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ABSTRACT

This special report provides answers to six fundamental questions on prenatal cocaine exposure: (1) What problems do drug-exposed newborns have? (2) How many of these children are there? (3) How do we get pregnant women to avoid drugs and alcohol? (4) What should be done to help the families of substance abusers? (5) How do drug-exposed children develop? (6) How should schools assess and prepare for drug-exposed children? It is concluded that careful, developmentally appropriate assessment will be crucial if children with prenatal drug exposure are to receive the best services. Further, those services will not be the same for every child. Fetal cocaine exposure does not create a uniform set of delays. The problems it tends to cause can be greatly exacerbated by a poor home life. Evaluation is complicated by the fact that behavior problems and developmental delays which seem to indicate prenatal drug exposure could be the result of other factors, such as divorce or death in the family. Nevertheless, many Southerners are hopeful that drug-exposed children can succeed in regular classrooms if teachers get enough support and training. (RH)

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Prenatal Cocaine Exposure The South Looks for Answers



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A SACUS SPECIAL REPORT

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Teachers, school administrators and child care providers across the South are worried about the “wave of crack babies” they hear is rolling toward preschool and elementary classrooms.

“We’re trying to say to people,
‘don’t panic.’”

JOAN JORDAN
GEORGIA DEPARTMENT OF EDUCATION



STORY BY ELIZABETH E. SHORES

PHOTOGRAPHS BY ELIZABETH MORSUND

PRENATAL COCAINE EXPOSURE

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In east Texas, for example, teachers have felt "kind of desperate ... They thought, 'I'm losing my mind because I can't deal with these children, and I've dealt with every kind of child in the world.' If we were sitting in no man's land in northeast Texas and we felt the need, (there must be) a lot of need," according to Patty Florey. Florey is a drug education manager for the Region VIII Education Service Center.

But is there really a "wave" of drug-exposed children about to crush early childhood teachers and classes? Are these children's problems as clear as television, newspaper and magazine reports imply? And if so, what must teachers and caregivers do?

Physicians, social workers and early childhood specialists at Northwestern University in Chicago, Illinois and at the University of California at Los Angeles have led the way in studying the effects of prenatal cocaine exposure. The Northwestern group, led by pediatrician Ira J. Chasnoff, has done extensive studies of the effects on newborns and toddlers but has not released a follow-up study of preschoolers. The U.C.L.A. group has reported one comparison study of 18 18-month-olds with cocaine exposure.

But as abuse of cocaine, and particularly its smokable derivative, "crack", spread to the South, Southerners also took up the task of helping "crack babies". Around the region, teachers, pediatricians, social workers and teacher educators have been asking important questions about the problem of prenatal substance abuse. SACUS went to them to find out what they are learning about these children and what they are doing for them.

Our report summarizes their questions and findings. Several impor-

tant themes emerge, including the need for family support and parent training, the need for drug treatment programs designed for women with children, and the danger of mislabeling drug-exposed children. Many experts stress that the approaches which SACUS has always advocated — developmentally appropriate classrooms, curricula, assessment and evaluation — are even more important for children who suffer various developmental delays and may live in terrifying, chaotic homes. Finally, we found widespread need for intensive training to prepare classroom teachers for children with prenatal substance abuse.

Maternal substance abuse is not a new problem.

Alcohol remains the most significant threat to children. Michael T. Stone is a program consultant with the Juvenile Welfare Board of Pinellas County, Florida, which is developing some of the South's most comprehensive services to pregnant addicts and their children. He describes how Pinellas County policy has shifted "away from the issue of 'cocaine babies' and expanded (its scope) to maternal substance abuse."

Yet a focus on maternal abuse of cocaine still seems valuable for two reasons. First, it is not clear yet that cocaine's effects on babies and families are just like those of other drugs. Mary Todd, a medical social worker in Memphis, Tennessee concedes that the pregnant women and mothers she tries to help typically abuse various drugs, including alcohol, caffeine and nico-

tine. But cocaine seems "more addictive". It is the drug they crave most. They turn to other drugs only when they cannot get cocaine, according to Todd.

Second, "crack" has acquired a reputation as a drug that damages babies so severely that they will cause severe disruption in classrooms and grow up to be a generation of social deviates. Keith Turner, a special education professor at the University of Texas, says the media has reported only half of the story.

