

# Postpartum women's perceptions of integrative and complementary health practices used during labor

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## ABSTRACT

**Objectives:** to investigate the use and perception of postpartum women about integrative and complementary health practices (acronym in Portuguese, PICS), as well as to analyze the application of these practices during labor. **Methods:** this is a qualitative study using data from semi-structured interviews conducted by telephone with 10 postpartum women treated at freestanding birth center a peri-hospital Normal Birth Center in São Paulo. The data was submitted to Bardin's content analysis. **Results:** three different categories emerged during data analysis: "Interference of integrative and complementary health practices in the evolution progress of the childbirth process", "Assistance of integrative and complementary health practices in pain management" and "Contribution of integrative and complementary health practices in the childbirth experience". It was observed that women seek information during pregnancy about practices that promote greater safety and control over childbirth pain. The main PICS mentioned were thermal therapy, music therapy, aromatherapy, and meditation. They are perceived by women as therapies practices that, in addition to pain management, promote empowerment, body awareness, emotional balance, self-awareness, and relaxation. **Conclusion:** the use of PICS can contribute to the promotion of empowerment, comfort, well-being, and pain relief and, consequently, they can promote positive childbirth experiences in childbirth.

**Descriptors:** Complementary Therapeutic Methods; Complementary Therapies; Humanizing Delivery; Labor Pain; Pregnant Women.

## INTRODUCTION

Complementary and integrative health practices (CIHP - acronym in Portuguese, PICS), are options for pain management and emotional, physical, and spiritual care, with application in various contexts, including obstetrics. Practices such as massage, aromatherapy, and acupuncture, which are aligned with the Brazilian National Policy on Integrative and Complementary Health Practices, seek to expand therapeutic approaches in the Brazilian Unified Health System (acronym in Portuguese, SUS - Sistema Único de Saúde) and challenge the prevailing biomedical paradigm<sup>(1-6)</sup>.

CIHP do not exclude regular with use of drugs, but can be used in a complementary way to them, such as with the use of massage, aromatherapy, meditation, hypnotherapy, yoga, acupuncture, thermal therapy, music therapy, reflexology, among others<sup>(4)</sup>.

In the field of obstetrics, CIHP not only provide pain relief during childbirth, but also promote a welcoming and less interventionist environment, offering a more positive experience<sup>(7,8)</sup>.

Although childbirth pain is a natural process, it can be intense and is influenced by psychological, cultural and environmental factors<sup>(9-12)</sup>. The effective management

of this pain is a critical aspect of care, and CIHP play an important role in this regard. The International Confederation of Midwives (ICM) emphasizes the importance of non-pharmacological practices in pain management and in supporting physiological childbirth, and care that respects women's individuality and choices about care during labor<sup>(13-15)</sup>.

In line with this, the recommendations of the World Health Organization (WHO) for a positive childbirth experience reinforce the need for respectful care that ensures people feel supported and involved in decisions related to labor and childbirth<sup>(16)</sup>.

Incorporating CIHP into care not only meets physical and emotional needs, but also reflects a paradigmatic shift in health care. It contributes to integrative care, i.e. care for the body, mind, and spirit that recognizes the importance of a safe environment and promotes personal empowerment to give birth<sup>(17,18)</sup>.

In this sense, this study aims to investigate the use and perception of postpartum women about Complementary and integrative health practices (CIHP), as well as to analyze the application of these practices during labor, in order to understand their influence on their overall experience of childbirth.

METHODS

This is a descriptive qualitative study<sup>(19)</sup>.

Setting

The study was carried out in a Freestanding Birth Center (FBC) in the city of São Paulo, which offers prenatal, birth, postpartum, and infant care services to SUS users.

This institution's mission, vision and values reference are the humanization of care and encouragement of pregnant women to childbirth autonomy. It offers courses, lectures, and workshops for both users and professionals, seeking to support and promote comprehensive care, use of CIHP, and anthroposophy in pregnancy, childbirth, postnatal period, breastfeeding, and infant care.

Childbirth care professionals are trained to use CIHP. They encourage its use by women who have been followed up in the service since prenatal care and recommend it to birthing people who seek the service at the time of birth, with a view to promoting comfort and well-being during labor and birth.

Participants

The eligibility criteria for participating in the study were: being 20 years of age or older; being in the postpartum period (i.e. breastfeeding and without a regular menstrual cycle); and having used any CIHP during labor.

Considering that data collection took place during the pandemic period, adolescents were excluded to avoid selection bias.

