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

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

Acknowledgment: This study was funded by FAPESP Foundation, São Paulo, Brazil

Ethics committee approval: Ethics and Research Committee of the Federal University of São Carlos (CAEE 71447317.6.0000.5504 and 08180919.0.0000.5504).

https://doi.org/10.1016/j.bjpt.2024.100917

332

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

Mateus Assis Benfica¹, Kerolyne Morbeck Moreira²,

Yasmim Rocha Checon²

¹ Universidade Estadual de Santa Cruz (UESC), Ilhéus, Bahia, Brasil
² UnesulBahia (UNECE), Eunápolis, Bahia, Brasil

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<0.0001. 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

Conflict of interest: The authors declare no conflict of interest. **Acknowledgment:** Not applicable.

Ethics committee approval: Not applicable.

https://doi.org/10.1016/j.bjpt.2024.100918

333

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

Matheus Pereira¹, Adriana Claudia Lunardi¹ ¹ Master's and Doctoral Program in Physical Therapy, Universidade Cidade de São Paulo (UNICID), São Paulo, São Paulo, Brazil

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).