

Original Research

Application of Acupressure and Breathing Techniques During Gentle Birth: A Qualitative Study of Midwives' and Doulas' Experiences

Rara Intan^{1*}, Stella Maris Bakara¹, Willie Japaries¹

¹Department of Dharma Usada, Nalanda Institute, East Jakarta 13950, Indonesia

ABSTRACT

Background: Fear of labor pain may influence women's preferences during childbirth, highlighting the need for non-pharmacological approaches. Acupressure and breathing techniques have been used during labor; however, research has largely focused on effectiveness, while limited research has explored their practical application and adaptation to maternal condition and comfort in gentle birth. This study aimed to explore midwives' and doulas' experiences in applying these techniques during gentle birth.

Methods: This study employed a qualitative descriptive design. Seven midwives/doulas were purposively selected as primary informants and interviewed until no new information emerged. One senior midwife and one Traditional Chinese Medicine practitioner served as key and supporting informants, respectively. Data were collected through in-depth interviews and analyzed thematically. Ethical approval was obtained from the Nalanda Institute LRPM Team.

Results: Acupressure application varied according to maternal condition and stage of labor, supporting contractions and labor progression, pain relief, and maternal comfort. Breathing techniques adapted to labor intensity and stage, progressing from deep abdominal breathing to vocalized and blowing breathing as contractions intensified and the baby was expelled.

Conclusion: This study highlights the application of acupressure and breathing techniques in gentle birth. The findings provide insights into individualized non-pharmacological support and may inform midwifery and doula practice.

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CONTACT

Rara Intan



raraintanwijaya@gmail.com

Department of Dharma Usada,
Nalanda Institute
Jl. Pulo Gebang No. 107, Pulo
Gebang, Cakung, East Jakarta
13950, Indonesia

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INTRODUCTION

According to the World Health Organization (WHO), Caesarean delivery rates have increased globally, rising from approximately 7% births in 1990 to 21% in 2021, with projections reaching 29% by 2030 (WHO, 2021b). In Indonesia, the 2023 Indonesian Health Survey (SKI) reported a caesarean delivery rate of 25.9% (SKI, 2023). Anticipated labor pain may influence some women's preferences regarding mode of delivery,

highlighting the need for non-pharmacological approaches to labor pain that promote a positive childbirth experience (WHO, 2021a).

Labor pain is a complex experience involving both physiological and psychological responses. Labor is a dynamic physiological process characterized by regular uterine contractions that progressively result in cervical dilation and effacement, followed by fetal delivery and placental expulsion. The process is divided into three stages, with the nature and intensity of pain changing as labor progresses (Hutchison et al., 2025). During labor, pain arises primarily from uterine contractions, myometrial ischemia, cervical dilation, and tissue distension. Visceral pain predominates during the first stage, whereas distension and traction of the pelvic and perineal structures become increasingly important as labor progresses into the second stage (Zuarez-Easton et al., 2023).

As uterine contractions become stronger and more frequent, women may experience increasing pain accompanied by tension, anxiety, fatigue, and difficulty maintaining a sense of control. The perception and experience of labor pain are highly individual, and women may differ considerably in how they experience and cope with pain (Zuarez-Easton et al., 2023). Therefore, intrapartum care requires approaches that address not only pain but also maternal comfort, relaxation, coping, and a sense of control throughout labor. WHO recognizes relaxation techniques, including breathing, as non-pharmacological options for pain relief during labor, according to women's preferences (WHO, 2025).

Among non-pharmacological approaches, acupressure and breathing techniques have characteristics that may facilitate their integration into individualized intrapartum care. Acupressure involves manual stimulation of specific points and can be performed without medication, while breathing techniques can be practiced throughout labor and adjusted according to the intensity and stage of labor. Both techniques can be guided by birth attendants and adapted to the woman's physical and emotional condition. Acupressure and breathing techniques are among the non-pharmacological approaches that can be used to support pain management during labor (Zuarez-Easton et al., 2023). Their application in combination has also been explored, with deep-breath relaxation and acupressure at LI4 reported as approaches for managing labor pain during the active phase of the first stage (Nurlaela & Tridiyawati, 2022). Both techniques' effects on labor pain and other birth outcomes have been investigated in recent studies.