The study was publicized on the FBC's social media with an informative video and written posts invitation to participate. The posts contained a telephone number to contact the researchers to check eligibility to participate in the study.

The study was then explained in detail and the informed consent was sent to the participants to be read and sign if they agreed to participate. After this procedure, the data collection via telephone interview was scheduled.

Data collection

Data collection took place between April and May 2020 and was carried out by two researchers who were in the final year of their undergraduate nursing course.

The structured interviews were recorded and lasted approximately 30 minutes. At the beginning of the interview, the participants answered a form that included items related to their sociodemographic and reproductive data, as well as eight open questions based on this study objectives (Table 1).

Data analysis

The audio recordings were transcribed, and the names of the participants were replaced by fictitious names of Greek goddesses.

The data obtained was submitted to Bardin's content analysis<sup>(20,21)</sup>. In the pre-exploration or pre-analysis stage<sup>(20)</sup>, the transcripts were prepared in a systematized way to ensure the interpretation of the information collected<sup>(16,17)</sup>; followed by an initial reading in an attempt to understand the general meaning of the content<sup>(20)</sup>.

Units of analysis<sup>(16,20)</sup> were then selected to answer the research questions. Interview clippings were made, aggregating the information according to the units of analysis: psychological preparation for childbirth, calming down during the discomforts of childbirth, motivation to use CIHP, the importance of the information obtained, CIHP that helped to deal with pain, and how the use of CIHP changed the childbirth experience<sup>(22-25)</sup>.

The third and final stage was the process of categorization and subcategorization.

The analysis and interpretation of the results was based on the theoretical framework of the World Health Organization entitled "*World Health Organization recommendations: Intrapartum care for a positive childbirth experience*"<sup>(16)</sup>. This document recommends that health professionals adopt evidence-based practices and

Table 1 - Open questions for the interviews, São Paulo (SP), Brazil, 2020

Questions
1. Did you use any CIHP* during labor? What made you decide to use them?
2. Did you receive any kind of guidance or support for using the CIHP*? If so, how was it carried out?
3. At what points during labor did you use CIHP*?
4. What was your experience about the sensation of the uterus contractions during labor?
5. Did CIHP* help you deal with labor contractions? How did they help you?
6. Did the use of CIHP* interfere with your birth experience? How so?

Note: \*Complementary and Integrative and Health Practices.

person-centered care to promote a positive childbirth experience. This includes a holistic approach based on human rights.

Ethical aspects

This research project was approved by the Research Ethics Committee of the ABC Medical School as per Certificate of Submission for Ethical Appreciation (CAAE) No. 24528819.5.0000.0082. The study was conducted in accordance with criteria established by Brazilian National Health Council Resolution No. 466/12.

RESULTS

Of the 21 women who contacted the research team by telephone, eight did not meet the eligibility criteria because they had given birth more than 10 months before (n = 5) or had given birth in another service (n = 3). Although they met the eligibility criteria verified in the initial contact, three of them did not respond to subsequent interview calls. Thus, 10 postpartum women participated in this study.

All the participants reported being married, with an average age of 27.1 years, and having completed high school (n = 7) or higher education (n = 3). From a reproductive point of view, there was a predominance of primiparous women (n = 7). All the births were normal, and the newborns were full-term, with adequate weight for their gestational age, according to the information provided by the interviewees.

The CIHP used were diverse (Table 2) and implemented with greater emphasis during the active phase of labor.

Three categories emerged from the participants’ speeches: “Interference of Complementary and Integrative and Health Practices in the progression of the childbirth process”; “Complementary and Integrative and Health Practices assistance in pain management”; and “Contribution of Complementary and Integrative and Health Practices in the childbirth experience”.

Interference of complementary and integrative and health practices in the progression of the childbirth process

It was during the prenatal period, at appointments and through individual searches for self-care practices, that the study participants

learned about CIHP and became motivated to use them during pregnancy, enjoying their benefits and feeling more prepared for childbirth.

*So, I think that, so, it made a total difference, total difference, so, my birth was completely different from what people expect it to be [...] when you are informed, you have a new power in your hands. (Artemis)*

The information search and preparation for childbirth were also motivated by a previous negative childbirth experience, as the following speech shows.

*So, the factor that led me to look for this was the trauma which I suffered in my first birth [...], but what led me to look for these non-pharmacological methods was the fact that I didn’t want to go again through induction with oxytocin in hospital, nothing that I went through. (Maia)*

The importance of the informations obtained in childbirth preparation courses offered by the institution was highlighted. The pregnant women reported discovering an universe of quality and scientifically-based information on childbirth and motherhood.

