

# Lamaze Breathing





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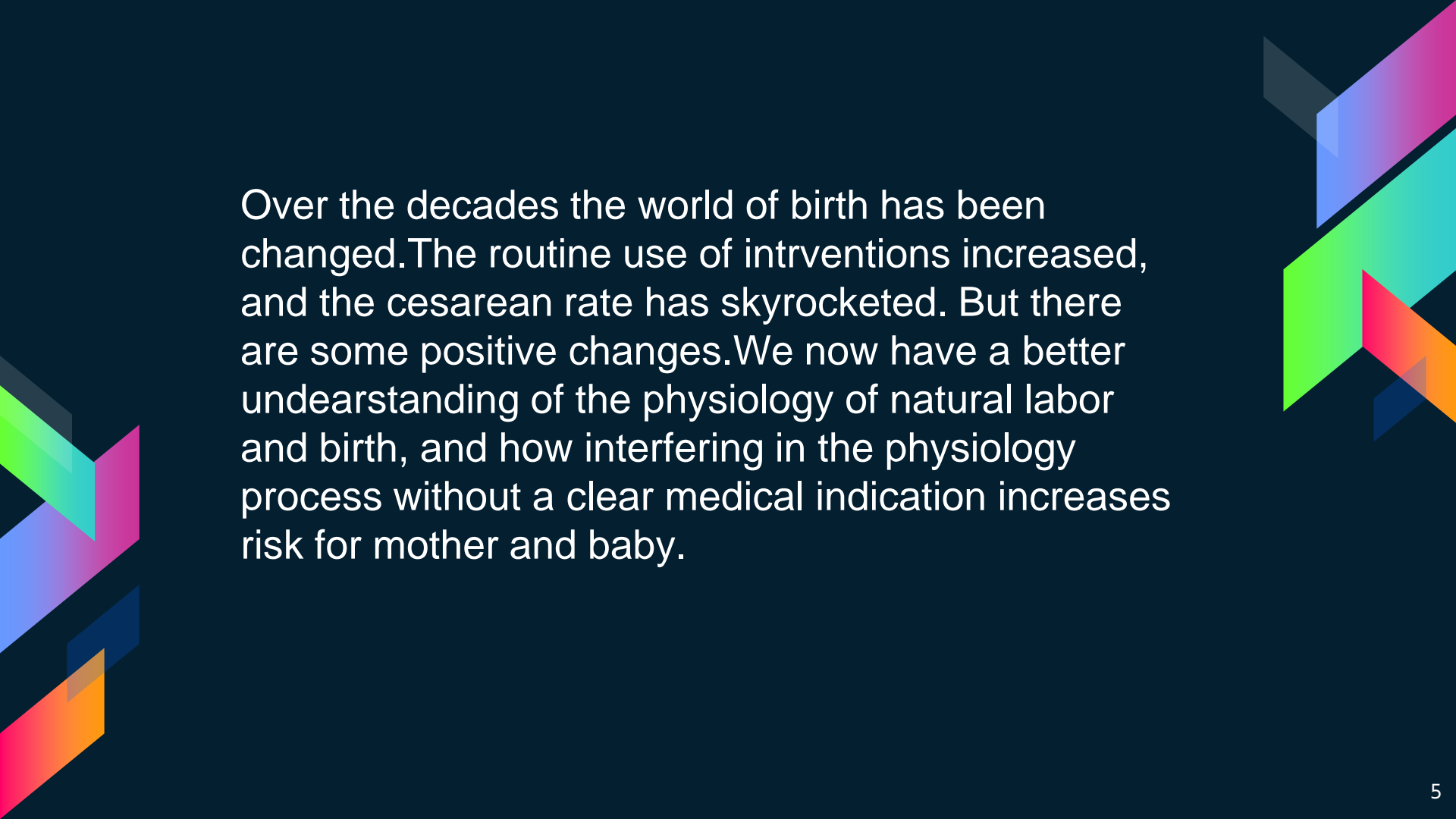
# Lamaze Breathing Guide

