



JON GILBERT FOX

Dartmouth's Judy Stern reported recently on the apparent effect of new national guidelines for fertility clinics.

## More is not merrier in fertility clinics

For many women undergoing *in vitro* fertilization, the prospect of twins or triplets often chalks up as a pro, not a con. After years of trying to have children, what could be better than having two or three at once?

Having a healthy mother and a healthy baby, and avoiding the neonatal intensive care unit, many experts argue. While a woman may be in favor of getting several embryos implanted at once, to boost her chance of achieving pregnancy, doing so can lead to twins, triplets, and even higher-order multiples. And that entails greater risk than a singleton birth does of prematurity, low birth weight, and perinatal mortality.

**Lab:** "You're always working with the balance" between getting the patient pregnant and not having a multiple pregnancy, says embryologist Judy Stern, Ph.D., director of DHMC's *in vitro* fertilization lab. Stern chairs the research committee of the Society for Assisted Reproductive Technology (SART), the professional organization for *in vitro* clinics. SART has been trying to improve that balancing act for almost a decade.

In 1998, SART began recommending that no more than three embryos be transferred

for women under 35; four for women 35-40; and five for women older than 40. SART lowered those recommendations in 1999 and again in 2004 to one to two embryos for women under 35; two to three for women 35-37; three to four for women 38-40; and four to five for women over 40. These guidelines "were aimed at reducing, and ultimately eliminating," pregnancies of three or more, reported Stern and several coauthors in a recent issue of the journal *Fertility and Sterility*. It appears that the guidelines have worked.

For example, in 1998 about 8% of women under 35 who conceived through assisted reproduction at SART member clinics had high-order multiple births (triplets or more). In 2003, high-order multiples accounted for only about 4% of births among such women, and the figure has held steady since. A lesser decline occurred in the 35-37 age group, and there was no decline in women older than 37. But those groups already had few high-order multiple pregnancies.

"We can't say for sure that this was causa-

tion," admits Stern. But "when those recommendations came out we changed what we did here [at DHMC] . . . There's no question in my mind that at least some clinics" changed their practices because of the guidelines. "What the recommendations did as much as anything else was to set a bar, a standard," she adds.

**Embryos:** SART member clinics—which account for more than 85% of the fertility clinics in the U.S.—now transfer an average of 2.4 embryos at a time to women under 35. About 33% of pregnancies in that age group result in twins and about 4% in triplets. At DHMC, an average of 2.0 embryos are transferred at a time to women under 35, resulting in fewer twins than the national average and virtually no triplets in this age group.

Reducing the rate of twins is "the next hurdle" for *in vitro* clinics, says Stern. She and her coauthors acknowledge that even the latest SART guidelines (published in 2006) "will not eliminate multiple births and allow us to reach our goal of the delivery of a single healthy child for all patients."

The National Institute of Child Health and Human Development echoed this goal in a report published in the April 2007 issue of *Obstetrics & Gynecology*: "The goal of assisted reproductive technologies should be the birth of healthy neonates rather than an increase in pregnancy rates alone. . . . Success should be redefined to emphasize the birth of term or late preterm singleton infants."

But the ability to reduce twinning rates without affecting pregnancy rates is limited by current embryo selection techniques and "the socioeconomic issues that pressure patients and physicians to transfer more embryos," write Stern and her coauthors.

**Baby:** "People are paying money," often out of their own pockets, she says. "They want a baby, and many think of twins as a positive thing." All of which means that pushing the field of *in vitro* fertilization toward single-embryo transfers and more singleton births is "going to be a much more difficult jump to make," Stern adds. JENNIFER DURGIN