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INTER- AND INTRA-EXAMINER RELIABILITY OF THE PHYSIOCODE POSTURE APPLICATION FOR QUANTITATIVE ASSESSMENT OF POSTURAL ALTERATIONS: PRELIMINARY DATA

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Background: Posture is defined as the alignment of body segments or the relative positioning of body parts for a specific activity. Traditional postural assessment is based on visual analysis, through qualitative observation of spinal curvatures and asymmetries from lateral, anterior, and posterior views. In most cases, it is subjective, as it relies heavily on the evaluator's experience and skill to interpret the results. With current technological advancements, the use of digital photography is being considered and applied for quantitative postural assessment. Physiocode Posture is an Android application designed to identify postural and movement alterations quantitatively.

Objectives: This study aimed to investigate the inter- and intra-examiner reliability of the Physiocode Posture application for the quantitative assessment of postural alterations.

Methods: This is a cross-sectional observational study conducted with 32 volunteers aged 18 to 30 years. Data collection took place on two separate days, with a seven-day interval between assessments. The Physiocode Posture app was used for quantitative postural analysis in the right and left lateral views. Images were captured using a smartphone mounted on a tripod, positioned at a standardized distance of 2.4 meters from the volunteers, with height adjusted according to each participant's stature. Anatomical points were identified and marked with retro-reflective markers to facilitate analysis. The volunteers were instructed to maintain an orthostatic posture, with their gaze fixed on a reference point. The evaluators performed the measurements independently and underwent a familiarization phase with the application before the study began. Inter- and intra-examiner reliability was assessed using the Intraclass Correlation Coefficient (ICC), analyzed with SPSS software.

Results: The study results suggest varying ICC values, with inter-examiner reliability generally higher than intra-examiner reliability. The reliability of the same evaluator in the right and left lateral views ranged from poor to moderate, while the reliability between different evaluators in the same views was good to excellent.

Conclusion: The Physiocode Posture application demonstrated good to excellent inter-examiner reliability, highlighting its potential as a quantitative postural assessment tool. However, intra-examiner reliability was lower, emphasizing the need for improvements in the use of the application and its methodology.

Implications: This study fills an important gap in the literature by investigating the reliability of Physiocode Posture in the quantitative assessment of postural alterations, a topic that has been minimally explored. By analyzing and reporting the application's reliability in different contexts, the study contributes to the consolidation of more objective and precise postural assessment methods, providing reliable data that can support clinical decision-making.

Keywords: Data Accuracy, Posture, Mobile Applications

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KNOWLEDGE, ATTITUDES, PRACTICES, AND BARRIERS OF PHYSICAL THERAPISTS REGARDING HEALTH PROMOTION IN FORTALEZA, BRAZIL: PRELIMINARY RESULTS

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Background: Noncommunicable chronic diseases (NCDs) are a leading cause of death and disability worldwide, including in Brazil. Fortaleza, the largest capital in the northeast, mirrors this trend. The main types of NCDs are cardiovascular diseases (heart attacks and stroke), cancers, chronic respiratory diseases (obstructive pulmonary disease and asthma), and diabetes. The World Health Organization recommends that health professionals focus on health promotion to manage well-being and prevent NCD risk factors like physical inactivity, and smoking, using behavior change theoretical frameworks. While physiotherapists are well-positioned to promote health and mitigate NCDs risks, there is little information on their competencies and barriers in health promotion in Brazil.

Objectives: To investigate the knowledge, attitudes, practices, and barriers to health promotion among physical therapists in Fortaleza.

Methods: A cross-sectional study was conducted using the Brazilian version of the "Knowledge, Attitudes, and Practice" questionnaire, which 30 physical therapists completed. Physical therapists were considered eligible for the study if they were currently practicing and providing services to adults. The questionnaire underwent cross-cultural adaptation following recommended procedures, ensuring appropriate semantic, idiomatic, cultural, and conceptual Equivalence in the final translated version. The ethical review board of the university approved this study and consent was considered implied for the physical therapists who participated. The questionnaire included 26 items designed to identify knowledge, attitudes, and practices related to health promotion. One item was added to the end of the questionnaire, to identify the most frequent barriers to updating clinical practice regarding health promotion. For most items, participants indicated their level of agreement using a 5-point Likert scale. Descriptive statistics and percentages were calculated for the data.

Results: Participants, aged 25 to 47 years (mean: 32.6, SD: 5.8), were predominantly women (63.3%). The most common highest education level was a bachelor's degree with an additional certificate (52%), and 67% had less than 9 years of clinical experience. Most respondents recognized health promotion as important disease prevention (83.3%) and behavior change (77%). However, over half lacked knowledge of behavior change theories (53%) and felt physical therapists were not well-positioned to meet clients' health promotion needs (57%). All participants agreed that physiotherapists should use appropriate methods and collaborate with stakeholders to enhance health promotion effectiveness (100%). Most reported consistently incorporating health promotion into client care (70%), with a lack of understanding about health promotion and time cited as the primary (62%) and second barriers (50%), respectively.