"What's so exciting is there is potential for intervention that's not getting the same headlines as the damage" done by maternal

"There is potential for intervention that's not getting the same headlines as the damage" done by maternal cocaine abuse.

**KEITH TURNER
UNIVERSITY OF TEXAS**

cocaine abuse, Turner says.

Florida's Stone traces the problem of maternal substance abuse to childhood itself. Girls who suffer physical and sexual abuse or neglect may enter sexual relationships very early in life, in a desperate search for affection and security. As poor, single mothers, they sink deeper into poverty, until drugs like alcohol and cocaine seem to offer the only escape from wretched lives.

If Stone is right, then a regional commitment to young children — and to the mental health, stability and financial security of their families — will be vital in preventing maternal substance abuse.

Exaggerating the problem

Many experts interviewed for this report said the news media often exaggerates the problem of prenatal cocaine exposure. They suggested that dramatic stories on television and in news magazines and newspapers unnecessarily alarm teachers and school administrators.

"There are no kids with five heads," Cynthia Vail, assistant professor of special education at the University of Georgia, said. She tries to "downplay 'cocaine madness'."

But the news reporters should not take all of the blame for exaggerating the phenomenon of "crack babies". If a group of researchers at the University of Toronto (Ontario, Canada) is correct, medical literature may also be slanted toward accounts of the worst outcomes.

They surveyed studies of effects of prenatal cocaine exposure submitted between 1985 and 1989 to the Society of Pediatric Research for possible presentation at a large scientific meeting. Among 58 abstracts the society considered, studies showing adverse effects from cocaine exposure were accepted at a significantly greater rate than studies finding no adverse effects. In fact, just one optimistic report was accepted.

The Lancet, a British journal of medical news, reported the group's conclusions in December, 1989.

Question: What problems do drug-exposed newborns have?

Answer: Many researchers have reported premature births, low birth weights, reduced head circumference, congenital defects and extreme irritability among cocaine-exposed newborns.

The problems that cocaine-exposed newborns exhibit have been widely-documented by medical researchers. Although the babies commonly suffer from other prenatal disadvantages, including poor nutrition and abuse of various other drugs and alcohol, cocaine has been isolated in some studies as the cause of significant problems (Oro & Dixon, 571, 576).

Some studies have found that many of these children are born prematurely (Feig, 4), with low birth weights (Zuckerman, 762, 766), and smaller head circumference (Bingol, 93). Smaller head circumference can indicate a smaller brain, which in turn can lead to Sudden Infant Death Syndrome (SIDS). One study found that the rate of SIDS among cocaine-exposed infants was 15%, while the rate among all babies is just .5% (Janke, 76).

Cocaine-exposed newborns have also displayed auditory system deficits (Shih et al, 251), malformations of the genitals and urinary tract (Chasnoff, Chisum & Kaplan, 201), and congenital heart defects (Little, 160).

The most common adverse outcomes involve the newborns' inability to cope with external stimuli, a phenomenon usually called "poor state control". Uncontrollable crying or extremely deep sleep are two ways in which these babies react to stimuli as simple as their mothers' touch. Motor

delays in infants are also well documented. Many of the easily-recognized problems which these children suffer at birth seem to disappear in the first months of life. But researchers warn that cocaine's effects on fetuses' brains may cause permanent brain damage — and behavior problems and learning disabilities later on (Schneider et al, 35). The problems that cocaine-exposed children exhibit will be described in more detail later in this report.

Question: How many of these children are there?

Answer: Counting drug-exposed children is a difficult and perhaps irrelevant undertaking. Urine tests can be unreliable and the isolated factor of prenatal substance abuse may not predict developmental problems. Estimates vary. At Grady Hospital in Atlanta, 30% of newborns in intensive care have been exposed to alcohol or illicit drugs.

Joan Jordan, Ed.D., director of the Georgia Department of Education's Division for Exceptional Students, explains that "we don't have clear data on how many kids there are. ... We're trying to say to people, 'don't panic.'"

Around the South, hospitals are attempting to measure the extent of maternal substance abuse, including cocaine abuse, through prevalence studies. At the University of Arkansas for Medical Sciences in Little Rock, the obstetrics and gynecology department in February, 1991 tested the urine of all women admitted in labor, looking for signs of drugs and alcohol. Because the urine screens were anonymous, the Arkansas High Risk Pregnancy Project did not have to tell patients about the tests. The goal of the month-long survey was to judge the need for



THE SOUTH LOOKS FOR ANSWERS

Drug tests don't deter drug abuse

ATLANTA — Georgia Rep. Ralph David Abernathy III used to believe maternal substance abuse was a crime. But he now thinks prevention and intervention to help mothers and children is a better approach.