INFOGRAPHIC



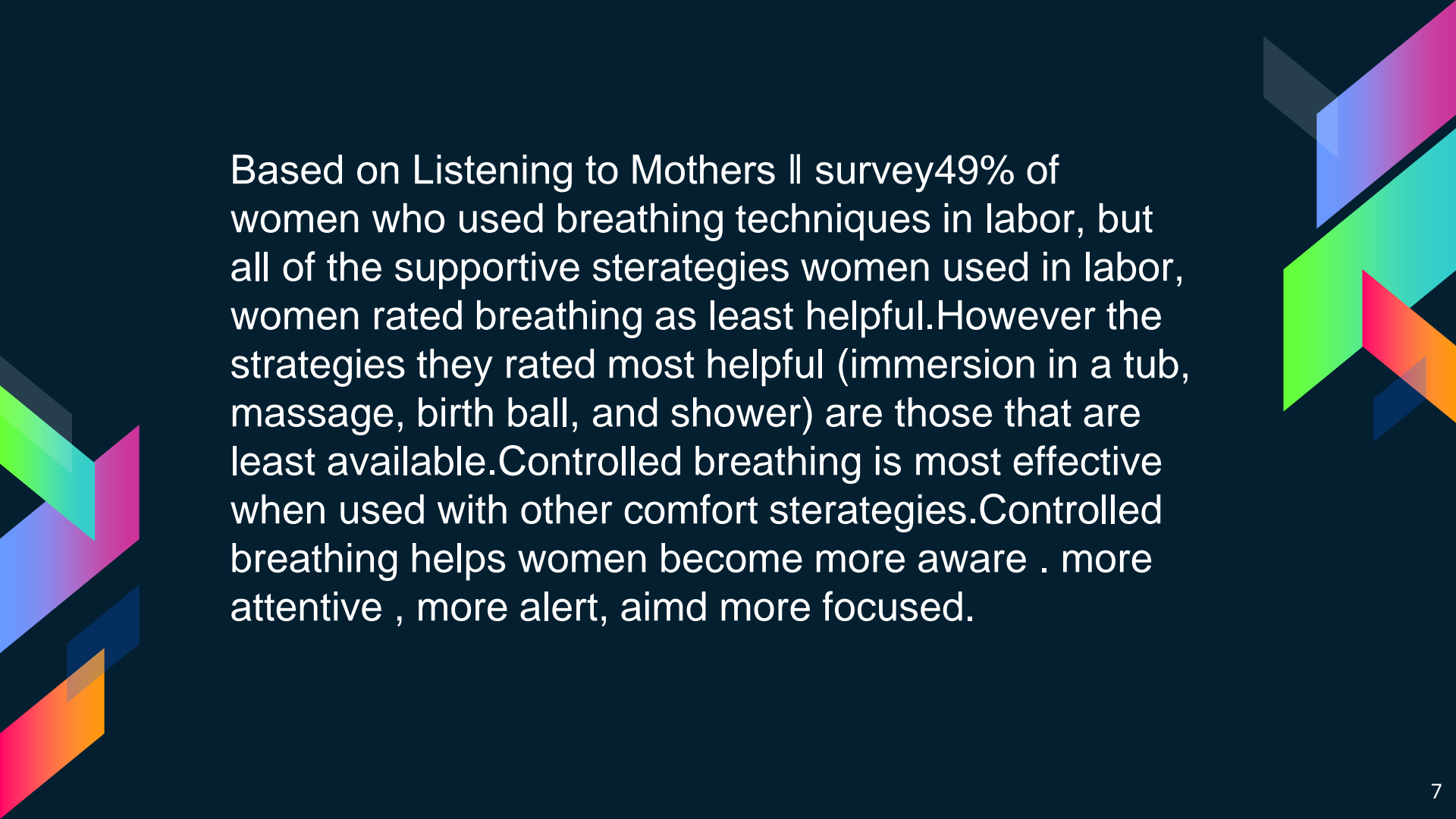


During labor , emotional stress and pain may negatively impact the physiologic process of contraction, and interfere with labor progression. In cases of women who have fear regarding birthing pain and complications, cesarean delivery is preferred over vaginal deliver. Labor pain management is important in reducing the rate of increased elective cesarean section



Over the decades the world of birth has been changed. The routine use of interventions increased, and the cesarean rate has skyrocketed. But there are some positive changes. We now have a better understanding of the physiology of natural labor and birth, and how interfering in the physiology process without a clear medical indication increases risk for mother and baby.

We learned about the hormonal orchestration of labor , the role of stress hormones, and the relationship between breathing, relaxation, and catecholamine release. This knowledge reaffirmed that controlled breathing enhances relaxation and the relaxation decreases stress hormone levels, especially important early in labor.,Instruction on breathing during dillataion is based on physiology, aimed at boosting oxygenation to both the mother and the baby;increasing relaxation; raising confidence; and decreasing discomfort, pain and anxiety, thereby keeping the mother calm and satisfied with the labor process




Based on Listening to Mothers II survey 49% of women who used breathing techniques in labor, but all of the supportive strategies women used in labor, women rated breathing as least helpful. However the strategies they rated most helpful (immersion in a tub, massage, birth ball, and shower) are those that are least available. Controlled breathing is most effective when used with other comfort strategies. Controlled breathing helps women become more aware . more attentive , more alert, aimed more focused.

