

HEALTH

A Tide of Opioid-Dependent Newborns Forces Doctors to Rethink Treatment

By CATHERINE SAINT LOUIS JULY 13, 2017

RICHMOND, Ky. — Just 24 hours old, Jay’la Cy’anne Clay already was having a rough day.

Convulsions rocked her tiny body as she lay under warming lights in the nursery of the Baptist Health Richmond hospital. She vomited and made strange, high-pitched cries.

The infant was going through opioid withdrawal.

For more than a decade, her mother, Jamie Clay, 28, had been hooked on oxycodone. For six months now, she had been in a recovery program, taking another opioid that eased her addiction but put her baby at risk for withdrawal.

From 2003 to 2012, the last year for which statistics are available, the number of babies born dependent on drugs grew nearly fivefold in the United States. Opioids are the main culprit, and states like Kentucky are particularly hard-hit: 15 of every 1,000 infants here are born dependent on opioids.

Babies with the worst withdrawal symptoms are routinely separated from their mothers and whisked by ambulance, at great expense, to hospitals hours away, filling up beds intended for newborns who have even more serious problems, like heart defects.

Urban medical centers nationwide are scrambling to expand neonatal intensive care units or to build separate facilities to accommodate a tide of opioid-exposed babies arriving from rural communities.

The result, many experts say, is an exercise in good intentions gone awry.

After their babies are moved, many new mothers, poor and still struggling with addiction, cannot find transportation or the resources to visit. Those who can travel find that some local charities decline to provide housing to addicts, as they do for other parents visiting sick children.

“I have women coming to appointments who say they slept in their car all weekend because they can’t afford to stay in a hotel,” said Dr. C. Brent Barton, an obstetrician-gynecologist at St. Joseph London, a hospital in London, Ky.

Moreover, a growing body of evidence suggests that what these babies need is what has been taken away: a mother.

Separating newborns in withdrawal can slow the infants’ recovery, studies show, and undermine an already fragile parenting relationship. When mothers are close at hand, infants in withdrawal require less medication and fewer costly days in intensive care.

“Mom is a powerful treatment,” said Dr. Matthew Grossman, a pediatric hospitalist at Yale-New Haven Children’s Hospital who has studied the care of opioid-dependent babies.

Whisked Away

Jay’la Cy’anne was born with a head of raven hair and a dependence on buprenorphine. Ms. Clay took the drug under the supervision of Dr. Barton to help reduce her oxycodone cravings and keep her off illicit drugs.

“Dr. Barton saved my life, and he saved my baby’s life,” Ms. Clay said. She also used cocaine on occasion in the first trimester, she said, but quit with his encouragement.

After a few days of observation, Jay'la Cy'anne was transferred by ambulance from Baptist Health Richmond to the University of Kentucky Children's Hospital, 25 miles away, for treatment.

Before being discharged, Ms. Clay was visited by an official from the state child-protective services office, who broke the unwelcome news that custody of the newborn would be given to her parents, the child's grandparents. (Officials declined to comment specifically on the case.)

For months, Ms. Clay had stayed sober, expecting that she'd be allowed to take her baby home. Standing in the hospital corridor, her dark hair up in a loose ponytail, she said, "I'm torn up in my heart."

Generally, treatment for drug-dependent babies is expensive and can go on for months. Nationally, hospitalization costs rose to \$1.5 billion in 2012, from \$732 million in 2009, according to researchers at Vanderbilt University.

These are largely low-income parents, and Medicaid covers an estimated 80 percent of the hospital charges.

Babies in serious withdrawal can't eat, sleep or settle down. Their bodies can be unusually stiff: When they are picked up, their heads may not fall back. Sleep may be interrupted by full-body "startles."

Even feeding a baby in withdrawal can be challenging. "You give them a bottle, and they are frantic," said Chandra Wells, a transport nurse based out of the University of Kentucky Children's Hospital. "They can't form a tight suck."

The standard treatment is to drip tiny doses of morphine into the mouth with a syringe to make the newborn comfortable enough to eat and sleep. Then, over two to 12 weeks, the infant is weaned off morphine.

But community hospitals in rural areas rarely have neonatal intensive care units in which staff can administer morphine. So, after a brief period of observation, infants in withdrawal are transferred to more sophisticated facilities.

The transport team that delivers opioid-dependent babies to Kentucky Children's Hospital is called the Kentucky Kids Crew. It is made up of two nurses in royal blue uniforms and an emergency medical technician, who drives an ambulance specially outfitted with an incubator.

The team picks up babies in severe withdrawal from 20 hospitals in rural towns across southern and eastern Kentucky. The squalling infants are at risk for seizures and hard to comfort.

By the time the team is on the scene, said Kelly Turner, a veteran transport nurse, beleaguered staff will meet it at the door and say, "We're glad you're here."