Abernathy, son of the prominent figure in the Southern civil rights movement, introduced a bill in an earlier session of the Georgia legislature that imposed criminal sanctions on women using illegal drugs while pregnant. Pressure from women's groups persuaded him to change his position. During the current session, Abernathy has introduced a new bill giving pregnant women priority in state-supported drug treatment programs.

"If we are not going to incarcerate these women, we should do something to rehabilitate them," Abernathy said recently.

The legislator organized a conference on prenatal drug exposure last year. Nearly 2,000 persons attended, developing various recommendations for preventing maternal substance abuse.

"We didn't just deal with the



RALPH DAVID ABERNATHY III

mother during the pregnancy. We wanted to get to the mother before she gets pregnant," Abernathy said. His shift in thinking may foreshadow policy around the region.

Some states, including Florida and Oklahoma in the South, require hospitals to report to law enforcement agencies any pregnant women found to be using illegal drugs (*ACOG Newsletter*, 11). But many observers condemn such mandatory reporting as a *deterrent* to prenatal care. The Southern Regional Project on Infant Mortality has called on Southern states to bar "the use of pregnancy-related tests and care that reveals substance abuse as evidence in criminal prosecutions". Some hospitals only perform anonymous urine assays — without even telling the pregnant women — in order to avoid frightening them from getting care.

A philosophical disagreement underlies this policy dilemma. Is the woman who uses illegal drugs during pregnancy a criminal or a victim? Wendy Chavkin of the Columbia University School of Public Health argues that "if psychoactive substance dependency is acknowledged to be a compulsive medical disorder, then it (is) logical that criminal sanctions alone cannot deter this behavior" (Chavkin, 485). And Sharon L. Dooley of the American College of Obstetricians and Gynecologists has said states should be constructive rather than punitive as they plan services for drug-exposed children and their families (*ACOG Newsletter*, 5/90).

clinical services and drug treatment for pregnant women in Arkansas (Cindy Crone, personal communication, Feb. 15, 1991).

In Florida, where many social services for pregnant addicts and their children have been established, some hard numbers are available. Between July, 1987 and June, 1989, 5,370 drug-exposed newborns were identified and reported to a network of child abuse prevention services (Stone, 1990, 1).

The Texas Commission on Alcohol and Drug Abuse recently surveyed births to 1,600 women over a 10-day period in hospitals in Houston, Dallas, San Antonio and El Paso, with findings to be released in March.

Regional Medical Center in Memphis identified 570 drug-abusing pregnant women last year. About 93 percent of them used cocaine. Two-thirds of the women admitted their drug use in interviews; the others were identified through urine tests. Another estimate is that 4,000 children have been born to cocaine-abusing women in surrounding Shelby County over the past few years.

In Atlanta, a city that probably has one of the South's highest rates of cocaine abuse, 833 children born at Grady Hospital, a huge indigent care medical center, during 1989 were identified as cocaine-exposed through urine screens of the mothers or babies. Hospital officials reported that in the same year almost 30% of babies admitted to its neonatal intensive care unit are born to women using illicit substances or alcohol. A total figure for 1990 is not available, but monthly reports were comparable to 1989 figures.

Although the federal government has made some attempts to estimate the number of children who suffer prenatal cocaine exposure,



Question: How do we get pregnant women to avoid drugs and alcohol?
Answer: Residential drug treatment programs may be the best way to rescue women and children from addiction.

Most observers believe that drug-dependent women and their children need years, rather than weeks or months, of treatment and help in order to function.

"We need to place these mothers and their children in drug rehab programs. They tend to be women who already have one or two children and started their lives as teenaged mothers. They are now in their mid- to late-20s," Walter F. Lambert, a pediatrician and medical director of the University of Miami Child Protection Team, argues. With meaningful follow-up treatment and counseling, the children and their families can thrive, he says.

"Cocaine babies whom I follow, who are growing up with their natural parents who are in the process of recovering (from drug addiction) ... these children at three and four years old appear to me, a developmental pediatrician, to be normal."