*I think that the evidence was very strong, and the staff at the center [birth center], they let everything very clear, everything that was done, why it was done, what the objective was behind that action, so... hot water, massage, all of this has a reason behind it, then it was very well explained to me, it was very well explained how this was going to be beneficial, so I embraced all these circumstances and it was fantastic. (Artemis)*

Hypnobirthing and aromatherapy were highlighted as practices that promoted emotional regulation during childbirth, which were essential for controlling emotions.

*I can say, in a way, that hypnobirthing was the one I used the most, and I believe that 50% of what happens during labor is*

Table 2 - Complementary and integrative and health practices used during labor (n = 10), São Paulo (SP), Brazil, 2020

Patients		Practices used in childbirth	
Aphrodite		Thermal therapy, music therapy, meditation, and Reiki	
Artemis		Hypnotherapy, thermal therapy, aromatherapy, and music therapy	
Iris		Aromatherapy, thermal therapy, and music therapy	
Themis		Meditation, aromatherapy, thermal therapy, and music therapy	
Hera		Thermal therapy, acupuncture, and music therapy	
Athena		Reiki, meditation, thermal therapy, reflex therapy, aromatherapy, music therapy, and chromotherapy	
Maia		Thermal therapy, aromatherapy, music therapy, meditation, and chromotherapy	
Gaia		Thermal therapy, aromatherapy, music therapy, meditation, and chromotherapy	
Metis		Thermal therapy, aromatherapy, music therapy, and chromotherapy	
Eileithya		Thermal therapy, reflex therapy, aromatherapy, and music therapy	

*your state of mind, so bringing in the kind of energy that will make it easier or that will somehow make you understand that the process doesn't have to be so difficult. I think that helped me. (Artemis)*

*[...] oh yes, I used aromatherapy, yeah, I also did massage [...] and I did a lot of meditation [...] because it brought me a little more peace and I thought it would also be important during labor, [...] I know it would help me [...] it made me feel calm, it also helped with the strength factor [...]. (Themis)*

Regarding their emotional state, some of them reported anxiety more specifically.

*[...] I was happy and I don't know, I think it also helped to get over the anxiety. Because when you're pregnant you get very anxious [...]. (Gaia)*

*I think it worked a lot on the psychological aspect, isn't it? It really helped me to worry less, to have less anxiety, sometimes I would get very anxious because of the pain and everything [...]. Then I started to get very anxious towards the end, because I was already at risk of premature birth, feeling a lot of pain and so on, so I started practicing meditation and yoga at home through the internet. And meditation helped me a lot, learning how to breathe properly helped me control my anxiety towards the end [...]. (Metis)*

### Assistance of complementary and integrative and health practices in pain management

The use of CIHP also contributed to a better understanding of the phenomenon of pain in childbirth and how women perceived pain.

*[...] Even with the pain I had, I learned how to relate pain not to suffering, but to power, you know? (Iris)*

*[...] I'd try to concentrate myself, at all times I'd be like, yeah, I thought it would pass, that it wouldn't last forever. (Hera)*

*[...] I felt embraced, I felt, yeah, that my pain mattered and that's why they were trying to alleviate it, not like "oh, pain is part of it, live with it", which we know people report, it wasn't like that with me, yeah, I realized that it's these actions that make, that legitimize what you're feeling and don't underestimate the pain of childbirth, that moment you're experiencing. (Artemis)*

For some women, facing the labor pain in a positive way, through focus and mental control, was the determining factor capable of changing their experience, understanding that the pain preceded an event of greater importance.

*[...] so that I could embrace pain in a positive way. I believe that, of course, each person has a resistance to pain, but I believe that for me, for the way I deal with pain, yeah, it gave me a completely different perspective on what to expect from labor, so I did that. [...] I think it made a total difference to the outcome of my childbirth. (Artemis)*

*[...] because of the meditation, I did a lot of work on this, I didn't see the pain as suffering, I saw it as the birth of my daughter, and I say that something so nice couldn't be suffering, so I prepared myself a lot for it. (Athena)*

The CIHP that most helped to deal with pain, according to the participants, were aromatherapy, meditation, and thermal therapy. Combined use was also reported.

