 375 patients were included in the study, of which 153 (40.8%) patients were diagnosed with NP and 222 [59.2%] patients had nociceptive pain. The ICC between pre and post-PD-Q scale total scores for the overall sample, NP group, and NocP group was 0.970 (95% CI, 0.964±0.976), 0.963 (95% CI, 0.949±0.973), and 0.962 (95% CI, 0.951±0.971), respectively. The Cronbach's  $\alpha$  values for the post-assessment measures in the overall sample, NP group, and nociceptive pain group, were 0.764, 0.684, and 0.746, respectively. The area under the ROC curve was 0.775 (95% CI, 0.725±0.825) for the PDQ

**Conclusion:** In summary, we developed the Arabic version of the PD-Q and tested its psychometric properties. The Arabic version of PD-Q demonstrated good reliability and validity. A large-scale study in the Arabic population is required to confirm the results of this study further and further affirm the validity and reliability of the Arabic version of the PD-Q..

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