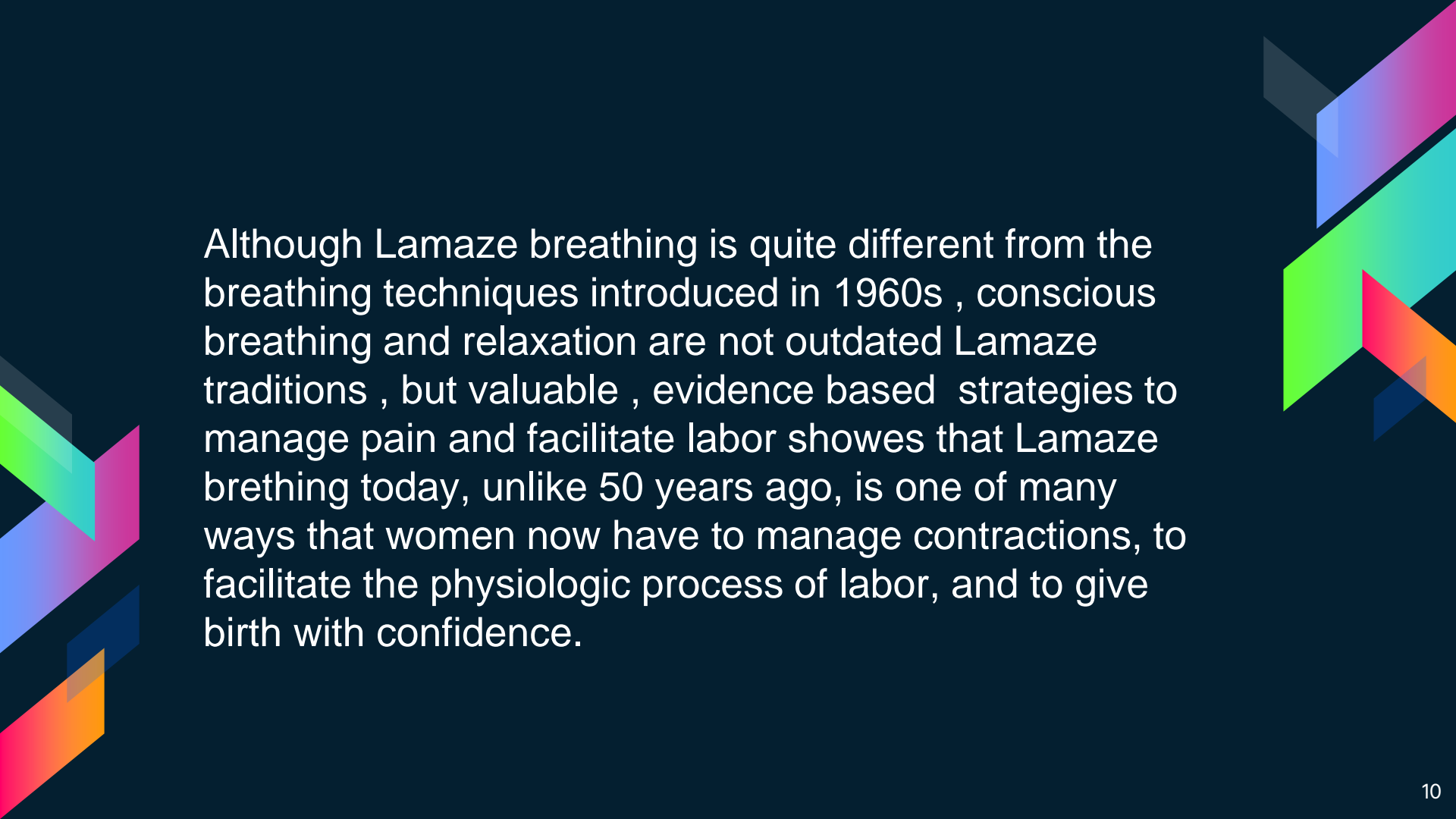
The isolated use of breathing techniques may not be enough to alleviate labor pain, reinforcing the evidence that pain control can be achieved using a therapeutic procedure without medication as a strategy involving several methods. These are all good things in labor.

