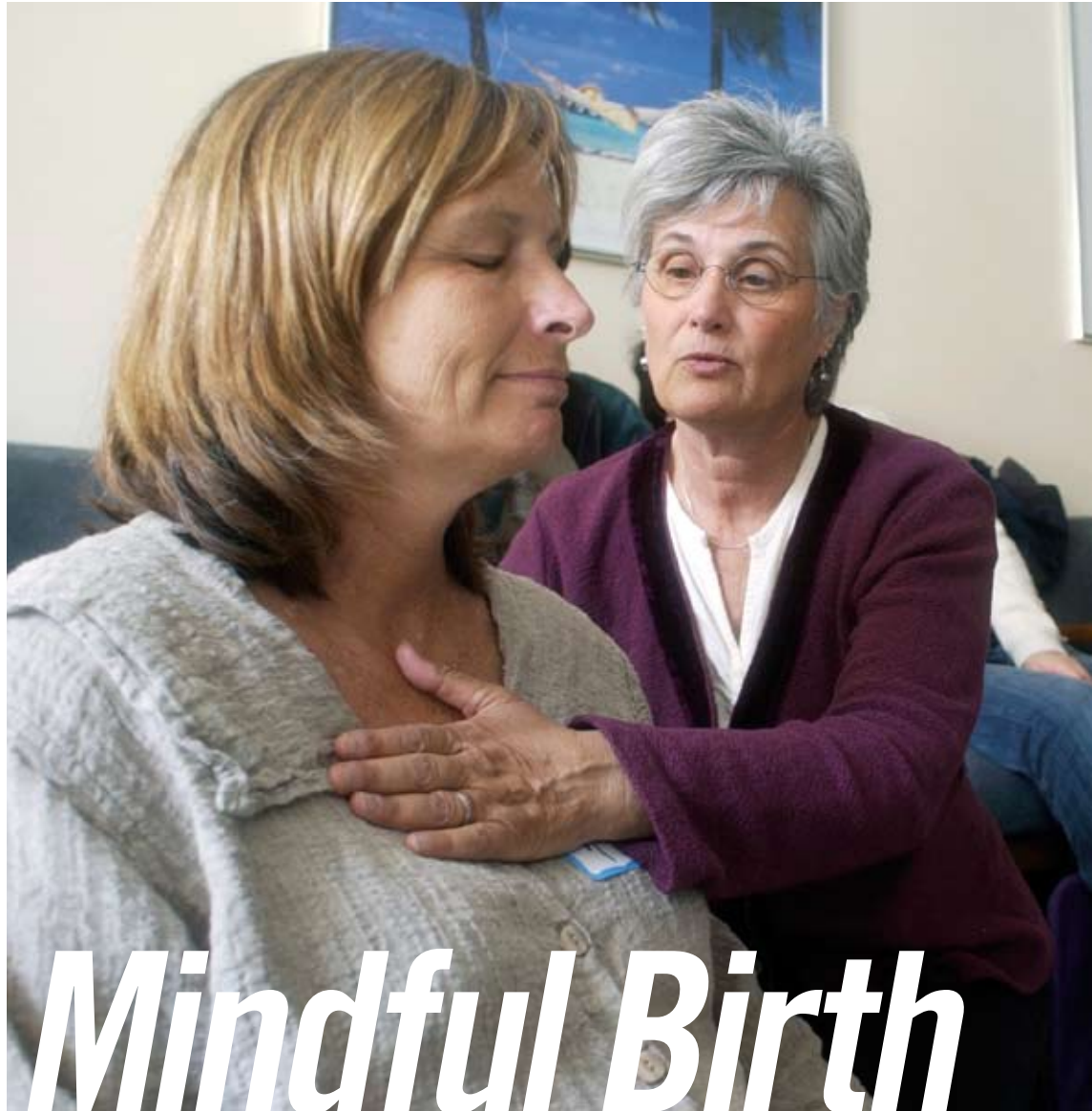


Nancy Bardacke (center) demonstrates a soothing touch on Mary Pearsall, who was participating in Bardacke's Mindfulness-Based Childbirth and Parenting course.