*Look, the intensity was very strong, it was very strong, but like this, what helped me a lot was the water, and aromatherapy also helped me a lot, together, right? In fact, I used to put a few drops of essential oil during the shower, right, I put a few drops in and that helped me a lot [...] the oil also calmed me down a lot, it made me feel very calm. (Themis)*

In addition to thermal therapy, the practice of meditation through concentration and breathing exercises has also shown positive and beneficial results for the moment of pain.

*[...] concentrating on my breathing, which is also something that if you pay attention, is something that relieves a lot, it's when you take a deep breath, and let it out, it relaxes you, [...] and that breathing and concentrating on the baby, always connected with the baby, that relieves a lot. (Aphrodite)*

In addition to reducing pain, aromatherapy relieved nausea and allowed for a greater connection with the labor.

When it came to the final moments of labor, it was observed that the practice of thermal therapy proved to be important and was the therapy most commonly used to promote comfort for women.

*In the water I was able to have better control over my body, I think my mind, my psychological state, I think everything. [...] So the bathtub was the solution to my problems. [...] because the bathtub seems to numb you.*

*As soon as you get in, your body seems to share the pain with the water. Not so much in the shower, but the bath helped a lot more. (Metis)*

### Contribution of complementary and integrative and health practices in the childbirth experience

The women reported that their childbirth experiences were modified and influenced by the use of CIHP, bringing a perspective

of care that is free of interventions or restrictive directions in the process of giving birth.

*I think the environment interfered with everything, the half-light that we tried to leave in the room, I know that if it was in a hospital environment I wouldn't have any of this, it would be very, very difficult, so that made everything [...] easier to deal with, you know? [...] the help with pain relief, not with how I have to give birth, you know? It was the best experience of my life, by far, by far. (Iris)*

Seeking to ensure a greater connection with their baby during the first hour after birth, also known as the "golden hour", Eileithya reported that she had used aromatherapy with the utmost caution, without, however, depriving herself of the therapeutic effects of essential oils.

*[...] at the end of the birth they took it away (the aromatherapy), because as it was an oil, yeah, I couldn't use it on my upper body, on my hand, because I was going to receive the baby, yeah, and it was good to have the smell of my body, so I didn't want to use it on my hand or anything, and I used to use it more on my back, my feet, my legs, to relieve all the tension. (Eileithya)*

For other women, the experience was determined by the help of CIHP in the labor progress, both by reducing pain and by providing them with the conditions to be more willing and stronger. For them, it even accelerated the process.

*Oh, it interfered with everything, because I used these practices to reduce the pain, yeah, and to get ready for the time expulsion, right, it was essential, without them I think it would be much more difficult. Well, I don't think I'd have as much strength, I'd get tired faster too, I think that was essential, I'd do it again with the same techniques. (Themis)*

The work of nurses and midwives is essential for this model of childbirth care to really happen. In her speech, Artemis highlighted respect for her individuality and humanized care from professionals as essential elements in promoting a positive childbirth experience.

*[...] my birth was an incredible experience, because I expected pain and the way it was dealt with, how I was cared, made all the difference so that I didn't have a very traumatic experience during childbirth. (Artemis)*

## DISCUSSION

The use of CIHP during childbirth, in the context of humanizing care and encouraging protagonism, facilitates the childbirth experience. It was found that the use of CIHP during childbirth was

diverse, with a predominance of thermal therapy, music therapy, aromatherapy, and meditation.

Meditation, aromatherapy, and music therapy help pregnant women stay focused, achieving better emotional regulation of anxiety levels and active participation in labor.

The relaxation provided by these CHIP reduces the body's release of adrenaline and increases endorphins and oxytocin, hormones that induce feelings of well-being and reduce the pain threshold<sup>(17,18,26-29)</sup>.

In addition to relaxation, thermal therapy favors fetal rotation, as well as the production and elimination of diuresis, contributing to the stabilization of blood pressure, reduction of edema and perineal trauma, and to a faster birth<sup>(30)</sup>.

Conscious breathing is associated with the main CIHP used by the study participants, namely: meditation, Reiki, thermal therapy, reflex therapy, aromatherapy, music therapy, and chromotherapy. Breathing exercises are effective both in reducing the perception of pain and in reducing the time spent in the active phase of labor<sup>(31)</sup>. In addition, proper breathing encourages a greater mind-body connection, allowing the woman to remain focused on the experience of labor<sup>(18)</sup>.

The use of CIHP should be initiated in prenatal care, in order to provide women with greater knowledge and autonomy in using them during labor, as well as promoting greater self-confidence in relation to their choices and preferences during childbirth<sup>(2,13,17)</sup>.