Recent studies have evaluated the effectiveness of acupressure and breathing techniques as non-pharmacological approaches to labor pain management. Studies on acupressure suggest potential benefits in reducing labor pain and influencing labor duration (Karimi et al., 2020; Larki et al., 2025; Mukhoirotn & Mustafida, 2020). Similarly, breathing techniques have been studied in relation to pain intensity and the duration of labor, although the certainty of evidence varies across outcomes (Delgado et al., 2024; Heim & Makuch, 2023; Issac et al., 2023).

However, existing literature has predominantly focused on the effectiveness of these techniques, while less is known about how they are practically applied and adapted according to maternal condition, stage of labor, and comfort. This gap is particularly relevant in gentle birth practice, which emphasizes maternal comfort and individualized support during labor (Sanjaya & Pemayun, 2023; Widiyanti & Dewianti, 2021). Exploring its practical application from the perspectives of experienced midwives and doulas may provide a more contextual understanding of non-pharmacological support during gentle birth. Therefore, this study aimed to explore how experienced midwives

and doulas apply acupressure and breathing techniques throughout the stages of gentle birth.

MATERIALS AND METHOD

Research Design

This study employed a qualitative descriptive design to explore and describe the experiences of midwives and doulas in applying acupressure and breathing techniques during gentle birth. The study was conducted from May to July 2025, with data collected through remote in-depth interviews via Zoom. The researcher was based in Jakarta, while the informants participated from their respective cities. The study focused on the practical application of these techniques within gentle birth practice, particularly how they were adapted according to the stage of labor and the maternal physical and emotional condition.

Research Participants

In this study, informants were selected using purposive sampling. The study involved seven midwives/doulas as main informants, one senior midwife as a key informant, and one Traditional Chinese Medicine (TCM) practitioner as a supporting informant. The inclusion criteria for the main informants were midwives/doulas who applied acupressure and guided breathing techniques while assisting gentle births. The key informant was a senior midwife with at least 15 years of experience who applied acupressure and guided breathing techniques while assisting gentle births. The supporting informant was a TCM practitioner who had treated patients with obstetric or gynecological complaints. The senior midwife and TCM practitioner were included for source triangulation. Individuals who were unwilling to participate were excluded.

Data collection

Data were collected between May to July 2025 by the researcher using in-depth interviews with all nine informants via Zoom. The researcher was a female student pursuing Dharma Usada education at Nalanda Institute. The interviews lasted approximately 40–90 minutes. Interviews were conducted using a semi-structured interview guide and were audio-and video-recorded with the informants' consent. The interview recordings were transcribed and checked against the original recordings for accuracy.

Interview data were analyzed using a matrix-based comparative approach. Following transcription, participants' responses were organized in a matrix and compared across informants to identify similarities and differences. Data-derived grouping was conducted separately for acupressure and breathing techniques. For acupressure, responses were first grouped according to the points used and subsequently according to their timing or purpose of use. For breathing techniques, responses were first grouped according to the techniques used and subsequently according to their timing or purpose of use. Similar responses were visually marked and grouped in the matrix, while differences and additional information were retained for analysis.

The responses of the senior midwife and TCM practitioner were incorporated into the same matrix and compared with those of the main informants as part of source triangulation. Data collection from the seven main informants was considered to have reached saturation when no new information emerged from the matrix-based comparison. After completion of the matrix, relevant books and journal articles were reviewed to

contextualize and interpret the findings and to explore the scientific rationale underlying the reported use of acupressure points and breathing techniques.

Trustworthiness

Trustworthiness was addressed through the criteria of credibility, dependability, confirmability, and transferability. Credibility was strengthened through source triangulation by comparing the experiences of the seven main informants with a senior midwife and a TCM practitioner, as well as through continued comparison of interview data until no new information emerged. The accuracy of the interview data was further supported by checking the transcripts against the original recordings.