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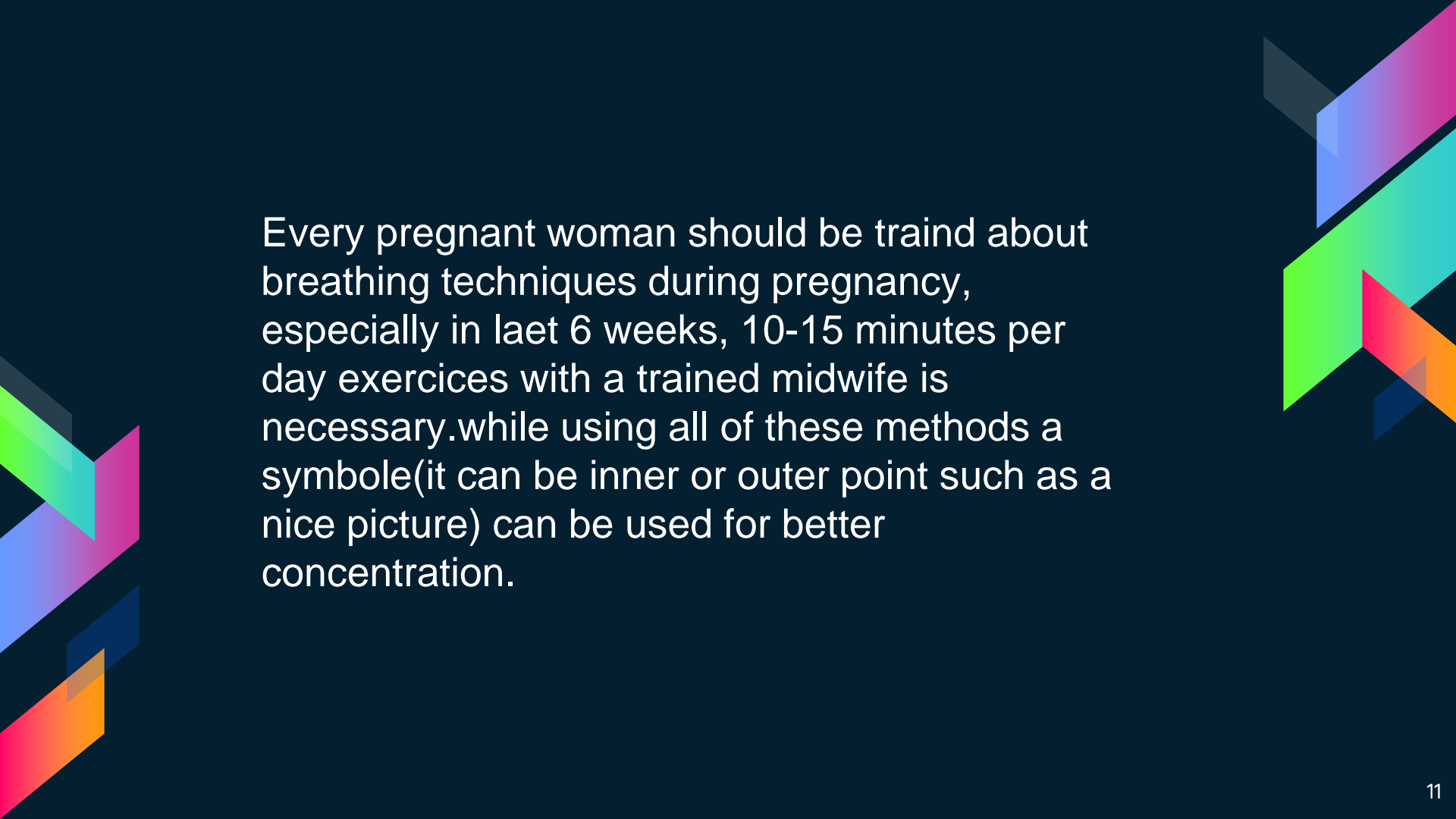




Lamaze Method was introduced to the United States by Marjorie Karmel who had her first baby in France with Dr. Fernand Lamaze. Lamaze method is about conscious relaxation and controlled breathing to manage the pain of contractions, avoiding the need for drugs. Actually Lamaze mothers are able to give birth "awake and aware."



Although Lamaze breathing is quite different from the breathing techniques introduced in 1960s , conscious breathing and relaxation are not outdated Lamaze traditions , but valuable , evidence based strategies to manage pain and facilitate labor shows that Lamaze breathing today, unlike 50 years ago, is one of many ways that women now have to manage contractions, to facilitate the physiologic process of labor, and to give birth with confidence.




Every pregnant woman should be trained about breathing techniques during pregnancy, especially in last 6 weeks, 10-15 minutes per day exercises with a trained midwife is necessary. While using all of these methods a symbol (it can be inner or outer point such as a nice picture) can be used for better concentration.




# First Stage

Paced Breathing Technique(Hoot-Hut)