# *The Mindful Birth*

**BY EMILIE RAGUSO**

All photos by Emilie Raguso

**A new program is applying mindfulness meditation to childbirth and parenting. Could it lead to easier births and healthier babies?**

MOANS FILL THE DIM ROOM AS NINE MEN hold ice cubes against their partner's wrists. The women's eyes are closed and their mouths are open as they practice releasing "aaahs" and "ooohs." The men stroke their partner's arms or hold a palm against their chests or backs as the chill gets more intense.

"Keep coming back to the breath," suggests the teacher, Nancy Bardacke. "Turn up the corners of the mouth. Shift your attention to your baby, your sense of the baby. See if a color appears comforting. Experiment with something that works for you. It's your labor."

Bardacke calls time. Eyes open, and the pregnant women look at their partners with relief as the melting ice comes off their skin.

The exercise was one segment in a day-long workshop aimed at helping expectant parents handle the stress of pregnancy and the pain of childbirth. But what sets this class apart from many other childbirth courses is that it centers on a group of skills known as mindfulness, which encourages people to pay close attention to whatever they're feeling mentally and physically in the present moment, without trying to change those feelings.



For example, when they feel the ice on their skin for one minute—the length of a contraction—the pregnant women practice sensing and even accepting the pain it's causing them, rather than focusing on whether that pain is going to get worse. Their partners learn techniques to soothe them when they're in pain—discovering, for instance, the effects of different touches (down strokes calm while up-strokes energize). Couples also experiment with positions, such as standing, rocking or walking, that might ease the pain of contractions.

Bardacke's curriculum—she teaches eight-week childbirth preparation classes in addition to shorter workshops—is based on the teachings of Jon Kabat-Zinn, a best-selling author and medical researcher who developed the Mindfulness-Based Stress Reduction (MBSR) program in the 1970s at the University of Massachusetts Medical School. In an effort to help people suffering from various painful and stressful ailments, Kabat-Zinn took

Buddhist meditation and secularized it, removing religious overtones and emphasizing a moment-to-moment awareness of one's internal state and external environment. In his eight-week MBSR program, people practice mindfulness in groups for several hours each week and attend a day-long retreat.

MBSR has emerged as one of the better-known clinical applications of mindfulness meditation. Studies have found that it offers many benefits—such as heightened positive emotions, lower stress levels, and a boost to the immune system—to people with numerous medical and psychiatric conditions, including chronic pain, cancer, anxiety disorders, depression, and eating disorders. Since Kabat-Zinn first launched the program, MBSR has been applied in many settings, from schools to tech companies to prisons.

Now Bardacke is bringing the approach to childbirth and parenting, and new research suggests that MBSR might lead to easier births and healthier babies.

Bardacke, a nurse-midwife based in Berkeley, California, first heard Kabat-Zinn speak on a rainy night in Marin County in the early 1990s. She was already a midwife with a background in yoga and meditation; as she studied his program over the next few years, she started to wonder if his ideas could be applied to childbirth preparation. In 1994, she participated in a training he offered to health professionals in Northern California.

“That was when I had the inspiration to use MBSR with pregnant women,” Bardacke says. “I just knew what I had to do.”

## High anxiety

Controlling stress is critical to the health of both moms and newborns. In pregnant women, high levels of cortisol, a hormone that's considered an indicator of stress, have been associated with many health complications. They include early and late births, low birth weight among babies, and babies having difficulty breathing at birth, all of which can result in low Apgar scores, a common measure that rates newborn health.

Amy Beddoe, an assistant professor at the San Jose State University School of Nursing, says that high anxiety and psychological stress among mothers have also been linked to infant and child behavioral problems. Many of the developments babies experience in the womb are regulated by hormones and neurotransmitters; stress alters these processes, she says.