Dependability was supported by the use of a semi-structured interview guide and a systematic matrix-based process for organizing and comparing responses across informants. Confirmability was enhanced through source triangulation and by maintaining the connection between participants’ statements, the matrix-based analysis, and the findings presented in the manuscript. Transferability was supported by purposive sampling with clearly defined inclusion criteria and by providing contextual information about the informants, their experience with gentle birth, and their practice locations.

Research Ethics

This research received an Ethical Exemption Certificate from the Nalanda Institute LRPM Team (No. 001/LRPM/EC-IN/V/2025). All informants agreed to participate in the interviews, and informed consent was provided to them before the interviews. Interviews were recorded with the informants’ consent, and video recordings were stored and accessible only to the researcher for research purposes. Informants’ identities were protected by referring to them as Informants 1–9 in the manuscript.

RESULT

The main informants in this study were midwives and doulas who applied acupressure and breathing techniques during gentle birth. Their characteristics are presented below.

Table 1. Characteristics of Main Informants (n = 7)

Informant	Role	Experience with Gentle Birth	Location
1	Doula	8 years	Jakarta
2	Midwife	10 years	Kendal
3	Midwife	6 years	Lombok
4	Midwife	9 years	Bali
5	Doula	11 years	Sleman
6	Midwife	6 years	Bandung
7	Doula	4-5 years	Bekasi

The key informant was a senior midwife and doula residing in Bali. She has been assisting gentle births since 2003 as a doula. In 2006, she pursued a Diploma IV (D4) in Midwifery. In 2009, she furthered her training by completing a Basic-Level Acupuncture course at an educational institution in Bali. The supporting informant was a general practitioner who also incorporates acupuncture into clinical practice. She has experience treating patients presenting with gynecological complaints and has conducted workshops

for midwives and doulas on the application of acupressure for pregnant and laboring women. She resides in Jakarta.

Theme 1: Application of Acupressure

This theme describes the application of acupressure points during gentle birth to relieve labor pain, promote maternal comfort, reduce anxiety, provide energy, support labor progression, and support the birthing process (second stage of labor).

1. LI4 Hegu and SP6 Sanyinjiao

The LI4 Hegu and SP6 Sanyinjiao are used for induction and significantly reduce pain during the active and transition phases. These points can be stimulated with moxa or acupressure using pressure or circular movements.

"... For the palms, we usually do it from the moment the patient comes in. That can also help reduce pain during contractions, right here. As for the inside, above the ankles, and the feet, we usually do it when the woman is dilated above 5 degrees, to help speed up the dilation process. We usually do it there..." (Informant 3)

"... Eeeeh, I use (LI4 Hegu and SP6 Sanyinjiao) when the contractions have started to decrease. For example, now the contractions are regular, the contractions are good, well, suddenly halfway through, the contractions decrease, maybe because of fatigue, or also too long, lack of sleep, or lack of nutrition intake, so that also affects the contractions, besides fulfilling all those nutrients, we restore the contractions with acupressure..." (Informant 4)

It is also acknowledged by the TCM practitioner that the SP6 and LI4 points are points that can be used to stimulate induction. The senior midwife explained the induction acupressure points in more detail. The SP6 point is used to soften the cervix or stimulate smoother contractions. The LI4 point is used if the mother experiences painful contractions and to aid dilation. These acupressure points are stimulated between contractions.

2. GB 21 Jianjing

The GB21 Jianjing can be used during the birthing process (second stage of labor). This point is stimulated only with acupressure.

"... Then there is also a point here, the one above here (pointing to GB21 Jianjing), this can only be applied when the mother is pushing, so when the dilation is still two or three, it cannot be touched at all..." (Informant 2)

"... Well, we also combine it with breathing techniques, when the mother takes a breath, we press here (pointing to GB 21 Jianjing), when the mother wants to push, and automatically that will help push the baby's head out..." (Informant 4)

The senior midwife described GB21 as one of the most commonly used acupressure points, particularly in situations where the mother experienced difficulty delivering the baby or when the baby was descending.

