



USE OF THE SWISS BALL FOR PAIN RELIEF DURING LABOR: AN INTEGRATIVE REVIEW

USO DA BOLA SUÍÇA PARA ALÍVIO DA DOR NO PARTO: UMA REVISÃO INTEGRATIVA

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ABSTRACT: The objective of this study was to identify, in the national and international literature, studies on the use of the Swiss ball for pain relief during labor. This was an integrative literature review, with data collection carried out in May 2024 in the SciELO, PubMed Central, Web of Science, and Scopus databases, focusing on studies published from 1996, the year in which the Good Practices in Labor and Birth were launched, to the present. The descriptors used were "Obstetric Nursing," "Birth Ball," "Labor," and "Humanized Childbirth." A total of 781 studies were identified, of which 12 were selected according to the established inclusion criteria, and the findings demonstrated that the Swiss ball is an instrument that should be widely disseminated, as it provides a significant contribution to the labor process by offering several advantages, including variability of positions and effective pain relief.

KEYWORDS: Obstetric Nursing. Humanized Childbirth. Labor.

RESUMO: O objetivo foi identificar na literatura nacional e internacional, estudos sobre a utilização da bola suíça para o alívio da dor no parto. Trata-se de uma revisão integrativa de literatura. A coleta foi realizada em maio de 2024 nas bases de dados Scielo, PubMed Central, Web Of Science e Scopus, com enfoque em estudos publicados desde 1996, data referente ao ano em que foram lançadas as Boas Práticas de Parto e Nascimento, até os dias atuais. Foram utilizados os descritores: Enfermagem Obstétrica; Bola de Nascimento; Trabalho de parto; Parto humanizado. Foram encontrados 781 estudos, sendo 12 selecionados de acordo com os critérios de inclusão estabelecidos. Foi possível identificar a bola suíça como um instrumento que deve ser disseminado, por trazer uma contribuição significativa no processo do trabalho de parto, por meio de diversas vantagens, variabilidade de posições e alívio da dor.

PALAVRAS-CHAVE: Enfermagem obstétrica. Parto humanizado. Trabalho de parto.

INTRODUCTION

The experience of giving birth evokes unique emotions, making it a defining moment in the lives of women and their families. In recent decades, with growing attention to the health of women and newborns, the labor and birth process has been enhanced to ensure high-quality care and promote humanized support for women in labor, allowing them to have more positive and satisfying experiences. In this context, new approaches and recommendations have emerged that reflect this evolving paradigm. To support this shift and provide humanized care, the World Health Organization (WHO) issued a set of evidence-based guidelines in 1996. These guidelines outlined practices that should be discouraged in routine care, as well as those that should be promoted during labor, encouraging healthcare teams to adopt a more respectful and holistic approach to childbirth. These recommendations are known as the WHO's Best Practices in Labor and Birth Care.¹

Among the recommended practices aligned with these guidelines is the development of individualized care plans that consider each woman's wishes, concerns, and expectations; respect for her choice of birth setting and birthing position; and the encouragement of non-pharmacological methods of pain relief during labor, such as using the birthing ball, hydrotherapy, and music therapy, among others. Additional recommendations include allowing the presence of a companion of the woman's choice, providing requested information, offering food and fluids as desired, and maintaining the woman's stability and well-being.¹

In contrast, certain harmful or outdated practices should be eliminated, such as routine use of enemas, pubic shaving, restriction to the supine position, and the indiscriminate administration of oxytocin at any stage of labor. Practices lacking sufficient evidence to support their use should also be avoided.¹ These guidelines help define how the parturient process should be guided.¹

Despite these and other more recent documents aimed at reducing maternal and infant mortality—such as the Alyne Thematic Health Care Network, updated by Ordinance GM/MS No. 5.350/20242—this remains a long-term process. This is largely due to a longstanding pattern of unnecessary and routinely performed interventions without clinical indication. The shift toward a new perspective on childbirth aligns with the third Sustainable Development Goal (SDG), "Good Health and Well-Being," one of the 17 global targets outlined in the 2030 Agenda.³

Within this context of childbirth medicalization, the WHO has identified Brazil, alongside Egypt, Turkey, Cyprus, and the Dominican Republic, as one of the developing countries with the highest cesarean rates, surpassing those of physiological births. Globally, it is estimated that 21.1% of women give birth via cesarean section, with the rate reaching 42.8% in Latin America.⁴

To address this issue, the WHO's 2023 statement emphasized growing concern among governments and healthcare professionals regarding the increasing number of cesarean deliveries and, more importantly, their negative consequences for maternal and child health.⁵ These recent statistics underscore that there is still a long way to go before childbirth is widely acknowledged as a process that should involve minimal intervention.