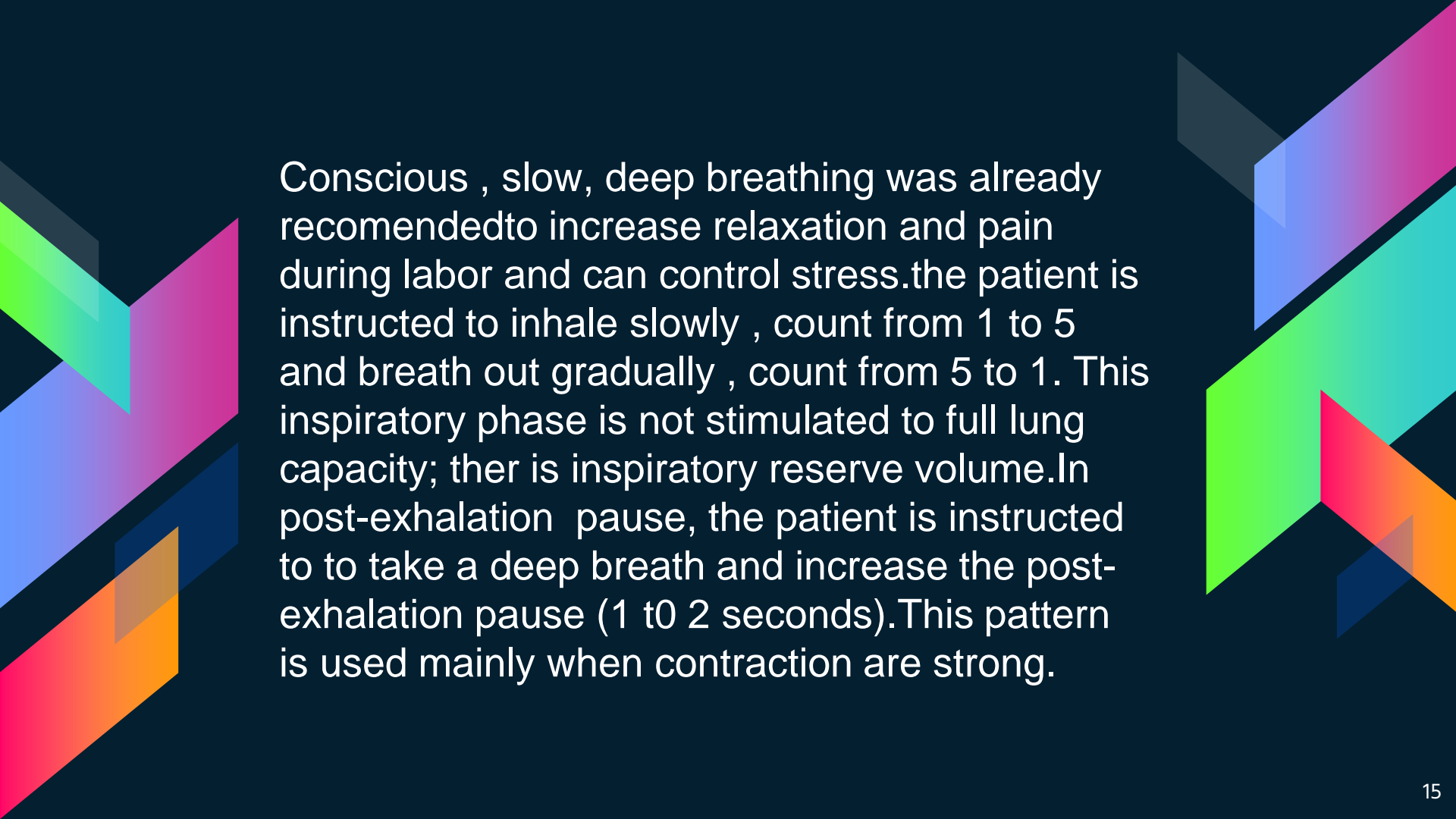


The top right corner of the slide features several overlapping, semi-transparent geometric shapes in shades of purple, blue, green, and red, creating a modern, abstract design.