3. BL32 Ciliao

BL32 Ciliao was stimulated during contractions, with the stimulation described as helping the mother feel more comfortable.

"... Only when there are contractions in the buttocks, but when there are no contractions, we don't need to do it. Usually, usually, the mother always asks to press the area there (BL32 Ciliao) when the contractions come, because she says it's comfortable too..." (Informant 4)

4. BL60 Kunlun

BL60 Kunlun was used to support labor progression and could be stimulated while the mother was in a lying position.

"... Oh, and this one, what's here (while pointing to a point behind the ankle)... ...Basically, she would be lying down, especially in a hospital setting, with her legs positioned at the end of the bed...." (Informant 1)

5. ST36 Zusanli

ST36 Zusanli can be stimulated when the mother appears tired, using either moxibustion or acupressure.

"... Here I think (measuring 4 fingers below the knee), here, below the knee, there is a distance like that..." (Informant 2)

The senior midwife explained that this point is usually stimulated when the mother is tired or looks tired.

6. KI1 Yongquan

The KI1 Yongquan can be stimulated when the mother appears anxious. For greater comfort, this point can be stimulated using moxibustion.

"... Actually, there is another one, on the soles of the feet, when we grip the soles of the feet like this (while using the palms of our hands to imagine that they are the soles of our feet), there is a point, well, usually it is there..." (Informant 7)

The senior midwife explained that KI1 could be stimulated when the mother appeared anxious, including through moxibustion. The TCM practitioner also supported the use of moxibustion at this point, as some individuals may find direct pressure on KI1 uncomfortable or ticklish; therefore, moxibustion may provide greater comfort.

7. Oxytocin Massage

In addition to specific acupressure points, oxytocin massage can be applied. These points are typically stimulated by applying pressure in a lateral circular motion.

"... eeeeh if I'm trying to stimulate contractions, I usually combine it with oxytocin massage. So, I help her relax, then I massage her. Then, when the mother is more relaxed, I press on those points. So, from GB 21, it flows along the spine, all the way to the sacrum area at BL 32. The slightly longer one is at BL 32..." (Informant 5)

"... Previously, at 36-37 (weeks), I usually suggested that fathers practice oxytocin massage on their spine area, their backbone, left and right, massaged outwards, all the way to the lower lumbar area..." (Informant 6)

Theme 2: Application of Breathing Techniques

This theme describes several breathing techniques that can be guided to women during labor. Abdominal breathing was the most commonly described technique and could be used throughout all stages of labor. In abdominal breathing, the laboring woman takes a long, deep breath through the nose, allowing the abdomen to expand, and then exhales slowly through the nose.

"... What we usually teach is abdominal breathing, so it's a longer breath..." (Informant 1)

"... I usually teach using the belly breathing technique or the diaphragm technique, diaphragm breathing..." (Informant 2)

"... So when we breathe using the diaphragm, the ribs have to expand right and left, the side of the thorax expands, the back of the thorax expands, and the side of the torso also expands. When we breathe using this diaphragm, the inhale expands, the exhale shrinks, so our lungs are fully filled with oxygen. Well, it turns out that when we use this diaphragmatic breathing, we can absorb seven times more oxygen than using chest breathing..." (Informant 2)

In addition, the Ujjayi breathing technique can be applied between contractions when the mother becomes tired from the contractions. It involves gently narrowing the throat, producing a warm and relieving sensation in the throat during exhalation.

"... there is also breathing that inhaling through the nose and then exhaling through the nose too, but the relief is in the throat here (pointing to the throat), I forget what the technique is called. (Practising breathing). Like that. So, she inhales through the nose and exhales through the nose, as when inhaling, the stomach is inflated, when exhaling, the stomach is deflated. Like that..." (Informant 4)

"... There's also Ujay's breathing, Ujay breathing, where you inhale through your nose and it feels warm in your throat. The breathing like 'Haaah'..." (Informant 6)

Ideally, inhalation and exhalation should be performed through the nose. However, if the laboring woman is not used to this and has difficulty doing so, she may inhale through the nose and exhale through the mouth.

