



## Analysis of interexaminer agreement in migraine screening

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### Introduction

Migraine diagnosis is based on clinical evaluation, so the International Headache Society proposes diagnostic criteria (International Classification of Headache Disorders - ICHD-3) to standardize the evaluation minimizing underreporting, subjectivity in evaluation and create a unique language among experts. In recent years, the multiprofessional approach has been highlighted in headache disorders patients care and physiotherapy has been recognized as an effective non-pharmacological strategy in the control and prevention of headache episodes. Therefore, it is important for physiotherapists to improve their knowledge about the diagnostic criteria for headaches in order to better manage these patients.

### Objective

To analyze the interexaminer agreement in the application of the ICDH-3 criteria in migraine screening performed by physiotherapists.

### Methods

This is a cross-sectional study submitted to the Ethics Committee of the Center for Health Sciences, Federal University of Pernambuco - UFPE, under approval number 4.891.495. The research was carried out at the Laboratory of Learning and Motor Control (LACOM), Department of Physiotherapy - UFPE, from July 2021 to July 2022. The study included 30 women with mean age of  $32 \pm 3$  years and a diagnosis of migraine provided by a neurologist according to the ICHD-3 criteria. Two physiotherapists, blinded to the medical diagnosis, and with 8 years of experience in the headache field, classified the patients' headache according to the ICHD-3 criteria. An external judge assessed the results for concordance analysis. Cohen's kappa coefficient was used for interexaminer agreement analysis. The strength of the intervals' agreement was classified as poor ( $< 0.20$ ); reasonable (0.21 to 0.40); moderate (0.41 to 0.60); good (0.61 to 0.80); and very good (0.81 to 1.00).

### Results

Interexaminer agreement was good between physician and physiotherapist 1 ( $k = 0.667$ ) and between physician and physiotherapist 2 ( $k = 0.780$ ).

### Conclusion

The diagnostic criteria for headache recommended by the International Headache Society, according to ICHD-3, showed good interexaminer agreement when applied by physiotherapists with at least eight years of experience in the management of headache patients. These findings suggest that it is possible to screen migraine in order to better understand its clinical characteristics (frequency, intensity and duration, laterality and location of the episodes), however, caution is needed when diagnosing these patients due to the diversity of subtypes of this clinical condition.

**Keywords:** Migraine Disorders, Data Accuracy, Diagnosis.