Among the recommended best practices to promote a low-intervention labor process, the birthing ball—now widely referred to by this name in obstetric care—stands out. This inflatable device, which is filled using a pump, comes in a variety of sizes to accommodate different body heights. It features a non-slip texture and is made of durable, safe materials.⁶ These features make it an accessible and easy-to-use tool.

Araújo⁶ also notes that this tool has been used in various contexts over the years, including with adult orthopedic patients, in physical therapy, in intensive care units, in strength and mobility

assessments, and in health and wellness promotion. Although still commonly referred to as a “physical therapy ball,” the tool is no longer exclusive to that field. It has proven valuable in other areas, especially obstetrics, as a non-pharmacological method to help reduce labor pain.⁶

In this context, the silicone birthing ball, along with other non-pharmacological methods (NPMs), stimulates the natural progression of childbirth, as described by Soares et al.⁷ Regarding childbirth physiology, Rezende Filho and Montenegro⁸ define it as the combination of fetal movement and cephalic rotation through the birth canal, driven by uterine muscle contractions (the labor mechanism). This process results in the opening of two diaphragms—the cervicosegmentary (cervix) and the vulvoperineal—through which the fetus passes.

Rezende Filho and Montenegro⁸ further divide the labor mechanism into six stages: engagement (when the widest diameter of the presenting part enters the pelvic inlet), descent, internal rotation of the head, delivery of the head, external rotation of the head with internal rotation of the shoulders, and finally, delivery of the shoulders and body. The birthing ball can support the woman throughout all of these stages.

The birthing ball is a widely available tool across all levels of care. It is easy to handle and comes in various types to accommodate different body types and sizes. Its primary purposes include facilitating fetal descent; encouraging upright positions that can shorten labor duration; relieving pain; enhancing pelvic mobility and body awareness; improving posture alignment; reducing lumbopelvic pain; and promoting the woman’s confidence and sense of autonomy.⁹ Although it is simple to use, proper knowledge and technical skills are essential to ensure safe application and avoid harm.

It is, therefore, crucial for nurses to be properly trained and knowledgeable in using the birthing ball. In addition, healthcare professionals involved in this phase should contribute through their care to the creation of a positive memory for the family and recognize that the woman must be included in all suggestions and decisions, as she is the central figure in labor and delivery.

To highlight the role of obstetric nursing in using the Bobath ball as a non-pharmacological method for pain relief, this study reviews the available literature on the benefits of the tool and its use in the delivery room to reduce pain during the parturient process. This led to the research question: “How is the birthing ball being used for pain relief during labor?”

In light of this, this study aims to identify studies on the use of the birthing ball as a non-pharmacological method for pain relief during labor in both national and international literature.

METHODOLOGY

This is an integrative literature review—an important research method for today’s practice, as it supports Evidence-Based Practice (EBP). EBP relies on systematic reviews of the literature to inform clinical decision-making, thereby strengthening the standing of nursing as a scientific discipline.¹⁰

To guide the study, we developed and adapted a research protocol based on the model proposed by Souza, Zeitoun, and Barros.¹¹ It included information on the project, such as the guiding question, objective, formulation of descriptors, inclusion and exclusion criteria, and database selection. The next steps involved searching for articles, screening those that addressed the research question and met the eligibility criteria, and analyzing the relevant scientific literature within a specific time frame.

We developed the guiding question using the PICO strategy, which, according to Santos, Pimenta, and Nobre¹², is a tool used to structure clinical research questions. PICO stands for: P – population/patient;

I – intervention; C – comparison; and O – outcome. Based on this framework, the following research question was formulated: “How is the birthing ball being used for pain relief during labor?”