Ideally, pregnant women reveal that they are abusing drugs to a physician or clinic worker and immediately receive counseling and preventive services. In this way, the effects of drugs such as cocaine on their fetuses are reduced. But in fact, few drug treatment programs make room for pregnant drug-abusers who come forth.

Drug treatment programs for pregnant women should include prenatal care and parent training, so there is some continuity of assistance to the women before and after they deliver their babies. These women, with chronic medical and psychosocial

independent experts reject his findings as too low (GAO, 6/90; Associated Press, 12/20/90). The U.S. National Drug Control Strategy recently revised earlier estimates to speculate that 1.7 million Americans currently use cocaine (Associated Press, 2/6/91).

Meanwhile, the National Association for Perinatal Addiction Research and Education (NAPARE) estimates that 375,000 cocaine-exposed children are born each year (GAO, 6/

90). NAPARE analyzed data from hospitals in Pinellas County, Florida, concluding that the rates of cocaine abuse among black and white women and among middle-class and poor women do not significantly differ (Chasnoff, Landress & Barrett, 1205). That 1989 study discounted earlier assumptions that pregnant cocaine addicts were found primarily in inner-city slums,

THE SOUTH LOOKS FOR ANSWERS

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problems, may need intensive counseling and support, something that typical drop-in programs for men do not provide (Weston, Ivins, Zuckerman, Jones & Lopez, 4; Chavkin, 486).

Moreover, conventional programs that were designed for men rarely provide child care or transportation, making them inaccessible to pregnant women and mothers (Feig, iv; U.S.G.A.O., 9). Georgia Nelson, a drug treatment administrator in Houston, Texas for 12 years, calls lack of child care "the major barrier" to women seeking treatment for drug addiction.

In many areas of the South, residential treatment programs that offer shelter and various services to women *and their children* are seen as another solution.

Nelson's program, Recovery Center, Inc., in Houston already provides 90-day residential treatment for drug dependency to women 18 years

and older. It was to open a second program in March for eight mothers and up to 16 children between birth and 12 years of age.

"For the past four years, the amount of crack-addicted women we see has doubled. Five years ago, there was no such thing. We saw women shooting heroin or shooting cocaine. (Now crack) is the drug of choice," Georgia Nelson, director of Recovery Center, said recently.

The residential program will stress parenting skills.

"The moms will learn about how to get day care, how to sign their children up for school, where to live, before they leave. And children will learn Mom's not a bad person, she's just very sick. They will work out their problems," Nelson said.

A little to the east in Fort Worth, Texas, the Salvation Army's First Choice program is planning a

shelter for pregnant addicts. Since June, it has provided housing in a donated apartment building, meals, child care, treatment, parent training and counseling to women addicted to alcohol or drugs.

The mothers get training in cooking, shopping, handling finances, finding a job, and riding a bus. When they begin looking for work, their children attend a nearby child care center.

"We look for somebody without support or anywhere else to go," Sherry Huff, First Choice director, said. But the shelter does not accept women unless they can prove they have not used drugs for at least 30 days. Even so, there are 20 families on a waiting list.

"The problem with the list is that women who need help need it now. If you go back later, they may have disappeared," Huff said.

The Medical College of

Pinellas County, Florida is coordinating services

St. Petersburg, Florida and surrounding Pinellas County have planned some of the most comprehensive services to drug-exposed children and their families in the South.

Thanks to a property tax increase that will generate \$13 million to \$15 million over five years, the county's Juvenile Welfare Board is supporting a wide variety of longterm projects to reduce maternal substance abuse and help pregnant addicts and their children. The county's efforts are aimed at helping families live drug-free lives and helping teachers of drug-exposed and other "at-risk" children. The projects include:

• "One-stop shopping" neighborhood centers offering child care, parent training, assistance with

medical care, housing, food, and job training, and recreation. Michael T. Stone, program consultant to the Juvenile Welfare Board, expects the county to establish three such centers this year.

• A pilot curriculum for preschoolers that emphasizes self-esteem and drug abuse education.

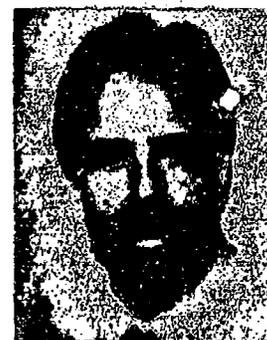
• Recommendations to public schools on meeting the needs of children who are prenatally or environmentally exposed to alcohol and other drugs. Due date: July 1.

