air flow greater than that generated spontaneously, also delivering humidified and heated air at temperatures close to 36.5°C with a programmed fraction of inspired oxygen. At first, HFNC emerged as an alternative to replacing CPAP (continuous positive airway pressure) in preterm infants. For a better understanding and safe clinical application, it is extremely important to search for its real physiological effects for use in the Neonatal Intensive Care Unit.
Objectives: To review in the current literature what are the physiological effects of usinga high-flow nasal cannula when applied to preterm infants.
Methods: This is an integrative literature review, in which scientific articles from journals indexed in the Bireme and Pubmed library and in the Scielo and PEDro databases, published between 2012 and 2022 were used.; published in Portuguese, English and Spanish, whose objective was to investigate the effects of HFNC in newborns with less than 37 gestational weeks.
Results: Six articles were selected that fit the inclusion criteria and that update knowledge about the physiological effects. Beneficial effects such as improved oxygenation and respiratory rate, lower incidence of injury to the nasal mucosa, effective alveolar ventilation, increased pulmonary pressure, washing of the nasopharyngeal dead space and possible harmful effects such as pneumothorax, pneumo-orbitis, pneumocephalus, subcutaneous emphysema, apnea, and bradycardia.
Conclusion: It is concluded that the use of a high-flow nasal cannula in preterm infants has beneficial effects and is a safe resource if used through individualized prescription. Most of the research compares it with CPAP, and when performing this comparison, it was observed in most studies that it reduces the risk of nasal trauma, facilitates ventilatory mechanics and provides greater comfort. However, it has been analyzed that flow rates greater than 8 liters per minute can have negative effects. It is essential that further research be carried out to understand the physiological effects of this therapy, providing an increasingly safer practice.
Implications: When planning ventilatory support for premature newborns, one of the main concerns that the physiotherapist must pay attention to is the risks that may arise. HFNC has been gaining notoriety in hospitals, especially after its use in the Covid-19 pandemic, and researching it in depth, investigating its implications in the body, whether or not it favors adequate development of the newborn is necessary. In short, when researching the subject, professionals working in the Neonatal Intensive Care Unit will be able to have a clear understanding of the repercussions on the physiological system with the use of this therapy.
Keywords: Oxigentherapy, Premaure, Respiratory

Conflicts of interest: The authors declare no conflict of interest.
Acknowledgment: We would like to thank our advisor Amanda Lucci for her patience, friendship and teachings to carry out this research. Our friend Patrícia Batista and our family members for their encouragement and companionship at all times.
Ethics committee approval: Not applicable.

https://doi.org/10.1016/j.bjpt.2024.100810

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COMPARISON OF THE EFFECTS OF TWO GROUPS OF SUSPENSION TRAINING ON PAIN IN WOMEN WITH CHRONIC LOW BACK PAIN: A PILOT STUDY

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Background: Low back pain is a disabling disease that originates from multifactorial aspects and directly interferes with the daily life of those who suffer from it.
Objectives: To compare the effects of two suspension training programs on pain in women with chronic low back pain.
Methods: Pilot study in which female participants, aged 18-49 years, with chronic low back pain (CLBP) of unspecific origin were selected. As inclusion criteria, participants should be at least moderately active according to the human activity profile (HAP) and have pain >3 according to the Numeric Pain Rating Scale (NPRS). After the evaluation, the participants were randomized into 3 groups: control group (CG), suspension training group 1 (STG1) and suspension training group 2 (STG2). STG1 performed the training with progression of exercise difficulty, while STG2 performed the program with progression of the number of repetitions every 4 weeks. The training consisted of 24 sessions, twice a week, for 12 weeks. Each session lasted approximately 50 minutes and was divided into 5 minutes of warm-up, 40 minutes of suspension training and 5 minutes of relaxation. Exercises were performed for upper limbs, trunk and lower limbs. The NPRS evaluation was carried out before the start of treatment and after the end of training (12 weeks).
Results: So far, 11 women have participated, 4 in STG1, 4 in STG2 and 3 in CG. The mean age was 31±09 years and the location of the pain was predominantly bilateral. No significant difference was found in the NPRS after training: STG1 (4±3.75 vs 4±1.50), STG2 (4±5.50 vs 4±3.50), CG (3±3.67 vs 3± 3.33) (Wilcoxon test, $p>0.05$). The intergroup analysis also showed no significant difference (Kruskall Wallis test, $p>0.05$).
Conclusion: So far, suspension training has not shown significant results in improving low back pain and there is no significant difference between the effects of STG1 and STG2.
Implications: This study allows us to present suggestions for suspension training exercises that can be prescribed to women with chronic low back pain.
Keywords: Low back pain, Pain measurement, Suspension training

Conflicts of interest: The authors declare no conflict of interest.
Acknowledgment: Not applicable.
Ethics committee approval: Not reported.

https://doi.org/10.1016/j.bjpt.2024.100811

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EFFICACY OF MOBILE-HEALTH INTERVENTIONS ON PAIN AND DISABILITY OF INDIVIDUALS WITH CHRONIC LOW BACK PAIN: A SYSTEMATIC REVIEW WITH META-ANALYSIS