The literature search was conducted in May 2024 using the following databases: Scientific Electronic Library Online (SciELO), PubMed (Medline), Web of Science, and Scopus. The descriptors used in both Portuguese and English were: “Enfermagem Obstétrica/Obstetric Nursing,” “Bola de Nascimento/Birth Ball,” “Trabalho de Parto/Labor,” and “Parto Humanizado/Humanized Childbirth.” These terms were combined using Boolean operators in four different search strategies: 1. Enfermagem Obstétrica AND Bola de Nascimento AND Trabalho de Parto AND Parto Humanizado; 2. Enfermagem Obstétrica AND Bola de Nascimento; 3. Bola de Nascimento AND Trabalho de Parto; 4. Bola de Nascimento AND Parto Humanizado.

Studies were selected based on a time frame from 1996 to 2024 to encompass the earliest research conducted after the release of the recommendations on best practices for labor and childbirth in 1996. The inclusion criteria encompassed full-text original articles; studies addressing the use of best practices in the delivery room; and articles published in Portuguese, English, or Spanish. The exclusion criteria involved articles that did not address the research question, letters to the editor, editorials, other types of integrative reviews, and articles unrelated to the topic. Duplicate entries across databases were considered only once.

Two researchers using separate electronic devices at the Department of Nursing of the Federal University of Rio Grande do Norte (UFRN) carried out the searches simultaneously. A total of 781 documents were initially identified. After a preliminary screening of titles and abstracts, 12 articles were selected for meeting the predefined inclusion criteria. Consequently, 769 studies were excluded for not aligning with the proposed protocol.

Based on the selected studies, three analytical categories were developed to structure the findings: Advantages of Using the Birthing Ball During Labor; Variety of Positions Provided by the Birthing Ball; and Pain Relief and Promotion of Vaginal Birth Using a Non-Pharmacological Approach.

RESULTS

Based on the data collected and the previously established inclusion and exclusion criteria, the structure below is presented.

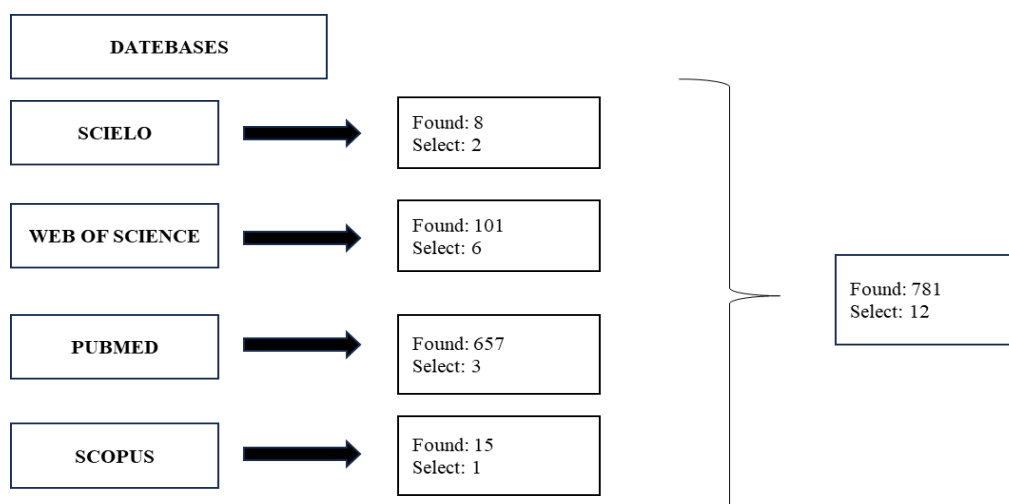


Figure 1. Flowchart of the search results from the databases used, created by the author.

Source: Prepared by the author.

The tables that follow list the selected articles according to the inclusion and exclusion criteria, along with their respective study identification details (title, authors, year of publication, journal, database, language of publication) and research-related data (study design, objective, and main findings).

Among the 12 articles reviewed, regardless of publication in more than one language, 4 were published in Portuguese, 11 in English, and 2 in Spanish. Considering multilingual publications, 3 articles were available in both Portuguese and English, and 2 were published in Portuguese, English, and Spanish.

As for the study design, 11 were randomized clinical trials, and 1 was a descriptive study. Regarding their findings, 3 articles addressed the use of the birthing ball in conjunction with other methods; 9 highlighted advantages associated with its use; and 3 concluded that further research is still needed to confirm its effectiveness or were pilot studies intended for later in-depth analysis.

Tables 1, 2, and 3 present the following information: article title, authorship, and year of publication; journal and database; language of publication; study design; study objectives; and main findings. The tables were divided into three sections to improve the clarity and visualization of the results.