It should be noted that the use of CHIP as of the start of pregnancy helps to develop body awareness, facilitating the appropriation of autonomy and confidence in the ability to give birth<sup>(22,24)</sup>.

The process of empowerment is gradual and, when mediated using CHIP, can broaden women's perspectives on their own personal resources, breaking with the socially hegemonic negativity about childbirth<sup>(1,2,13,23)</sup>.

Pregnant women are often challenged to deal with new experiences, such as bodily changes and identity and role conflicts<sup>(21,24,25)</sup>, which generate antagonistic feelings such as anxiety, fear, and stress, especially when it comes to coping with pain.

Psycho-emotional factors directly influence pain tolerance and generate a biological response of greater or lesser tolerance to pain<sup>(26)</sup>. Maternal anxiety can influence the course of pregnancy and the outcome of childbirth, in addition to posing a risk of developing postpartum depression<sup>(25)</sup>. CIHP emerge as additional tools for managing these negative feelings and emotions, reducing the risk of complications<sup>(5,6,11,12,25,26-28)</sup>.

Pain in labor, as reported by the study participants, can vary widely for each woman, being influenced by cultural factors, expectations, anxiety, fears, and stress, which can generate unexpected results such as frustration and a sense of failure<sup>(28)</sup>.

CIHP help to reduce the tension and stress of dealing with the unknown<sup>(13,18)</sup>. In this sense, the results of this study allowed us to understand that the use of CIHP was essential for women to better understand the phenomenon of childbirth pain, reducing resistance and providing alternatives to pharmacological methods, in addition to making childbirth a positive experience.

CIHP can reduce the use of interventions in childbirth. They are associated with a significant reduction in pain in the transition between the latent to active phases, and lead to less use of analgesic medication, as well as less use of epidurals and indications for caesarean sections<sup>(22,31,32)</sup>. The use of practices to help manage pain is strategic for promoting positive experiences during childbirth. It is therefore essential for childbirth care professionals to have a holistic and humanized vision, seeking to support the needs of pregnant women<sup>(24,27-29)</sup>.

It is important to understand that comfort is not restricted to the elimination of pain, but refers to the promotion of comprehensive care, including a favorable environment with embracement, safety, and well-being<sup>(1,16,29)</sup>, as seen in the participants' statements.

On the other hand, it is important to consider that a higher level of education, as observed among the study participants, as well as better socioeconomic conditions, favor access to information about CIHP and its possible benefits during labor<sup>(7)</sup>.

Likewise, health professionals can encourage the use of these complementary practices, and should be responsible for ethical counseling, based on scientific evidence and respect for the autonomy and decision of pregnant women and parturients about the procedures and practices to be adopted during care<sup>(2,14,17,23)</sup>.

In this sense, the place where this study was carried out not only supports the use of CIHP as a strategy for humanizing labor and birth, but also has professionals who are qualified to use complementary practices with parturients.

In view of this, it is recommended that health services invest in adequately preparing professionals for the safe use of CIHP in obstetric care.

It is worth noting that the frequency of use of CIHP by nurses and midwives in care is still influenced by variables such as knowledge and skills, legal support and institutional incentives<sup>(13,33,34)</sup>. The Brazilian Federal Nursing Council (COFEN – acronym in Portuguese) Resolution No. 0500/2015<sup>(35)</sup> recognizes the use of CIHP as a skill of these professionals, and they are qualified to apply the techniques if properly trained<sup>(1,18,35)</sup>.

The study's limitations include the fact that it did not use saturation to determine the number of key informants; however, it should be emphasized that the recruitment process was as comprehensive as possible.

Despite possible methodological limitations, this study has shown that the use of CIHP during labor can be a useful strategy for developing self-confidence, greater emotional regulation, and pain control, in addition to making the childbirth experience more positive.

## CONCLUSION

The use of CIHP during childbirth is perceived as beneficial by the women who use them, providing greater empowerment, body awareness, emotional regulation, connection with the body and childbirth, relief from nausea, and better understanding and management of pain, which are fundamental to collaborating with the positive experience of childbirth.

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**NL:** data curation; formal analysis; methodology; writing – original draft and writing – review and editing.

**TTT:** data curation; formal analysis; methodology; writing – original draft and writing – review and editing.

**MIRP:** conceptualization; data curation; formal analysis; methodology; project administration; supervision; writing – original draft and writing – review and editing.

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## Conflict of interests

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