“If the mother is producing more stress hormones, they're going to be transmitted to the fetus,” says Beddoe. “Everything we do impacts the fetus. It's kind of a marvelous thing. The fetus is getting information about what kind of a world it will be born into.”

There hasn't yet been a lot of research on MBSR and pregnancy. For one thing, says Beddoe,

**Controlling stress is critical to the health of both moms and newborns.**

**What happens when the rock reaches the bottom? It just drops, Bardacke said. It doesn't worry about the waves.**

pregnant women are difficult to study. Pregnancy is in constant flux, unlike other health conditions, which can show more stable symptoms. It can also be hard to find large groups of women who are at the same stage of pregnancy. Cost can be a factor because, as pregnancy advances and women grow, the equipment that's needed to study them changes, too. Despite the challenges, Beddoe says that researchers are trying to understand the role of stress, and stress reduction, on pregnant women. (Disclosure: *Greater Good* Executive Editor Dacher Keltner is currently leading a study on the effectiveness of Bardacke's program.)

A pilot study published in 2004 in *Biological Psychology* found that pregnant women who were told to relax more and eliminate stressful circumstances from their lives demonstrated lower stress levels, lower symptoms of depression, and lower levels of cortisol.

Beddoe herself led a pilot study in 2006 that found that women who practiced yoga and mindfulness reported less physical pain and lower stress while pregnant.

And a pilot study led by psychologists Cassandra Vieten and John Astin, published last year in the journal *Archives of Women's Mental Health*, found that pregnant women who practiced eight weeks of stress reduction techniques showed 20 to 25 percent lower levels of stress, anxiety, and negative emotion after finishing that eight-week training; pregnant women who did not take part in the training showed none of these improvements. Though the study was limited by its small sample size—13 women received the training and 18 were assigned to a control group—the authors argue that the significant decline in anxiety they observed warrants further research, particularly because as many as 18 percent of women experience depression while pregnant.

Gina Hassan, a therapist in Berkeley who specializes in treating pregnant women and women with postpartum depression, says she's seen many couples suffer intense anxiety before and after childbirth. As couples prepare to become parents, their ideas about their identities shift, and their relationship changes, she says.

These changes make expectant couples uniquely receptive to the one-moment-at-a-time approach advocated by mindfulness, explains Hassan, who took Bardacke's class in 2006 to see how it might help her counseling practice. "It's a window of opportunity," she says.

## Full catastrophe birthing

Bardacke started teaching her childbirth preparation course at a hospital in 1998, then moved it to her own living room the following year; she taught it for the 55th time this summer.

The course has eight regular meetings, a day-long retreat, and a reunion for the couples and their babies after the mothers deliver. Before

anyone joins the class, Bardacke talks to expectant mothers on the phone, explaining her rules: On top of the weekly three-hour meetings, they must practice 30 minutes of meditation, six days a week.

"A lot of times, when I say 30 minutes a day, there's this long pause," she says. Once she explains that the skills won't work without practice, most couples agree to the requirement. Daily meditation is a cornerstone of Kabat-Zinn's teaching.

In her program's first meeting, expectant parents explain why they want to take the class and discuss fears about parenting and childbirth. Bardacke leads an exercise in mindful eating that involves focusing each of the five senses on a raisin—a way to encourage couples to be more conscious of the present moment. Further sessions go over Kabat-Zinn's techniques of silent meditation, yoga, and the body scan, in which a participant slowly considers each part of his or her body. Partners work together on pain practice using ice cubes. They read Kabat-Zinn's 1990 book, *Full Catastrophe Living*, which takes its title from a line in *Zorba the Greek* that refers to the ups and downs of family life as "the full catastrophe." Bardacke goes over breastfeeding, the labor process, and the needs of newborns.

As couples work together on the skills of living in the present moment, Bardacke says the effects become obvious.

"You can see the changes in their faces," she says. "Their faces get softer, more relaxed. They just get happier. The fear level goes down and confidence goes up."