Table 1. First four studies included in the review.

Article title / Authors/ Year of publication	Parâmetros maternos e perinatais após intervenções não farmacológicas: um ensaio clínico randomizado controlado. Melo PS et al., 2020.	O uso da bola de nascimento na posição vertical em pacientes primíparas: um estudo clínico. TCC, Maderle LM, Coelho S., 2003.	O uso da bola suíça no trabalho de parto. Silva LM et al., 2011.	The effect of birth ball exercises on labor pain, delivery duration, birth comfort, and birth satisfaction: a randomized controlled study. Aslanat BN, Cakaya S., 2024.
Journal / Database	Revista Acta Paulista de Enfermagem / SciELO	Revista Mineira de Enfermagem (REME) / SciELO	Revista Acta Paulista de Enfermagem / Web of Science	Journal Archives of Gynecology and Obstetrics / Web of Science
Language of publication	Portuguese, English, and Spanish	Portuguese	Portuguese, English, and Spanish	English
Study type	Randomized clinical trial	Clinical trial	Descriptive study	Randomized clinical trial
Study objective	To analyze the effects of warm showers, perineal exercises using the birthing ball, or both during labor on maternal and perinatal outcomes.	To assess the use of the birthing ball in the upright position as a strategy to promote comfort, reduce pain and anxiety, and improve satisfaction in low-risk primiparous women.	To describe how the birthing ball is used in obstetric care in public maternity hospitals within São Paulo's municipal health system.	To examine the effects of birth ball exercises on labor pain, labor duration, birth comfort, and maternal satisfaction.
Main findings	Isolated or combined, the interventions proved to be a safe form of labor support, as they did not negatively affect maternal or perinatal outcomes.	The findings demonstrated positive effects of the birthing ball in reducing anxiety and pain and enhancing satisfaction, with further research recommended in other maternity settings.	The study identified the birthing ball as a strategy that contributes to non-pharmacological pain relief during labor, based on data from health professionals and medical records.	Its use significantly reduced labor duration and is recommended for low-risk parturients to support fetal descent and cervical dilation.

Source: Prepared by the author.

Table 2. Four additional studies included in the review.

Article title / Authors / Year of publication	Use of a peanut ball, positioning, and pelvic mobility in parturient women: labor outcomes and maternal satisfaction with childbirth. Henrique AJ et al., 2016.	Hidroterapia e bola suíça no trabalho de parto: ensaio clínico. Ergea CDS et al., 2021.	Birth ball or hot shower? A randomized trial to analyze the effectiveness of birth ball versus hot shower in pain relief and sacrum-perineal height therapy in labor pain management. Januário L et al., 2016.	Using a birth ball to reduce pain perception in the active phase of labor: a randomized controlled trial. Nakibol ECM et al., 2024.
Journal / Database	Journal of Physiotherapy / Web of Science	Revista Acta Paulista de Enfermagem / Web of Science	Journal of Complementary Therapies in Clinical Practice / Web of Science	Journal of the Australian College of Midwives (ACM), Women and Birth / Web of Science
Language of publication	English	Portuguese and English	English	English
Study type	Randomized clinical trial	Randomized clinical trial	Randomized clinical trial	Randomized controlled trial
Study objective	To evaluate the effects of a peanut ball protocol on pain, labor duration, and maternal satisfaction in low-risk women.	To examine the effects of warm showers, birthing ball use, and their combination on pain and anxiety during labor.	To investigate the effectiveness of two non-pharmacological interventions—hot showers and the birthing ball—for pain relief and labor progression.	To assess whether birthing ball use reduces pain perception during the active phase of labor and improves delivery outcomes.
Main findings	The protocol helped reduce pain and labor time and increased maternal satisfaction.	Combining warm showers and birthing ball use was more effective at reducing pain and anxiety than either method alone.	Both interventions helped relieve labor pain and supported the natural progression of labor in low-risk women.	The birthing ball effectively relieved pain, improved comfort and mobility, and helped reduce the need for unnecessary cesarean sections.

Source: Prepared by the author.

Table 3. Final four studies included in the review.