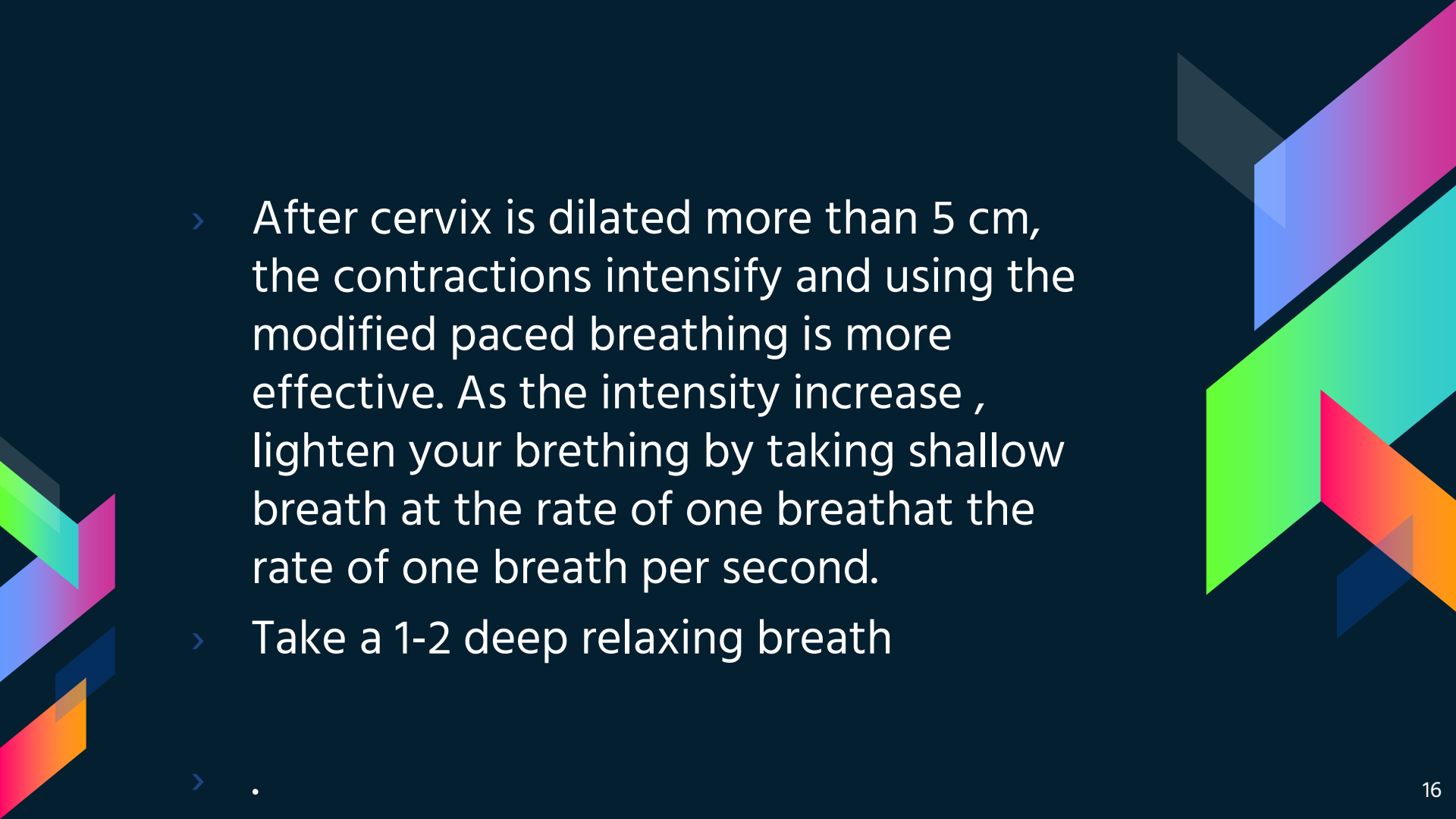
Fill lungs with a deep breath and exhale  
When contraction begins, take 7-10 deep breaths in a minute . Using hands stroke the lower abdomen upwards and when you exhale let your hands move downwards.The slight massaging of uterus helps with the contractions.

The bottom left corner of the slide features several overlapping, semi-transparent geometric shapes in shades of green, blue, purple, and orange, mirroring the design in the top right.

When the contraction is gone, breath normally.



Conscious , slow, deep breathing was already recommended to increase relaxation and pain during labor and can control stress. the patient is instructed to inhale slowly , count from 1 to 5 and breath out gradually , count from 5 to 1. This inspiratory phase is not stimulated to full lung capacity; there is inspiratory reserve volume. In post-exhalation pause, the patient is instructed to take a deep breath and increase the post-exhalation pause (1 to 2 seconds). This pattern is used mainly when contractions are strong.

- 
- The slide features a dark blue background with abstract, colorful geometric shapes in the corners. On the left, there are overlapping shapes in shades of green, cyan, purple, and blue. On the right, there are shapes in shades of purple, cyan, green, red, and orange. The text is presented as a list of three items, each preceded by a white chevron symbol (>).
- > After cervix is dilated more than 5 cm, the contractions intensify and using the modified paced breathing is more effective. As the intensity increase , lighten your brething by taking shallow breath at the rate of one breathat the rate of one breath per second.
  - > Take a 1-2 deep relaxing breath
  - > .



- › When the contraction begins, start with light breaths and increase the frequency as the contraction peaks.(hoot-hut)It usually peaks around 30-45 seconds, then you can breath slower.in this step there is no need to concentrate on inhalation and exhalation, because air goes inside and outside normaly.
- › After the contraction is done , breathe normally



# Transition Phase

Modified Paced Breathing  
Technique



- › This form of controlled breathing is used when dilation is 8-10 cm .the contractions duration is about 60-90 seconds and they are really powerful. This type of controlled breathing techniques is used to stop mother from pushing when cervix is not dilated.thereby conserving her energy. Sooner pushing may lead to tearing in the cervix.

## Second Stage

- › Variable breathing
- › (Hoot-Hoot-Hoot→Hout )  
( pant-pant-blow)



- › In this stage breathing exercises with deep inhalation and exhalation are effective in reducing the and shortening the duration of the second stage of delivery .The second most intense stage of labor calls for expulsive breathing.it is used when cervix is fully dilated, otherwise it could cause tearing or other damages.

- › Using appropriate breathing during labor can be effective in facilitating fetal descent. The pain is localized to the lower abdomen in the second stage, and pain can be managed more effectively through breathing exercises to facilitate labor. The main components of breathing exercises are as follows: at first Find a focal point or sth to focus on then



- › A) fill stomach and then lungs with air while breathing
- › B) fill the expansion in the stomach
- › C) make sure the muscle from your stomach to your knee are relaxed
- › D) when there is pain, perform deep abdominal breathing exercises, and take a deep breath in and hold as much as you can
- › E) try to push the baby downward
- › F) you can do it by holding your breath or breathing out quite slowly from your mouth
- › G) you should continue the pushing until the pain is relieved.

