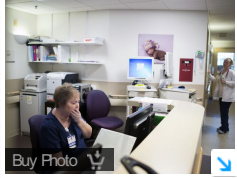


Drug-dependent infants stress hospitals

Leigh Giangreco, DelmarvaNow 11:29 a.m. EDT October 2, 2014

Between 2000 and 2009, the number of infants born with neonatal abstinence syndrome tripled, according to NIH.



(Photo: Staff photo by Joe Lamberti)

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When Dr. Aser Kandil arrived at Peninsula Regional Medical Center two years ago, premature infants or those treated for infection made up the majority of patients inside the special care unit.

Now, six out of 10 of those beds are filled with drug-dependent babies. The nursery is frequently filled to capacity and does not have enough space for more infants, he said. The hospital can send babies who need cardiac or surgical care to another hospital, but it must accommodate its sickest babies — who are often drug-dependent.

"It's been a substantial increase," he said Kandil, a neonatologist who came to PRMC from Children's National Medical Center. "It's become a burden to staff, to have a unit that's operating at its maximum capacity, and a burden for the babies."

When a fetus become exposed to opioid drugs, such as heroin or synthetic drugs — including fentanyl and methadone — the fetus experiences changes in brain and nervous system chemistry. The exposure is known as neonatal abstinence syndrome, or NAS. After birth, the infant experiences the feeling of going "cold turkey" from the drug, when it is no longer receiving the drug through the placenta.

The screams of an infant with NAS are inconsolable, Kandil said. With their nervous system and tissues deprived of the drug, they vomit, sweat, experience changes in heart rate and abnormal bowel movements, refuse to eat and can become hyper excitable. In some cases, neonatal abstinence syndrome can result in seizures, Kandil said.

Spike in cases

Cases of NAS have spiked during the past decade. Between 2000 and 2009, the number of infants born with the syndrome tripled, according to the National Institutes of Health. During the same period, the number of mothers dependent or using opioid drugs increased five-fold.

In the first six months of deliveries in 2014 at PRMC, 1.3 percent of babies, or 11 out 900, have been treated for neonatal abstinence syndrome. That number could increase in the fall, when more women typically deliver, said Diane Hitchens, director of Women's and Children Services at the hospital.

Delaware has not compiled statewide NAS data, and the syndrome is not a reportable data requirement for the Delaware Division of Public, said Heidi Truschel, a spokeswoman for the division.

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STORY HIGHLIGHTS

- In 2009, hospital care for an NAS infants cost \$53,400, with nearly 78% of charges to Medicaid.
- Between 2000 and 2009, the number of infants born with NAS tripled, according to the NIH.

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Data includes opioid exposure as well as illegal/street drugs, marijuana, methadone, heroin, cocaine, pills, prescription pain

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Beebe Medical Center
Nancy Forsyth

While babies exposed to drugs before birth are often characterized as drug "addicted," the substance exposure creates a dependence, not an addiction, said Bridget Buckaloo, executive director of women's health services at Beebe Healthcare.

As of September, 10.7 percent of this year's infant population at Beebe Healthcare in Lewes were exposed to various drugs, 11.6 in 2013 and 11.5 in 2012. Not all of those exposed to drugs experienced withdrawal symptoms.

Of those infants exposed to drugs, 60 percent were exposed to opioids, Beebe reported.

Beebe's data included exposure to illicit drugs — including heroin, cocaine and marijuana — and illicit use of prescription drugs, as well as licit drugs, such as methadone. The data did not include infants exposed to tobacco and alcohol.

The hospital keeps a running tally of babies suffering from drug withdrawal.

There is a diagnosis code for neonatal abstinence syndrome. There is not a universal diagnosis code for infants who are simply drug-exposed, said Nancy Forsyth, a neonatal nurse practitioner at Beebe.



Registered nurse Jen Horner pushes a neonatal warming and resuscitation table down the hall outside the Women's Health Pavilion at Beebe Healthcare in Lewes. (Photo: Staff photo by Joe Lamberti)

"Public health problem"

Drug-dependent infants are not only filling up beds but stay longer than their healthy counterparts. In 2009, babies with NAS stayed in the hospital an average of 16.4 days, more than five times the number of days other newborns spend, according to the National Institutes of Health.

During standard weaning treatment, NAS babies are administered a morphine syrup orally. The weaning process varies by individual, with some babies staying a couple of weeks or a couple of months, Forsyth said.

Hospital charges for infants born with neonatal abstinence syndrome are roughly five times more than a normal hospital birth, according to a study published in the Journal of the American Medical Association. In 2009, hospital care for an NAS infant cost

\$53,400, with nearly 78 percent of charges to state Medicaid programs. In Delaware, almost half of the state's births are funded by Medicaid.

"The bottom line is, at least 75 percent is (carried) by state medicaid programs," Forsyth said. "It's not just an issue for Beebe hospital, it's a huge public health problem that's not unique to Delaware."



Certified nursing assistant Vicky Mallet carries a stack of baby diapers inside the Women's Health Pavilion at Beebe Healthcare in Lewes. (Photo: Staff photo by Joe Lamberti)

Early treatment

Hospitals and treatment centers are trying to grasp their hands around the growing problem, with few options which will do the least harm to the mother and infant. Most centers do not want to treat pregnant women, but feel it's better to put them on methadone, a long-acting opioid that can replace cravings for heroin or prescription pain killers, said Nancy Oyerly, director of maternal child health at Nanticoke Memorial Hospital.

The methadone is not reduced until after the pregnancy, when there is no longer a risk of a contracting uterus during withdrawal. So far this year, Nanticoke Memorial has seen nine neonatal abstinence syndrome infants out of 580 deliveries, compared to 10 out 865 last year.

"We're looking at early identification to get them into the methadone," she said. "At least that's better than being on heroin."

Oyerly urges early intervention for pregnant women, which can direct them to the appropriate treatment. If mothers are found on methadone at the time delivery, there's no potential legal backlash, she said.

"(The mothers) tend to get on the methadone because they know the Division of Family Services will not open a case on them if they are in a treatment program," she said. "A lot of these women have had babies taken away before so they will make sure they are on the methadone when they come in."

Most women arrive at the hospital on methadone, Oyerly said. While Oxycontin and prescription drugs were once the drugs of choice, more women have turned to heroin, as prescription drugs have become more difficult to obtain, she said.

At Nanticoke Memorial, NAS infants are not separated into a special care unit. When all 13 beds are filled in the nursery, nurses have the option to move infants to the pediatric unit. Still, the older children can pose potential health problems to babies who have untested immune systems.

"It's difficult as winter is approaching with the flus and colds," Oyerly said. "We handle it, but it is taxing."

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NOTE: This report has been updated to clarify there is a diagnosis code for neonatal abstinence syndrome, but there is not a universal diagnosis code for infants who are simply drug-exposed.