• Summer training sessions for all kindergarten and first grade teachers in Pinellas County.

• Training for teachers in play-based assessment.

• A uniform method of assessment of children and families.

• A multi-year media campaign with the theme, "What Goes Into Your Body Goes Into Your Baby". The campaign will include posters on buses, radio announcements, brochures and a hotline with more information about maternal substance abuse. "We have to keep the message out front for a long time" to have an impact on pregnant women, Stone says.



MICHAEL T. STONE

Virginia's Center for Perinatal Addiction plans another small residential treatment program for pregnant women and their children (Southern Legislative Summit on Healthy Infants and Families, 1990). The house will shelter and treat eight families at a time.

And in St. Petersburg and surrounding Pinellas County, Florida, drug treatment agencies offer transitional apartments to some drug-exposed children and their mothers. Neighborhood associations are buying abandoned homes in order to make them available to families who need housing (Stone, personal communication, 2/11/91).

NAPARE, the Chicago-based organization that studies maternal drug addiction, is now comparing the success of mothers who go through outpatient drug treatment programs and through residential programs. That study will take five years, Pat O'Keefe of the association said.

Question: What more can be done to help the families of substance-abusers?
Answer: If states and communities want to preserve these families, parents will need prolonged, intensive training and support as they raise children who may have behavioral or learning disabilities. They also will need help finding work, decent housing, and medical care. Without social services like these, "crack kids" may be having "crack babies" in a decade or so.

Some observers emphasize that middle-class pregnant women may use dangerous drugs at the same rates as poor women, but most experts argue that unemployment, poverty, illiteracy, sexual abuse and drug-ridden neighborhoods enormously complicate the lives of poorer drug-exposed children.

"We need to address the underlying reasons why these people are

"...I was not prepared for the horror scene about to unfold. When the door was opened there was an immediate foul smell to the air. Inside there was no furniture and the utilities had been shut off. My sister was grossly unkempt and foul and only partially clothed. ... There was a pallet of rags in one corner, no furniture. The pallet of rags contained the most pitiful little piece of humanity I had ever seen. She was lying there, in a pool of her own waste, open sores on her body, unable to move or cry. I picked her up and her body was stiff like cardboard."

ANN EVANS

MOUNT PLEASANT, TEXAS

turning to (cocaine). Maybe it's depression from being so stuck in a poor lifestyle. There is a very unrealistic (federal) poverty line (for qualifying for welfare and other government assistance and) very little public housing. The majority of these women (are living) on a miserable amount of money," Lambert, the Miami pediatrician, says.

"If you have a drug-using mom, for example, her lifestyle is not healthy. She's not eating right, she's probably battered. She may have venereal disease or other kinds of infections. All of these things can cause problems with the babies," Iris Smith, M.P.H., an associate in Emory University's Department of Psychiatry and director of applied research at Emory's Human Genetics Laboratory, says.

Lambert and a colleague,

Gwen Wurm, M.D., warn in an unpublished essay, "Kids, Crack, Courts and Custody: The View of Two Pediatricians", that society should decide whether to improve the home lives of drug-exposed children or take them from their homes. And what are those homes like?

At the Medical College of Virginia in Richmond, observers report that mothers who abuse drugs "have a history of severe emotional, familial, social, vocational and financial problems" (Center for Perinatal Addiciton, 1:3). In the words of Lambert and Wurm, "for too many poor women, crack is viewed as an escape from a life that is without

opportunity or hope."

The poor state control that many drug-exposed infants exhibit can make a bad home life immeasurably worse. The combination of irritability, uncontrollable crying, and an inability to respond to a mother's attention virtually set up the child for physical abuse (Schneider *et al*, 28). The mothers need immediate and long-term training to learn how to hold their babies, how to comfort them, how to cope with their behavior and how to encourage their development (Bellissimo, 24; Chasnoff, *Women & Health*, 34).

Nurses and social workers in Memphis invite all women whose newborns tested positive for drugs such as cocaine to a 12-week course in parenting at the Early Intervention Program (E.I.P.) of the Boling Center for Developmental Disabilities. Fay



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ST. PETERSBURG, FLORIDA

PRENATAL COCAINE EXPOSURE.

