

strengthen the collaborative intervention model involving primary healthcare professionals, secondary-level healthcare providers, and patients to enhance self-management of chronic pain in Guaraçuva SUS users.

Implications: The implementation of *EducaDor* in the SUS of Guaraçuva city may provide information to discuss about pain neuroscience education inclusion in other cities, the best strategies and mode of delivery, and will support the expansion of the implementation science in public health.

Keywords: Chronic pain, Health education, Public health

Conflict of interest: The authors declare no conflict of interest.

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EVIDENCE BASED PRACTICE'S RELEVANCE IN OBSTETRICS' TEACHING

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Background: Considering the abusive and inadequate use of interventions in the present Brazilian obstetrics scenario and this field's relevance for human and social development, a technically proficient, humanized and updated health assistance is essential. Evidence Based Practice (EBP) becomes a relevant tool in Obstetrics having in mind its capability of promoting individualization and care quality improvement. EBP incorporation in graduation studies can be a determinant in care's quality, clinic results improvement, health practice safety and efficiency during professional life.

Objectives: To evaluate health graduate students' perception about Obstetrics' teaching, taking into consideration EBP presentation during classes. From that assumption, their ability to identify evidence-based interventions within the field.

Methods: Survey like research, applied remotely through Google Forms, with graduate students from a health university. The questionnaire is compound of 12 multiple choice questions aiming to draw participants' academic profile, their EBP in Obstetrics' perception and their ability to identify, within 11 interventions common to Obstetrics (offering non-pharmacological pain relief methods, food intake denial, water intake, encouraging the adoption of mobility and an upright position, adoption of a birth position of the individual woman's choice, lumbar massage, routine use of episiotomy, application of manual fundal pressure, water immersion, skin-to-skin contact with their mothers during the first hour after birth, incentive and orientation to breastfeeding in the first hour of life). From this, 3 interventions are not recommended by the World Health Organization - food intake denial, routine use of episiotomy and application of manual fundal pressure. A descriptive analysis of data was conducted.

Results: 58 students participated in the study, 86,2% were female, with 23,37 average age (19-45 minimum and maximum), from 8 courses (Biomedicine, Nursing, Pharmacy, Physiotherapy, Fonoaudiology, Medicine, Nutrition and Psychology). 37 students (63,8%) answered that during graduation classes EBP theoretical and practical concepts were presented in Obstetrics. 10 participants (17,24%)

marked at least one of the 3 options not recommended by WHO. 27 participants (46,55%) marked all correct alternatives.

Conclusion: By analyzing available data, a great percentage of graduate health students didn't have contact with EBP in Obstetrics (36,2%). 17,24% from participants wrongly identified interventions not recommended by lack of scientific evidence. Less than half (46,6%) of participants were able to correctly identify all evidence-based interventions proposed.

Implications: With the important growth of obstetrics' field for physical therapy professionals, an academic graduation targeted to offer the best quality care, having as principle EBP and humanized care should be of interest in this professional category.

Keywords: Obstetrics, Evidence Based Practice, Teaching

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DO SEX AND AGE MODERATE THE RELATIONSHIP BETWEEN BELIEFS ABOUT PAIN AND CLINICAL OUTCOMES IN INDIVIDUALS WITH CHRONIC SHOULDER PAIN?

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Background: Shoulder pain is one of the most prevalent musculoskeletal conditions in the general population. Beliefs about pain seem to significantly influence the variability of symptoms in this population, however, it is not yet clear how personal, gender, and age variables can influence this relationship between beliefs and pain.

Objectives: Verify whether the personal aspects of gender and age moderate the relationship between pain beliefs and clinical outcomes in individuals with chronic shoulder pain.

Methods: Sixty-seven individuals aged between 18 and 80 years who complained of shoulder pain were evaluated. Age was divided into 3 groups: young adults (18-29 years old), middle-aged adults (30-49 years old), and adults (50-80 years old), and gender was divided into male and female. Pain beliefs, such as pain catastrophizing, kinesiophobia, fear-avoidance beliefs, and self-efficacy, were assessed using the Brazilian version of the Pain Catastrophizing Scale, Tampa Kinesiophobia Scale, Fear-Avoidance Beliefs Questionnaire and Chronic Pain Self-Efficacy Scale experiments, respectively. Clinical symptoms included frequent pain intensity, measured by the Numerical Pain Scale, and upper limb disability, assessed by the Brazilian version of the Disabilities of the Arm, Shoulder and Hand Questionnaire. Moderation analyzes verify the impact of gender and age moderation on the relationship between pain beliefs and clinical outcomes. The significance criterion used was $p < 0.05$.

Results: Gender does not significantly moderate the relationship between pain beliefs and clinical outcomes ($p > 0.05$), so that men and women had the same pain and disability outcomes in view of variations in pain beliefs. Age moderates the relationship between kinesiophobia and clinical outcomes, so that the positive correlation between pain intensity and kinesiophobia is stronger in middle-aged adults ($p = 0.04$) and the positive correlation between disability and

kinesiophobia is stronger in the elderly ($p=0.04$), both compared to young adults.