The babies are taken to a multilevel pediatric hospital that has a Level 4 neonatal intensive care unit, the highest level of care. The unit has nine rooms of bassinets with swaddled babies hooked up to monitors that beep at all hours. The overhead lights are bright.

In 2015 and 2016, this unit was over capacity almost half the time. Nearly 60 babies in withdrawal had to be diverted to other hospitals, because there were infants with even more pressing needs, like life support or breathing assistance.

Ironically, a baby in withdrawal needs a quiet and dark environment without too many stimuli.

"Why are we putting kids in the NICU — a loud, bright room where their parents can't stay?" Dr. Grossman asked.

A Different Model

Ms. Clay was able to visit her daughter six times during her 11-day stay at Kentucky Children's. She fed her and dressed her up in the gifts she had brought: a pink gown, slippers with monkeys on them.

But she was not allowed to see the child unsupervised, because the child-protection order explicitly said one of her parents had to be present. Her mother, Tamara Clay, works 12-hour overnight shifts as a forklift operator, and her father was tied up caring for her toddler, Jakiah Rayne.

“I thought I was doing the right thing, then come to find out they take my baby anyway because I was on Subutex,” Ms. Clay said referring to a brand name for buprenorphine. “It wasn’t fair.”

Increasingly, experts fear that babies are being removed from mothers they need so they can get morphine they do not. Now some researchers are urging hospitals to pursue a new strategy.

“The model of care that’s being touted now is really that the mother is the first line of treatment for the baby,” said Dr. Debra L. Bogen, a professor of pediatrics at the University of Pittsburgh School of Medicine.

The strategy is called “rooming-in.” In a recent experiment at Children’s Hospital at Dartmouth-Hitchcock in Lebanon, N.H., for example, mothers and opioid-dependent newborns stayed together in the hospital, but outside the bustling NICU.

Staff prepared mothers struggling with opioid addiction before delivery to be caregivers. After the birth, volunteer “cuddlers” stepped in when parents were unavailable.

Rooming-in reduced the length of stay for morphine-treated infants to 12 days from nearly 17, and the average hospital costs per infant to \$9,000 from roughly \$20,000, according to a study published last year in the journal *Pediatrics*.

In another experiment, researchers at Yale-New Haven Children’s Hospital focused on newborns who had been exposed in the womb to methadone, putting them in low-stimulation rooms with parents sleeping in the hospital while caring for their newborns. The staff nicknamed the method the Eat-Sleep-and-Be-Consolated system.

Typically, nurses begin treating a baby only after symptoms reach a critical point. But at Yale, infants were comforted from the beginning, and physicians gave the babies morphine only if they could not eat an ounce at one time, could not sleep for an hour undisturbed or could not be quieted after 10 minutes of crying.

Ultimately, this method reduced the proportion of infants treated with morphine from 98 percent to 14 percent, as reported in a study published in *Pediatrics* in May. And it decreased the average stay to six days from 22 days, with no adverse events reported.

Rooming-in also may be better for mothers addicted to opioids, who “often have a history of trauma and loss,” helping them bond with babies from birth, Dr. Bogen said.

“Separation may impair her attachment to her baby, increase the guilt she feels about the impact her addiction has on her baby and diminish her perception of her own mothering capacity — all of which can increase her risk of relapse,” she said.

The new strategy is already producing results at Kentucky Children’s Hospital. Specialists at the hospital help with any feeding trouble and teach parents ways to comfort babies in withdrawal, such as massage, cuddling or, if possible, breast-feeding.

“When we keep babies and mothers together the entire time, we almost never have to treat” with drugs, said Dr. Lori A. Shook, a neonatologist at the hospital.

Infants who do not need medication stay just four or five days, while babies who do stay 22 or 23 days, she added.

Soon, a unit with eight private rooms for babies with neonatal abstinence syndrome and their mothers will open. The infants will be kept out of intensive care and with their parents.

Those special rooms were up and running too late for the Clays. But Ms. Clay was proud that Jay’la Cy’anne’s treatment for withdrawal was shorter than that of her firstborn daughter, who was exposed to oxycodone.

Dr. Barton, Ms. Clay’s obstetrician, had hoped to slowly wean her from buprenorphine. But she stopped taking it after she lost custody, enduring weeks of withdrawal.

“It was so bad,” Ms. Clay said. “But if I wanted my daughter back, I had to get clean.”

Without buprenorphine, she believed, a judge would have no reason to deny custody of her children.

Ms. Clay now spends days caring for Jay’la Cy’anne, but at night she must leave her parents’ home under the state order.

“It bothers her,” said her mother, Tamara Clay, 52. “Most parents want to be with their children in the night.”

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