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Background: Low back pain is the main cause of disability in the world, causing serious socioeconomic and health systems impact. Individuals with chronic conditions have been widely affected by the pandemic. In this context, mobile health (*m-Health*) has

become popular. Despite the considerable number of applications for low back pain available in the app store, their effectiveness has not been established and there is a lack of evidence regarding the effectiveness of the isolated use of mobile applications in the self-management of low back pain.
Objectives: Investigate the effectiveness of interventions using mobile health in improving pain and disability of individuals with chronic low back pain, compared to usual healthcare strategies or no treatment.
Methods: A systematic review (PROSPERO-CRD42022338759) with meta-analysis comparing *m-Health* to usual care or no intervention. The search terms used were related to low back pain and *m-Health*. Pain intensity and disability were included as primary outcomes, and quality of life as a secondary outcome. Only randomized clinical trials (RCT) were included, and the primary outcomes were pain intensity and disability, and the secondary outcome was quality of life. Searches were carried out in the following databases, without date or language restriction: PubMed, SCOPUS, EMBASE, PEDro, Cochrane and Opengray, in addition to studies' references. The selection was performed using the Rayyan software, by two independent reviewers (screening of abstracts and full-text reading). The risk of bias was analyzed using the PEDro scale, by two independent reviewers, considering each individual item. Conflicts were resolved by consensus, at all stages. Data were summarized descriptively and through meta-analysis (pain and disability). In the meta-analysis, eligible studies were combined considering clinical and methodological homogeneity. The certainty of evidence was assessed using GRADE.
Results: 1,824 relevant publications were identified. After excluding duplicates and screening by title and abstract, 18 were eligible for full-text reading. Five RCTs were included, totaling 894 participants (n: 447 allocated to the *m-Health* group and n: 445 to the usual care group) and they had similar methodological structure and interventions. Follow-up ranged from 6 weeks to 12 months. The studies did not demonstrate significant differences for pain (MD -0.86; CI95% -2.29;0.58) and disability (SMD -0.24; CI95% -0.69; 0.20) when comparing *m-Health* and usual care. Most studies showed biases, with emphasis on non-concealed allocation and non-blinding of the outcome assessor. The certainty of the evidence was rated as low for the analyzed outcomes.
Conclusion: m-Health alone was not more effective compared to usual care or no treatment in improving pain intensity and disability in individuals with low back pain. Due to the biases found and the low certainty of the evidence, the evidence remains inconclusive and future high-quality clinical trials are needed.
Implications: We demonstrated that currently, *m-Health* does not have consolidated evidence that allows the recommendation of isolated use in the management of people with low back pain. Our findings demonstrate that there are indications of clinical benefits from the use of *m-Health*, though further studies are needed. Furthermore, we emphasize that research could investigate the complementary effects of *m-Health* on the self-management of this population.
Keywords: Mobile Health, Low Back Pain, Pain Management

Conflict of interest: The authors have no conflict of interest.
Acknowledgment: Thanks to Francisco and Renata, Coordination for the Improvement of Higher Education Personnel (CAPES) and the Foundation Support Research of the Federal District (FAPDF, process n. 00193-00000758/2021-24).
Ethics committee approval: Not applicable.

https://doi.org/10.1016/j.bjpt.2024.100812

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CLINICAL AND SOCIODEMOGRAPHIC DESCRIPTION OF WOMEN WHO INDUCED THEIR LABOR WITH MISOPROSTOL IN A PUBLIC HOSPITAL IN THE FEDERAL DISTRICT

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Background: The induction of labor can be performed with the aim of initiating a vaginal delivery, a method defined by cervical maturation, through digital examination. As labor induction is an intervention, it is expected that it will come from a clear medical recommendation. Therefore, we were interested in understanding the profile of women admitted to the Obstetric Center with the use of misoprostol, an induction method that stimulates cervical preparation.
Objectives: Describe clinically and sociodemographic pregnant women that had labor induced by misoprostol in a public hospital in Distrito Federal, in 2019, differing the profile from the one's that had vaginal birth to the one's submitted to cesarean section.
Methods: This study consist in a descriptive, cross-sectional, retrospective research. Data were collected by the nursing records from the maternity. The inclusion criteria consist in labor induced using misoprostol with living newborn and from a single-fetus pregnancy.
Results: 309 women met the inclusion criteria of the study, with a higher prevalence of the age group between 20 and 34 years old (64,1%), brown skinned (64,1%), 9 to 11 years of education (53,7%), single marital status (42,1%), residence at a distance greater than 45 kilometers from the hospital (51.8%), with a minimum of 6 prenatal appointments completed (79.6%), between 37 to 40 weeks of pregnancy (75,1%), primiparous (50.2%), with gestational disease (50.8%), without previous cesarean section (97.7%) or previous disease (77.0%), with presence of a companion during labor (92.2%) and without the use of oxytocin after misoprostol (50.5%). Among these women, 72.2% had vaginal delivery as an outcome (223), and 27.8% evolved to a cesarean section (86). In the group that evolved to vaginal delivery, 42.60% were primiparous, 56.95% were multiparous, 56.95% are multiparous, 46.18% developed gestational disease, 53.36% were not diagnosed with gestational diseases. Among those who evolved to a cesarean section, 69.77% were primiparous, 30.23% were multiparous, 62.79% had gestational disease and 37.20% did not. Data missing to complete 100% are missing data.
Conclusion: The differences between the two groups were the parity and gestational diseases, because in the one's who achieved the vaginal birth, multiparous women and/or those who didn't developed gestational diseases were more prevalent, while women that had cesarean section were, most of them, primiparous and/or with a gestational disease. Regardless the misoprostol's use it's contraindicated in cases of previous cesarean section, 1,9% of the sample were women with this history.
Implications: There is a need for better hospital induction and childbirth protocols. In addition to new actions directed at pregnant women, with a focus on prenatal education. Analytical studies are also suggested, as well as the training of professionals to complete the hospital and public policies evolution to improve rates related to childbirth, such as the presence of more physiotherapists in maternity.
Keywords: Induced, Labor, Misoprostol

Conflict of interest: The authors declare no conflict of interest.
Acknowledgment: The authors appreciate the Conselho Nacional de Desenvolvimento Científico e Tecnológico and the Fundação de Apoio à Pesquisa do Distrito Federal for the financial support.