Article title / Authors / Year of publication	The effectiveness of delivery ball use versus conventional nursing care during delivery of primiparae. Wang J et al. 2020.	Effectiveness of a peanut ball device during labour on maternal and neonatal outcomes: protocol for a randomised controlled trial. Kamath P et al. 2022.	Birthing ball on promoting cervical ripening and its influence on the labor process and the neonatal blood gas index. Shen H-C et al. 2021.	Using a peanut ball during labour versus not using a peanut ball during labour for women using an epidural: study protocol for a randomised controlled pilot study. Stulz V et al. 2018.
Journal / Database	Pakistan Journal of Medical Sciences/Pubmed.	F1000Research/Pub med.	World Journal Of Clinical Cases/ Web Of Science.	BMC Public Health/Scopus.
Language of publication	English	English	English	English.
Study type	Randomized clinical trial	Randomized clinical trial	Randomized clinical trial	Pilot randomized controlled trial with two arms

Study objective	To analyze maternal satisfaction and labor outcomes in women who used the birthing ball compared to those who received conventional nursing care.	To evaluate the effectiveness of peanut ball use in improving labor outcomes and reducing the need for medical interventions in primiparous women.	To explore whether the birthing ball promotes cervical ripening and influences the labor process and neonatal outcomes.	To assess the feasibility and acceptability of peanut ball use and examine its impact on delivery outcomes among low-risk women in Australia, particularly regarding cesarean section rates.
Main findings	Birthing ball use, combined with upright positions, helped reduce labor duration, pain, and stress, while increasing maternal satisfaction during childbirth.	The peanut ball was effective in relieving pain, shortening labor, and decreasing intervention rates, while also enhancing comfort during labor.	Use of the birthing ball, combined with upright and squatting positions, shortened the first stage of labor, facilitated cervical dilation, and improved Apgar scores.	The peanut ball was found to be feasible and acceptable for use during labor in low-risk women, contributing to a lower rate of cesarean deliveries.

Source: Prepared by the author.

DISCUSSION

Considering the findings and the need to enhance their presentation, three analytical categories were developed: *Advantages of Using the Birthing Ball during Labor*; *Variety of Positions Provided by the Birthing Ball*; and *Pain Relief and Promotion of Vaginal Birth Using a Non-Pharmacological Approach*.

ADVANTAGES OF USING THE BIRTHING BALL DURING LABOR

This first category explores the advantages of using the birthing ball during labor—a topic that appeared most frequently and consistently across the studies selected for this integrative review.

The benefits of the birthing ball—also referred to as Swiss ball, Bobath ball, or birth ball—have increasingly drawn the attention of researchers in recent years. The device has been used in obstetric centers as a method to support women in achieving a physiological birth while also relieving discomfort caused by uterine contractions.¹³ Although the number of studies on this intervention remains limited, the clinical trials reviewed here report favorable outcomes that support its clinical use.

Regarding how the ball facilitates physiological aspects of labor, studies by Henrique et al.¹⁴, Silva et al.¹⁵, Stulz et al.¹⁶, and Aslantaş and Çankaya¹⁷ highlight its role in enhancing the effects of gravity, aligning the fetal axis with the maternal pelvis, and promoting fetal descent and progression through the birth canal—all supported by pelvic muscle relaxation resulting from perineal exercises.

Moreover, Henrique et al.¹⁴ emphasize that encouraging pelvic movements during labor has positive physiological effects. Since the birthing ball enables these movements, it should be promoted. In addition to the benefits mentioned above, it helps reduce maternal discomfort, perineal trauma, and the need for episiotomy.

Still, with regard to the promotion of physiological processes, Shen et al.¹⁸ emphasized that when the laboring woman uses the ball, it facilitates the movement of the uterus away from the spine toward the abdominal wall. This helps align the fetal longitudinal axis with the birth canal, thereby shortening labor and promoting a successful outcome. The study also highlights another advantage: the birthing ball

reduces intrauterine distress and the likelihood of asphyxia, helping to prevent adverse outcomes in newborns, thus offering benefits not only for mothers but also for infants.

As for postpartum advantages, Stulz et al.¹⁶ state that the ball reduces the risk of postpartum hemorrhage and psychological morbidity, increases the rate of successful breastfeeding, and promotes greater independence for mothers during the puerperium. This is because it supports vaginal birth, which typically allows for faster, less dependent, and less painful recovery compared to cesarean sections. Another frequently cited and relevant finding—especially given that women are the protagonists of their childbirth experience and must feel at ease—is the high level of maternal acceptance and satisfaction with the use of the Bobath ball, as evidenced by positive feedback in clinical trials.