- > J breathing, down breathing, or simply  
can be memorized as:

- > MOO BREATHING

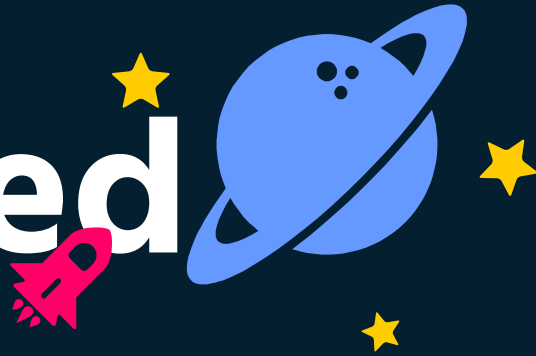
# Maternal Satisfaction

- > Personal Expectation
- > Support from health care professional
- > Active participation in decision making
- > Physical Factor
- > Quality of patient-caregiver relations

# Maternal Satisfaction

- > Lack of an intergroup difference in pain
- > anxiety
- > fatigue

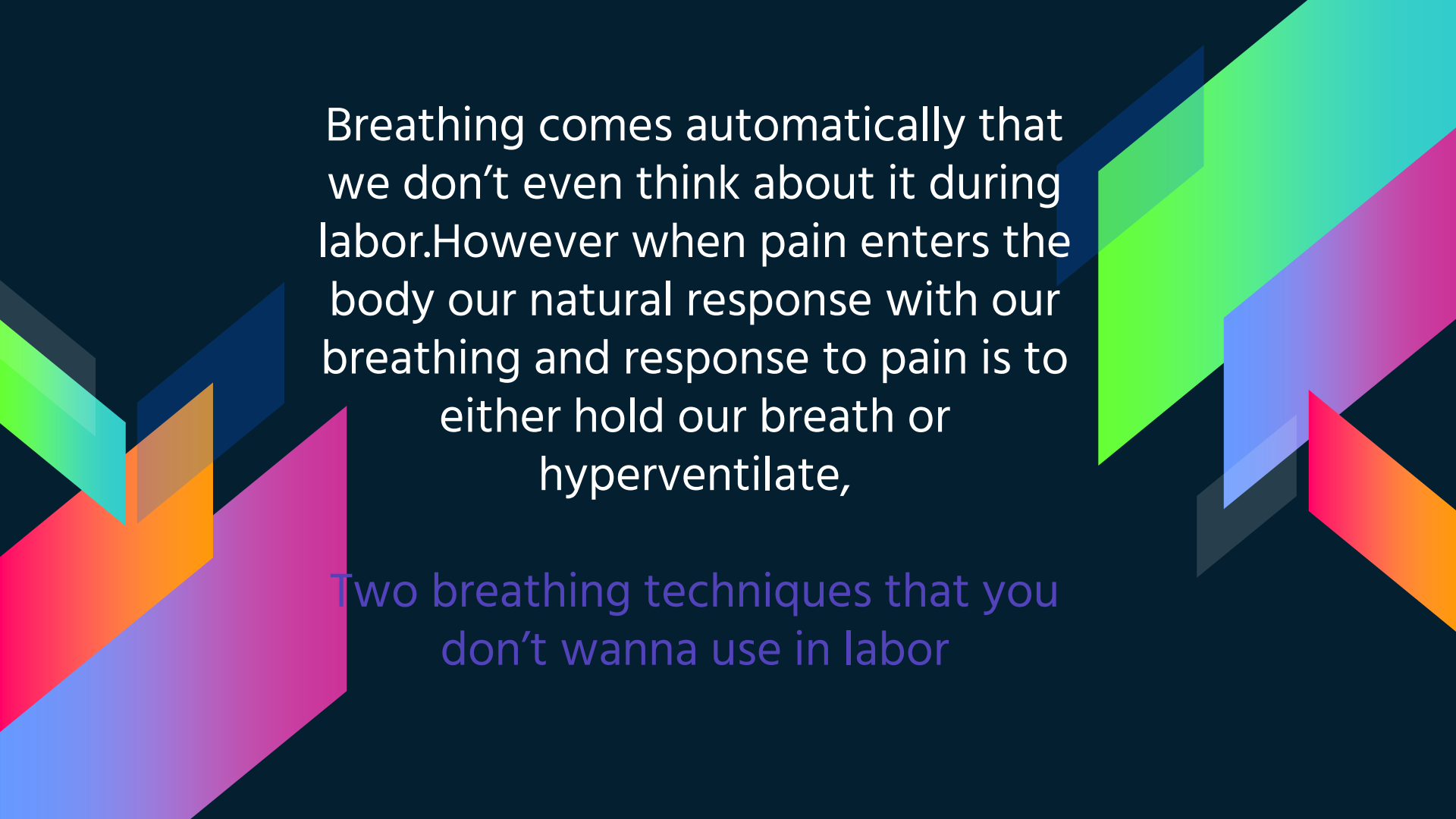
**We need  
more  
modalities ..**



# PREGNANCY BREATHING PRACTICE



**What's our  
Normal  
Reaction to  
Pain?**



Breathing comes automatically that we don't even think about it during labor. However when pain enters the body our natural response with our breathing and response to pain is to either hold our breath or hyperventilate,