"...then on the day of birth, breathe slowly and deeply from nose to nose for as long as, as deep as possible. If it doesn't feel comfortable, it's okay to do nose to mouth, as long as the mother feels comfort..." (Informant 5)

"... okay, then you can do inhale to your nose, out to your mouth. But not into your mouth and out to your mouth, because that's what often happens if not guided..." (Informant 8)

Another technique was vocal breathing, in which the mother vocalized vowel sounds at a low pitch while exhaling. This technique could be guided during the transition phase, when contractions became more regular and intense. It was described as helping the mother maintain control and avoid uncontrolled screaming.

"... keep breathing which brings the vocal eeee down "Haaaa... (practicing low tone) ..." (Informant 1)

"... Then there is also a breathing technique, when you inhale through your nose and then when you exhale, there is a sound. So, it's like there is a sound, there is a sound coming out, so it's like this "Huuuuu" (while demonstrating breathing) ..." (Informant 4)

"... Well, then there's another thing, sis, to manage contractions, sometimes I combine it with vocalization, by inhaling through the nose and exhaling through the mouth while making the vowel sounds "Aaaaaaa...." like that, the tone is low "Haaaaaa..." like that..." (Informant 6)

The final technique was blowing breathing. This technique was used during the delivery of the baby (second stage of labor), when the baby had reached the crowning stage. It involved exhaling slowly, similar to blowing up a balloon.

"... Then, when the baby's crowning, "That's it, Ma'am. No need to use power, just blow." Still "Inhale, expand your stomach, let's just breathe normally, use your mouth, no need to use power, no need to use power." It's almost like belly breathing, but exhaling through the mouth..." (Informant 2)

"... when she is pushing, while pushing, and the baby's head comes out three to five centimeters, we direct her to blowing. Like blowing up a balloon "Huh huh huh huh" (giving an example)..."
(Informant 4)

The senior midwife explained that this technique was usually guided in specific situations, such as when she observed that the baby was relatively large. She used this technique to help control the delivery of the baby and reduce the risk of perineal tearing.

DISCUSSION

Acupressure

The findings showed that eight acupressure points were applied during gentle birth according to the mother's condition and the stage of labor. LI4 Hegu and SP6 Sanyinjiao were the most consistently reported points, mentioned by all informants and used primarily to support pain relief and labor progression. BL32 Ciliao and BL60 Kunlun were also used to promote maternal comfort and support labor. These findings indicate that acupressure in gentle birth was applied as an individualized supportive practice rather than as a fixed combination of points.

The frequent use of LI4 and SP6 is consistent with previous evidence reporting their potential benefits during labor. (Salsabila & Hidayanti, 2023), based on an evidence-based review, reported that SP6 acupressure could relieve labor pain, while LI4 acupressure could reduce the duration of the first stage of labor. More recently, a systematic review and meta-analysis of 37 randomized controlled trials found that acupressure significantly reduced labor pain compared with touch, sham, and no intervention, with both SP6 and LI4 demonstrating significant effects. The certainty of evidence, however, was moderate to low (Larki et al., 2025). These two points can be stimulated with moxibustion or acupressure.

Several physiological mechanisms may explain the potential analgesic effect of acupressure. Mechanical pressure provides sensory stimulation that may activate peripheral sensory afferent pathways and modulate nociceptive transmission at the spinal level, consistent with the Gate Control Theory of pain proposed by Melzack and Wall. Acupressure may also activate endogenous analgesic pathways. Therefore, the pain-relieving effects described by the informants may involve both sensory modulation and endogenous analgesic mechanisms, although these physiological mechanisms were not directly measured in the present qualitative study. This interpretation should consequently be regarded as a possible explanation rather than a finding established by the present study.