Additionally, it is worth noting that some studies, such as those by Melo et al.¹⁹, Henrique et al.¹⁴, and Wang et al.²⁰, have investigated the combined use of the birthing ball with other methods, such as warm baths. Their findings indicate that one of the ball's advantages is its versatility: it can be combined with other techniques to provide women with even more options and greater comfort.

Finally, another benefit—central to this integrative review—is pain relief during the parturition process. We will address this topic in the third and final category, *Pain Relief and Promotion of Vaginal Birth Using a Non-Pharmacological Approach*.

Based on these findings, we emphasize that the birthing ball aligns with the shifts in obstetric care over recent decades, which advocate for natural birth instead of pharmacological or surgical interventions that carry avoidable risks. In this context, the birthing ball emerges as a facilitator of more natural labor.

The Brazilian Ministry of Health²¹ reinforces this perspective in its updated *National Guidelines for Normal Childbirth Care (2022)*, which recommend offering non-pharmacological methods before pharmacological interventions to promote humanized care. The birthing ball is included among these initial approaches. Therefore, given its benefits and alignment with national guidelines, it is essential to highlight and further explore the existing literature on this device to support its safe use in obstetric care settings.

VARIETY OF POSITIONS PROVIDED BY THE BIRTHING BALL

This category explores the variety of positions that can be achieved using the birthing ball. The selected studies describe different positions that should be offered to laboring women. As the protagonists of their own birth experience, they should be encouraged to express their preferences and change positions as they wish, provided there are no clinical contraindications.

The study by Kamath et al.²² focuses on a specific type of birthing ball—the peanut ball—which is curved, peanut-shaped, and designed to fit between the woman's legs. This allows the laboring woman to adopt a variety of positions. According to the authors, obstetric nurses offer the device once the woman reaches 4 cm of cervical dilation. It is available in different sizes to accommodate women of varying body weights, making it an accessible and adaptable tool.

In 1996, the World Health Organization¹ published a document on *Evidence-Based Practices for Care During Labor and Birth*. The document includes a list of recommended practices, among them encouraging freedom of movement and position during labor and promoting non-supine positions. It is, therefore, incumbent upon healthcare institutions to implement such practices in order to promote a welcoming and humanized environment for labor and birth.

In this context, Lopes, Madeira, and Coelho²³ contributed a study on the use of the birthing ball as a resource to help women adopt positions that are more comfortable during labor, especially upright positions and their variations. The authors emphasize that numerous other studies report a preference

for upright over horizontal positions, as the former are considered more physiological and often judged by women to be more comfortable. Moreover, upright positioning allows the abdominal wall and diaphragm to exert pressure on the uterus, thereby promoting fetal descent.

Thus, institutionalizing currently lacking protocols is essential to support comprehensive care strategies that guide the appropriate use of the birthing ball. The establishment of such protocols would significantly support professionals working directly in this field, aiming to ensure humanized and high-quality care.

Additionally, among the various documents cited in this integrative review, one more stands out for reinforcing and encouraging the use of the birthing ball during labor, along with the freedom of movement that should be granted to women, provided there are no clinical contraindications. This document is Resolution of the Collegiate Board (RDC) No. 920, dated December 19, 2024, which regulates the operation of obstetric and neonatal care services.²⁴

More than being familiar with the wide range of position options, nurse-midwives are responsible for actively sharing this knowledge to support the empowerment of laboring women.

PAIN RELIEF AND PROMOTION OF VAGINAL BIRTH USING A NON-PHARMACOLOGICAL APPROACH

Based on the literature reviewed, the use of the birthing ball, due to its significant impact on pain and anxiety in laboring women, has been shown to reduce the need for pharmacological interventions and cesarean deliveries. We developed this third category to highlight the relevance of this tool in reshaping current perspectives on childbirth.

When it comes to pain, a central theme of this integrative review, it is important to note that most of the studies analyzed emphasize that labor pain should be a primary focus for healthcare professionals. Although pain is a subjective and variable sensation, it is inherently caused by the physiology of childbirth.

Moreover, pain tends to trigger other emotions experienced during labor and delivery, such as fear, anguish, anxiety, and restlessness. Therefore, alleviating pain not only addresses a single source of discomfort but also reduces multiple related stressors. This view is clearly supported by Wang et al.²⁰, Shen et al.¹⁸, Taavoni et al.²⁵, Kamath et al.²², Aslantaş and Çankaya¹⁷, Henrique et al.¹⁴, Melo et al.¹⁹, Lopes, Madeira, and Coelho²³, and Silva et al.¹⁵.