Conclusion: The relationship between beliefs about pain and clinical outcomes is similar between men and women. On the other hand, older individuals have a stronger relationship between fear of movement and pain and disability compared to younger individuals.

Implications: To provide the therapist with new tools to help him understand the condition of chronic pain in the shoulder and facilitate clinical decision-making that is more specific to the patient's age. The fact that advancing age potentiates the negative effect of kinesiophobia on pain intensity and upper limb disability, suggests attention to pain beliefs when evaluating people with shoulder pain, over 30 years of age.

Keywords: Biopsychosocial model, Disability, Behavioral aspects

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THE EFFECTIVENESS OF PERINEAL MASSAGE IN THE PREVENTION OF EPISIOTOMY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Episiotomy is a common procedure in which a surgical incision is made in the perineum to widen the birth canal. Although it was widely used in the past to expedite delivery and prevent severe tears, systematic reviews have shown that its routine performance does not provide significant benefits and is associated with risks and complications such as edema, infections, dyspareunia, urinary incontinence, and tears. In this context, perineal massage, which involves manual manipulation of the perineal region, can be considered an option as it increases the flexibility of perineal tissues, reducing muscular resistance and, consequently, the chances of tears and the need for episiotomy.

Objectives: Based on the PICOS question, the aim of this systematic review was to evaluate the effectiveness of perineal massage compared with no intervention in preventing episiotomy through randomized controlled trials.

Methods: This study is a systematic review of the literature, following the 2020 PRISMA protocol for its conduction. It was registered on the PROSPERO platform under number CRD42020153045. Among the stages for its preparation are: Development of a guiding question (PICOS), definition of descriptors and databases, as well as eligibility criteria, where only randomized controlled trials in English were included. Two researchers participated in the selection of studies and extraction of results (M.A.B and K.M.M) and a third carried out the consensus (Y.R.C). The risk of bias was assessed using the PEDro scale and a dichotomous representation of the data was created using a forest plot using the RevMan 5.3 software.

Results: Five studies were included in the review. In total there were 683 women in the intervention groups and 678 in the control groups. Perineal massage was superior to no intervention in preventing episiotomy, considering that $p<0.05$, and in the overall assessment of the forest plot with an effect size of 0.46 (95% confidence

interval (CI): 0.37 - 0.57) $p < 0.00001$. The lowest score on the PEDro scale was 4 and the highest score was 6, meaning that the studies range from moderate to high risk of bias.

Conclusion: In general, perineal massage was superior in reducing cases of episiotomy when compared to no intervention. We believe that despite the limitations, this study can help health professionals in decision making and help researchers in conducting new studies in the area.

Implications: Perineal massage is an accessible and easily performed procedure that can be done starting from the 34th week of pregnancy by the pregnant woman herself, her partner, or qualified healthcare professionals, including pelvic physiotherapists. Its benefits outweigh the risks, thus making it a part of these professionals' recommendations. Additionally, considering one of the factors influencing the quality of evidence, the risk of bias, it is important for new studies to be conducted with better research designs to reduce recurring systematic errors in clinical trials, thereby providing stronger recommendations.

Keywords: Perineal massage, Perineal trauma, Episiotomy

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HACOR SCALE FOR PREDICTING NON-INVASIVE MECHANICAL VENTILATION FAILURE: TEST OF CLINIMETRIC PROPERTIES

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Background: Non-Invasive Ventilation (NIV) aims to improve pulmonary ventilation and reverse the reason for ventilatory failure. Despite the benefits, improper use can contribute to failure of ventilatory therapy. NIV failure, which translates into the need for orotracheal intubation, is 30% and mortality in this group is 47%. The HACOR scale was developed using HR, RR, PaO₂/FiO₂ Ratio, Glasgow, Ph and is intended to predict the risk of NIV failure. The scale should be applied after 1h of NIV use. Its score ranges from 0 to 25 points and the closer to the maximum value, the greater the risk of failure. A score above 5 points indicates a greater than 80% risk of therapy failure. The scale showed 72.6% sensitivity and 90.2% specificity for the diagnosis of NIV failure. Given the importance of having a single scale with adequate accuracy for predicting NIV failure available in the literature and the absence of a Brazilian-Portuguese version that tested the clinimetric properties. It is necessary to test the properties so that with the test results, the scale can be used in Brazilian hospitals.

Objectives: Test the clinimetric properties of the HACOR scale in adult patients using NIV in a hospital emergency room.

Methods: The HACOR scale considers heart rate, acidosis (blood pH), Glasgow scale, oxygenation (PaO₂/FiO₂) and respiratory rate, from 0 to 25 points. The highest score defines the need for intubation (mechanical ventilation-MV) after one hour of NIV in hypoxemic hospitalized patients. Ten minutes later, the second application of the HACOR scale was performed to test the reliability (Intraclass Correlation Coefficient-ICC), measurement error (standard error of measurement-SME and minimum difference detected-DMD), ceiling and floor effect, validity of construct by correlation (Pearson-r) with pulse oxygen saturation (SpO₂) and predictive capacity (area under the ROC-curve).