Two breathing techniques that you don't wanna use in labor

**If we don't Help  
Mammas to reduce  
labor pain.....**





# Why Breathing Is Important During Labor?



**In patients with respiratory intervention there is low anxiety level in both latent and active phases, and positive pain relief results during active phase labor.**

# The Lamaze Six Healthy Birth Practices are based upon the most recent, evidence based research.they are 6 recommendations

Let labor begins on its own

Walk, move around and change positions throughout labor

Bring a loved one, friend or doula for continuous support

Avoid interventions that are not medically necessary

Avoid giving birth on your back and follow your body's urges to push

Keep mother and baby together; it's best for mother, baby, and breast feeding

## Accepted Manuscript

The effectiveness of breathing patterns to control maternal anxiety during the first period of labor: A randomized controlled clinical trial

A. Boaviagem, E. Melo Junior, L. Lubambo, P. Sousa, C. Aragão, S. Albuquerque, A. Lemos

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## • Research Article

### Effectiveness of breathing exercises during the second stage of labor on labor pain and duration: a randomized controlled trial<sup>a</sup>

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1. Department of Family Medicine, Ataturk University Faculty of Medicine, Erzurum 25070, Turkey  
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#### ABSTRACT

**BACKGROUND:** Some research exists on the effect of non-pharmacological approaches for labor pain relief. However, there is limited information about effectiveness of breathing exercises in pregnant women to reduce maternal pain during labor.

**OBJECTIVE:** To determine whether breathing exercises for pregnant women during the second stage of labor have beneficial effects on maternal pain, duration of labor, and the first-minute Appearance, Pulse, Grimace, Activity and Respiration (APGAR) scores.

**DESIGN, SETTING, PARTICIPANTS AND INTERVENTIONS:** This randomized clinical trial involved 250 pregnant women, who were randomly divided into two groups: intervention group (IG; n = 125) and control group (CG; n = 125). IG received one session breathing exercise training and performed breathing exercises during the second stage of labor versus the CG that did not receive any breathing exercise training.

**MAIN OUTCOME MEASURES:** The effects of breathing exercises on maternal pain were determined by Visual Analogue Scale (VAS), duration of the second stage of labor, and the first-minute APGAR scores.

**RESULTS:** The mean age of the participants was (23.2 ± 4.2) (range: 18 to 42) years. Both IG and CG had similar baseline characteristics in terms of age, education level, occupation, and smoking (P > 0.05). The mean VAS scores of IG and CG were (88.2 ± 6.3) and (90.5 ± 7.0), respectively (P = 0.001). The duration of the second stage of labor was (369.8 ± 92.0) s for IG and (440.7 ± 142.5) s for CG (P < 0.001). The mean first-minute APGAR scores were (6.64 ± 0.50) for IG and (6.73 ± 0.89) for CG (P = 0.05).

**CONCLUSION:** Based on this study, breathing exercises with deep inhalation and exhalation in pregnant women are effective in reducing the perception of labor pain during the second stage of labor, management and shortening the duration of labor.

**TRIAL REGISTRATION:** This study is registered with the number of NCT03066973.

**Keywords:** breathing exercise; labor pain; randomized controlled trial

Yuksef H, Cayir Y, Kozan Z, Tastan K. Effectiveness of breathing exercises during the second stage of labor on labor pain and duration: a randomized controlled trial.

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NAVIGATING THE MAZE—Personal Exchange

Continuing Education Module

## Lamaze Breathing: What Every Pregnant Woman Needs to Know

Judith A. Lothian, PhD, RN, LCCCE, FACCE

#### ABSTRACT

Lamaze breathing historically is considered the hallmark of Lamaze preparation for childbirth. This column discusses breathing in the larger context of contemporary Lamaze. Controlled breathing enhances relaxation and decreases perception of pain. It is one of many comfort strategies taught in Lamaze classes. In restricted birthing environments, breathing may be the only nonpharmacological comfort strategy available to women. Conscious breathing and relaxation, especially in combination with a wide variety of comfort strategies, can help women avoid unnecessary medical intervention and have a safe, healthy birth.

The Journal of Perinatal Education, 38(3), 118–130, doi: 10.1891/1098-1243.38.3.118

Keywords: childbirth education, Lamaze breathing, Lamaze Method, breathing, in labor, Lamaze standard of practice, comfort in labor, relaxation in labor



# THANKS!

**Any questions?**

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