BL32 was specifically stimulated during contractions to promote maternal comfort. Its location in the sacral region may partly explain its practical use when mothers experience discomfort in the lower back or sacral area. This finding is consistent with (Mukhoirotni & Mustafida, 2020) who found that combinations of BL32 with LI4 or SP6 reduced labor pain. Similarly, (Alimoradi et al., 2019) included BL32 together with GB21, GB30, LI4, and SP6 in a body-acupressure intervention and reported reduced labor pain compared with routine care. These findings support the use of BL32 as a complementary local point alongside distal acupressure points.

Other points were selected according to specific maternal conditions. ST36 Zusanli was used when the mother appeared fatigued. From a TCM perspective, ST36 is regarded as an important point for supporting Qi and Blood (Resmiye Kaya Odabas et al., 2023) providing a traditional rationale for its use when maternal fatigue was observed. In the present study, this point could be stimulated through either acupressure or moxibustion, allowing the method of stimulation to be adapted to maternal comfort.

KI1 Yongquan was used when the mother appeared anxious. Its traditional calming effect on the mind provides a rationale for its use when emotional distress was observed. Previous evidence has also identified KI1 among acupoints used to improve sleep quality (Furong He et al., 2018). This may be relevant during prolonged labor, when opportunities for rest between contractions are important. In the present study, moxibustion was considered when direct pressure on KI1 was uncomfortable for the mother, illustrating the practitioners' adaptation of the stimulation method according to maternal comfort. GB21 Jianjing was used to support the labor process, particularly during the second stage. From a TCM perspective, GB21 has a releasing and descending action on Qi, providing a traditional rationale for its use in supporting the downward movement associated with childbirth. This point is stimulated only by pressure.

In addition to stimulation of specific acupressure points, some informants described oxytocin massage as a supportive technique during labor. The area stimulated during this massage is anatomically similar to the distribution of the Hua Tuo Jia Ji points along the paravertebral region. It is a group of 34 points on both sides of the spine, 0.5 cun lateral to the lower border of each spinous process, starting from the first thoracic vertebra to the fifth lumbar. In TCM, it is used to treat various disorders, including cardiovascular, digestive, urinary and reproductive systems (Widayati et al., 2025).

In the present study, oxytocin massage involved circular and lateral pressure along the spine. This finding is consistent with (Widayati et al., 2025) who reported a significant reduction in maternal discomfort following oxytocin massage during the active phase of labor. However, the anatomical similarity should not be interpreted as evidence that oxytocin massage acts specifically through Hua Tuo Jia Ji points, as this mechanism was not investigated in the present study.

Breathing Techniques

The findings showed that several breathing techniques were guided according to the stage and intensity of labor. Abdominal breathing was the most general technique and could be applied throughout labor. As contractions became more intense, particularly during the transition phase, vocal breathing was used to help the mother maintain control and regulate her response to pain. Ujjayi breathing was used between contractions when the mother appeared fatigued, whereas blowing breathing was directed during crowning to support a more controlled birth of the baby. Thus, breathing techniques were not applied as a single standardized method but were adapted to the mother's condition and the progression of labor.

The use of abdominal breathing throughout labor is consistent with previous literature describing slow and deep breathing as commonly used breathing approaches during childbirth. A 2024 systematic review and meta-analysis of 13 studies found that breathing exercises during the first stage of labor were associated with reduced pain intensity and a shorter second stage of labor. However, the certainty of evidence for pain reduction was very low, whereas the evidence for a shorter second stage was moderate (Delgado et al., 2024). These findings provide support for the use of controlled breathing as a non-pharmacological approach during labor, while also indicating the need for cautious interpretation of its effect on pain.

The potential analgesic and calming effects of controlled breathing may involve autonomic and stress-regulation mechanisms. Slow breathing has been associated with increased vagally mediated heart rate variability, suggesting an influence on parasympathetic regulation. A systematic review and meta-analysis including 223 studies

found increased vagally mediated heart rate variability during and following voluntary slow-breathing interventions (Laborde et al., 2022). In the context of labor, this physiological regulation may help reduce excessive arousal and support relaxation, attention, and a sense of control when coping with contractions. Thus, the use of abdominal breathing in the present study may have functioned not only as a means of managing pain but also as a strategy for supporting maternal awareness and a sense of control during labor.