Although few studies have physiologically detailed the link between the device and pain relief, Silva et al.¹⁵ offer valuable insights. According to the authors, the birthing ball plays an important supportive role, as exercises performed with it engage the pelvic muscles—especially the levator ani, pubococcygeus, and pelvic fascia. This activity helps relax and stretch the muscles directly involved in labor, contributing to pain reduction.

Silva et al.¹⁵ also point out that lying in the supine position compresses the inferior vena cava and aorta and positions the fetus parallel to the mother's back, which may hinder the effectiveness of uterine contractions. In contrast, the upright position allows contractions to act more effectively, as gravity pulls the uterus forward and improves the alignment of the maternal-fetal axis. In short, by enabling alternative labor positions, the birthing ball supports the physiological progression of vaginal birth and helps relieve pain.

In recent decades, there has been growing advocacy for women's autonomy throughout all stages of the pregnancy-puerperal cycle, empowering them to take ownership of childbirth. As explained by Nucci, Nakano, and Teixeira²⁶, with scientific advancements and the ability to synthesize substances naturally produced by the body, oxytocin was first manufactured in 1950. Since then, its synthetic version

has been increasingly used in obstetric care. Over time, this led to a growing reliance on uterotonic agents, gradually transforming a significant and personal experience for women into one that is increasingly medicalized and mechanized.

In this context, studies have emphasized the importance of non-pharmacological methods as alternatives to reshape current childbirth practices. According to Henrique et al.¹⁴ and Melo et al.¹⁹, the birthing ball provides pain relief, facilitates fetal descent through the birth canal, and enhances comfort through perineal exercises in obstetric settings. These benefits contribute to reducing unnecessary cesarean sections and promoting a more natural labor process by decreasing the need for medical interventions. Wang et al.²⁰ further note that achieving these outcomes requires interventions focused specifically on managing pain in first-time mothers, as many women cite the desire to avoid pain as a major reason for choosing elective cesarean delivery.

In contrast to the current recommendations encouraging more natural childbirth approaches, Nucci, Nakano, and Teixeira²⁶ highlight that Brazil still faces challenges related to the excessive use of interventions aimed at accelerating labor, including the unwarranted or premature administration of synthetic oxytocin.

Given this reality, Rodrigues et al.²⁷ emphasize that the disproportionate fear of pain during vaginal birth influences women's decisions to opt for surgical delivery, as pain relief is typically achieved through anesthesia. This is one of the factors contributing to the increasing cesarean rate. Therefore, studies on non-pharmacological methods for labor pain relief serve as tools to empower women and healthcare professionals, encouraging efforts to make childbirth a less medicalized experience.

CONCLUSION

This study compiled national and international research on the use of the Bobath ball during childbirth. Understanding how this tool has been applied made it possible to recognize its relevance in supporting labor progression and in promoting fetal well-being, as evidenced by clinical trials showing reduced distress and fewer complications. The postpartum period also showed clear benefits, with improved maternal mental and physical health, including lower rates of postpartum hemorrhage and depression.

The use of the birthing ball aligns with current national guidelines advocating for freedom of movement during labor, as it allows for varied and flexible positioning. Several studies highlighted its effectiveness in relieving pain, which can help reduce unnecessary medical interventions and lower the number of cesarean deliveries, ultimately contributing to higher-quality maternity care.

In addressing labor pain, the role of healthcare professionals must be emphasized. Their support is essential for creating favorable conditions during childbirth and for promoting women's autonomy and active participation in every stage of the process.

Obstetric nurses, in particular, hold the responsibility and clinical competence to adopt strategies that help make childbirth a lighter, more positive, and less distressing experience. To provide humanized, high-quality care, they must be knowledgeable and trained in non-pharmacological pain relief methods that help preserve the physiological nature of labor.

Although non-pharmacological techniques have gained increasing attention, there is still a shortage of studies specifically detailing the use of the birthing ball. Further research is needed, including investigations on the optimal timing for its use and the development of formal clinical protocols, especially considering the tool's demonstrated benefits.

Incorporating the birthing ball during the early stages of labor, in addition to the aforementioned benefits, is consistent with national guidelines for quality care during childbirth.

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