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“We can be encouraged”

ST. PETERSBURG, FLORIDA — Shirley Davis, director of Operation PAR, a drug and alcohol treatment program here, does not say she's found all of the answers to treating drug-exposed children.

But she is encouraged because children in her Child Development and Family Guidance Center respond to the nurturing the center provides.

“Drug-exposed children are all over the bell curve. It's a crap shoot how much effect the drug has on kids,” Davis says. She has become an outspoken critic of the assumptions that cocaine-exposed children have major behavioral and developmental problems.

Operation PAR serves such 31 children at the center and 14 more in licensed family day care homes.

“If tomorrow we had 10 more slots, we'd have 20 more to fill the slots,” Davis says. Since opening the center, she and her staff have treated 65 children and 135 women with substance-abuse problems.

So far, they have not found cocaine-exposed children to be the unreachable problem they expected. In fact, with plenty of individual attention and nurturing, combined with extensive social, medical and therapeutic care of their mothers, they have found that the children are successful.

“We have not seen in our school a number of these children who are mentally handicapped or emotionally handicapped,” Davis says. One child has entered a class for gifted children in public elementary

school. Others are functioning in normal classroom settings. Only one of seven “graduates” of the Operation PAR center was referred to a class for emotionally handicapped children.

“Who knows why that little boy is emotionally disturbed? There are so many variables. It's hard to do the kind of research that can point to this or that as the cause.” Davis says. Davis has observed some of the problems of state control and tremulousness among newborns that others report.

“Their nervous systems are not developed enough to do all the things they need to do. But the tremors don't last more than six or seven months. Some have emotional outbreaks. Some will have fine motor problems. Some have a hard time with attention span.” But Davis does not believe the children suffer from true attention disorders. And she stresses that the children's environment after birth has as much effect as prenatal exposure to drugs and alcohol.

The Operation PAR center provides “the same kinds of experiences and programs any middle-class child gets.” The program is based on the Head Start model with extra emphasis on nurturing that addicted mothers may not provide.

“We meet them at the door and tell them how glad we are that each child is there. We give them lots of attention. ... We want them to know the world is not just the house they live in.”

Davis echoes the warnings of many Southern early childhood experts.

“(Teachers) need to be aware that you don't have to segregate these children into special classes. You do not have to go out and spend tons of new money either. They have the expertise to do what we do. They just need to bring it out and polish it up,” she says.

W.N.



SHIRLEY DAVIS

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Russell, R.N., M.S., is director of E.I.P. During weekly evaluation and therapy sessions, the mothers and other family members can learn about the importance of home life in their children's development — and how they can make a difference in the babies' lives.

"So much depends on the home environment," Mary Todd, a medical social worker with the program, says.

The mothers work with nurses, social workers and special education consultants to set developmental goals for their children and plan how to meet them. But only about one-fourth of the mothers of drug-exposed babies agree to participate in the program.

"Some have so many other problems, they just can't come in," according to Todd. Although the program offers transportation to the six-hour sessions, she believes more women would agree to participate if social workers could visit them in their homes. In fact, researchers at Northwestern University recommend that "regardless of how competent a parent may seem, a follow-up session after the infant has been in the home ... for at least one week". Social workers and others who make such visits can encourage the struggling mothers by pointing out any progress the babies have made in state control and by demonstrating ways to respond to their babies' cues (Schneider *et al.*, 32).

Sheldon Korones, M.D., director of the Newborn Center at Regional Medical Center in Memphis, has asked the U.S. Office of Substance Abuse Prevention for \$1.5 million in order to provide just such follow-up services to more drug-exposed babies and their parents. More families could receive in-home training and counseling; babies could be enrolled at the Boling Center,



and mothers could receive "intensive" out-patient treatment for drug addiction and more training in parenting, Korones said.

Georgia's Department of Human Resources is developing a program to track some disadvantaged newborns after discharge from hospitals. Beginning in July, social workers will follow about five percent of the 110,000 babies born in Georgia each year. Children expected to have significant developmental delays will be referred to public health agencies, pediatricians, and early intervention programs. Initially, the program will only provide referrals; the state will not guarantee that services will be available.

In Mount Pleasant, Texas, social workers and others are already calling on substance-abusing women to

monitor their children's health and safety and train the mothers to be good parents. The Region VIII Early Childhood Intervention Program sends early childhood experts into homes in seven surrounding counties in the eastern part of the state.