The use of vocal breathing during the transition phase further illustrates this adaptive approach. Controlled exhalation accompanied by a low-pitched vocal sound may provide an external focus and help the mother regulate her behavioral response to increasingly intense contractions. In the present study, informants described this technique as helping mothers maintain control rather than responding to intense contractions with uncontrolled screaming. This interpretation is consistent with the broader literature on controlled breathing during labor, although evidence specifically examining vocal breathing remains more limited.

Ujjayi breathing was used primarily between contractions when the mother appeared fatigued. In the present study, it therefore appeared to function mainly as a relaxation and recovery strategy rather than as a specific pain-management technique. Because evidence specifically examining Ujjayi breathing during labor remains limited, its potential physiological effects should be interpreted cautiously. It is therefore more appropriate to interpret this finding in terms of the practitioners' adaptive use of breathing according to maternal needs rather than to attribute a specific physiological mechanism to Ujjayi breathing.

Blowing breathing was used during crowning to slow and control the delivery of the baby. The senior midwife described using this technique particularly when she perceived that the baby was relatively large, with the aim of reducing excessive pressure on the perineum. This finding is supported by (Rina Aritonang et al., 2022) who reported that a bottle-blowing technique involving controlled exhalation during the second stage of labor was associated with reduced labor pain, shorter duration of the second stage, and fewer perineal tears compared with conventional breathing. Although the technique was not identical to the blowing breathing described in the present study, both involve controlled exhalation during the second stage of labor. The similarity in this basic principle provides supportive evidence for the practitioners' use of controlled blowing to help regulate the birth of the baby. Nevertheless, the present qualitative study does not establish that blowing breathing prevents perineal trauma.

Overall, the findings suggest that both acupressure and breathing techniques were used as adaptive, non-pharmacological approaches during gentle birth. Rather than following a rigid protocol, midwives and doulas selected acupressure points and breathing techniques according to the stage of labor, maternal physical condition, emotional state, and comfort. This individualized approach may be particularly relevant to gentle birth practice, where supporting maternal comfort, coping, and a sense of control is an important component of the childbirth experience.

Acupressure and breathing techniques may be incorporated into midwifery education and in-service training as complementary, non-pharmacological approaches to support women's comfort, coping, and sense of control during labor. In clinical practice, these techniques can be integrated into individualized intrapartum care according to the stage of labor and the woman's physical and emotional needs, while remaining complementary to pharmacological pain relief and other medically indicated

interventions. This approach is consistent with WHO recommendations that relaxation and manual techniques may be offered as pain-relief options according to women's preferences (WHO, 2025). For gentle birth programs, incorporating these techniques may strengthen woman-centered care by providing practical strategies that can be adapted throughout labor.

This study has limitations. The study explored the application of acupressure and breathing techniques from the perspectives of midwives and doulas, without directly including the experiences of women during childbirth. Therefore, the findings do not capture how women themselves perceived the techniques, including whether acupressure and guided breathing contributed to their perceived comfort, relaxation, coping, or sense of connection with their bodies during labor. Future research is expected to include women in labor as informants to explore their experiences directly. Such research should consider their comfort and well-being during labor and carefully determine the timing of data collection after childbirth to minimize potential recall bias and the influence of the immediate postpartum experience on their responses.

CONCLUSION

This study explored how midwives and doulas apply acupressure and breathing techniques during gentle birth. The findings show that these techniques are applied flexibly according to the stage of labor, the mother's physical and emotional condition, and her comfort, rather than through a fixed procedure. Acupressure points and breathing techniques were used to support pain relief, maternal comfort, anxiety reduction, energy, labor progression, and controlled delivery. The scientific contribution of this study lies in providing a contextual description of how these non-pharmacological techniques are practically adapted by experienced birth attendants within gentle birth practice. The findings highlight that acupressure, and breathing techniques can serve as complementary approaches to support woman-centered and individualized care during labor.

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