Cari Napoles took Bardacke's class in 2006, before the birth of her daughter, Ondine. As the executive director of a nonprofit, her life was highly scheduled, revolving around the "tyranny of the to-do list" and everything she and her husband wanted to arrange before Ondine's birth.

"I came into that first class feeling like I was oscillating at a really fast vibration. There was so much stress, so much to do," she says. "My story to the group from the beginning, was, 'I'm working too much, and I'm stressed out.'"

In addition to writing grants for her job, her head was full of "baby stuff": Packing bags for the hospital. Having the car seat installed and inspected. Painting the nursery three different colors.

Napoles remembers her "surrender moment." Bardacke was leading a meditation, instructing the couples to imagine themselves as a rock falling through water. What happens when the rock reaches the bottom? It just drops, Bardacke said. It doesn't worry about the waves. The image stuck with Napoles.

"I was big. I was moving slowly. And I was tired. Being big, I couldn't rush anymore. I couldn't do more. By the time I left work, by the time I gave birth, I was at a completely different speed: I had



**“The class helped me get better at being present with what’s going on right now instead of worrying about what I don’t know about tomorrow.”**

**Nitin Gupta applies ice to the wrists of his wife, Pritika—an exercise in pain management that’s part of Bardacke’s course.**

staff told her that her cervix was only two centimeters dilated; she couldn’t be admitted until she was three or four centimeters. Instead of going home, the couple spent two hours walking the hospital halls. Moving slowly, Robinson kept one hand on a handrail and one on her husband’s shoulder. They rocked back and forth, making low moaning sounds together, as they’d practiced in Bardacke’s class.

“We were using our practice,” she says. “I felt like Steve was in labor with me. He wasn’t experiencing contractions, but he was really in it with me. And I think that came out of Nancy’s class.”

Bardacke’s lessons spilled into the couple’s daily life, even beyond

slowed down. I was able to see and engage in the world with so much more beauty and elegance. I wasn’t rushing through it.”

Living moment to moment and slowing down, she says, allowed her to let go of the lists. Napoles started listening better to her employees and spending more time on conversations instead of dashing from one task to the next. After Bardacke’s course ended, she and her classmates created a group called “Present Moment Parents.” With babies in tow, they have continued to meet, making time to sit, practice mindfulness, and discuss the joys and challenges of parenting.

## True presence

Mantra Robinson, who took Bardacke’s class in early 2007 with her husband, Steve, learned a similar lesson.

At the time, Robinson says she was nervous about the changes to come with her baby’s birth. She imagined herself in a state of complete panic during labor, demanding drugs for the pain and “just totally losing it.”

“I don’t like unknown things. I’m not comfortable with change,” she says. “But the class helped me get better at being present with what’s going on right now instead of worrying about what I don’t know about tomorrow.”

Robinson went into labor in April of 2007. When the couple first showed up at the hospital, she was having strong contractions. Hospital

parenting and the birth process, says Steve Robinson. As a social worker, his job often consists of one crisis after another. Before the class, he sometimes would find himself out of breath, “huffing and puffing,” and turning red from the stress. The panic went away after he started practicing mindfulness and paying more attention to breathing, he says.

Though Bardacke’s program is couched in the language of birth preparation, the Robinsons say the skills they learned also have helped them be better parents. The idea of living on “baby time,” fitting their responsibilities into the baby’s schedule rather than the other way around, stuck with them. They also have been able to let go of certain expectations they had for parenting, such as whether their son would sleep through the night.

It’s no surprise to Bardacke that the skills couples learn in her class continue to be useful long past labor, shaping the health and well-being of the next generation. Though that’s not the way she advertises the training, she believes the techniques couples develop with her are probably even more valuable after birth than they are before.

“Really, the skill of parenting is paying attention,” she says. “You can’t teach parenting skills to people who don’t have a baby. But you can teach mindfulness.”

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