Conclusion: Physical Therapists from an underprivileged region of Brazil expressed positive attitudes towards health promotion;

however, there is a need to develop an educational and supportive organizational infrastructure. This would enhance knowledge and skills of behavioral change theories, ultimately increasing research integration in physical therapy.

Implications: Potential strategies may include incorporating behavioral change theories into undergraduate programs in this city.

Keywords: Health Promotion, Noncommunicable Diseases, Health promotion strategies

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PREVALENCE OF CHRONIC PAIN IN A STATE IN NORTHERN BRAZIL

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Background: Chronic pain represents a significant public health issue, characterized by its high prevalence and the associated physical, emotional, and social impacts. Investigating and understanding the distribution of this condition in different populations is essential to support policies and intervention strategies. In the Brazilian Amazon, there is a gap in studies focused on this topic, making it crucial to conduct research that allows for a deeper understanding of the regional scenario of this population.

Objectives: To identify the prevalence of chronic pain in the population of the state of Amapá.

Methods: A cross-sectional study investigating the prevalence of chronic pain in the state of Amapá, Brazil. Data were collected from 204 participants, aged 18 and older, through an online structured questionnaire.

Results: Of the 204 individuals, 131 (64.2%) reported experiencing pain; of these, 112 (85.5%) stated they had been experiencing pain for more than three months, while 19 (14.5%) reported pain for less than three months. The mean age was 32.6 ± 11.3 years; 145 (71.1%) were female. Regarding self-reported race, 112 (54.9%) identified as mixed-race, 59 (28.9%) as white, 32 (15.7%) as Black, and 1 (0.5%) as Asian. A total of 159 (77.9%) reported no associated disease or comorbidity, while 45 (22.1%) had at least one. Concerning physical activity, 68 (33.3%) engaged in regular exercise, while 136 (66.7%) did not.

Conclusion: The findings of this pioneering study indicate a high prevalence of chronic pain in the population of the state of Amapá, with higher occurrence among women and individuals who do not engage in physical activity.

Implications: Public and private health policies aimed at managing chronic pain in these individuals, as well as improving healthcare professionals' qualifications, could help reduce the physical, economic, and social impacts in this region of the country.

Keywords: Chronic pain, Prevalence, Amazon

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EXPLORING HEALTHCARE PROFESSIONALS' KNOWLEDGE OF STROKE: A STUDY IN HEALTH FACILITIES IN SOUTHERN BRAZIL

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Background: Stroke is the second leading cause of death and the third leading cause of permanent disability among adults worldwide. Given that the duration of cerebral ischemia is directly correlated with the risk of permanent disability, rapid and efficient screening by a well-trained healthcare team is crucial. Previous worldwide studies observed low recognition of the major stroke symptoms, risk factors, sequelae and acute stroke management among HCPs, and few studies were found regarding the knowledge of health professionals about stroke management in the Brazilian population.

Objectives: This study aimed to assess HCPs' knowledge of stroke in health facilities in Southern Brazil to identify knowledge gaps that could inform future training initiatives. The primary objective was to evaluate HCPs' knowledge of stroke pathophysiology, signs and symptoms, emergency management, risk factors, and prevention. A secondary objective was to analyze the impact of previous stroke training and professional experience on knowledge levels.

Methods: This cross-sectional study was conducted in public health facilities in Southern Brazil. A total of 296 HCPs participated, including physicians, nurses, physiotherapists, and nursing assistants. Participants completed a validated questionnaire assessing stroke knowledge. Responses were categorized as adequate or inadequate based on established criteria. Statistical analyses included Kruskal-Wallis and Mann-Whitney tests for group comparisons and Spearman correlation for experience-related knowledge trends.

Results: The overall correct response rate was 46.6%. Physicians and medical interns had significantly higher scores than other professional groups ($p < 0.03$). Nursing assistants demonstrated the lowest accuracy (36.1%). Participants who had attended stroke training scored higher (52.2% vs. 45.1%, $p = 0.039$). A negative correlation was observed between years of professional experience and knowledge levels ($r = -0.275$, $p = 0.00$), suggesting a decline in knowledge retention over time. Only 33.4% of participants accurately described thrombolysis, and just 6.7% knew the correct therapeutic window for its administration. However, 75% correctly identified stroke prevention strategies.

Conclusion: Significant knowledge gaps about stroke exist among HCPs, particularly non-physicians, emphasizing the need for targeted education and continuous training programs. Future studies should assess the effectiveness of different educational approaches and expand research to other Brazilian regions.

Implications: The study highlights the urgent need for ongoing professional development in stroke management. Findings support integrating stroke education into undergraduate curricula and continuing education programs for practicing HCPs. Public policies should promote systematic training efforts to enhance early stroke recognition and management, ultimately improving patient outcomes and reducing stroke-related disability and mortality in Brazil.

Keywords: knowledge, health care team, CVA (Cerebrovascular Accident)