"We start, hopefully, with some of the babies in the nursery before they even leave the hospital. Our goal is when possible to take a child who is developmentally delayed and make sure he stays at his age level. ... We (usually) work with the family on a weekly basis," Linda Wallace, an in-home facilitator with the program, says. Parents "need all the support they can get just to cope. We do anything we can to help the baby's situation."

For example, Wallace brings toys with her on her visits so that she and the mother can observe the child at

play, evaluating her development and planning interventions. Children who demonstrate special needs are referred to specialists, including physical therapists.

Ann Evans, a Mount Pleasant woman who has custody of her drug-exposed two-year-old niece, credits the Region VIII program with the child's progress.

"We got her into therapy at Linda Wallace's program (and have been) doing physical therapy. The therapist would come to our house weekly. Linda still comes to my house but the physical therapist doesn't. Now every three weeks, I take her to a physical therapist. She's potty trained. She's trying to talk a little bit. She says our names; she's starting to string two words together. She has a little bit of a vocabulary," Evans says.

Lambert and Wurm of Miami argue that society must provide this kind of comprehensive, intensive parent support to every substance-abusing family if the children are to avoid the same cycle of neglect and despair.

"A system that favors keeping families together, as ours does, cannot afford to ignore the conditions that beset the families of crack babies. It cannot continue to be blind to the fact that keeping families together means improving the environment in which children are raised," they wrote.

Beyond kicking their drug habits, even beyond learning how to understand their babies' needs, how to feed and nurture them and keep them safe, women with a history of substance abuse may need help finding work, job training, decent housing, medical care and transportation.

But keeping track of these at-risk children and their families and making sure they get that help will be a

huge challenge, even where money is available to pay for services. Mary Todd, the Memphis medical social worker, reports that often "we just can't find them (after they are discharged from hospitals)".

"Substance-abusing parents are unstable, move frequently, lack telephones, fail to keep appointments, and drop out of sight when abusing illicit drugs," Judy Howard, M.D., of the University of California at Los Angeles Department of Pediatrics, confirms (Howard, Beckwith, Rodning, & Kropenske, 8). Howard has worked with cocaine-exposed children for almost a decade.

When parents are unwilling or unable to care for their children, others must take over. Observers including Dolly Moseley, Ph.D., of Little Rock, Arkansas, say grandparents are caring for many drug-exposed babies. In some instances, "we're falling back on a generation that didn't succeed with their own children," according to Moseley, director of ARChild, a child care program that serves children from six months to six years who have developmental delays. "We need to take a good look at grandmama support."

Todd reports that elderly grandparents are commonly unable to bring drug-exposed babies to her program. And Wurm and Lambert of Miami add that without legal custody, relatives who take in these children cannot receive federal financial help to buy food or medicine (Wurm and Lambert, 14).

Question: How do drug-exposed children develop?

Answer: There is no agreement about the types and extent of developmental delays which these children experience. But many reports describe extremely

"Meet Staysha"

It was really hard for me to adjust at first to this tiny little "baby bird" that never cried, never seemed interested in eating, and was completely oblivious to her environment.

...As the days passed and she gained weight, five pounds in the first two weeks, I noticed there was still something missing in her development. ... There was a real lag in her ability to bond. She lacked spontaneity, she seldom cried or showed emotion. She seemed to be in a daze all the time. It was like there was an emptiness in her that I was at a loss to explain.

She had an exaggerated startle reflect which hasn't completely gone away. A person sneezing or a door slamming could send her into a panic where she would shake and cry. She spit up constantly and had a perpetual runny nose. She would sit motionless in her infant seat for long periods without motion or sound. ... Although Staysha has come a long way in the last few months (she is now 10 months old), I still have concerns for her future. It's just been in the last couple of weeks that the fog seems to be lifting and she really acts as though she recognizes and belongs to me and our family.

Hopefully having a family who'll always love her no matter what will be the key which helps her open the door to a satisfying future.

**BY THE TEXAS
ADOPTIVE PARENT
OF A DRUG-EXPOSED CHILD**



passive or hyperactive behavior plus trouble at paying attention and at playing with toys or other children.

Experts such as Iris Smith, the Emory University researcher, believe there is no typical cocaine syndrome such as the Fetal Alcohol Syndrome that affects children prenatally exposed to alcohol. In fact, she stresses that exposure to alcohol and premature birth — a typical consequence of maternal cocaine abuse — probably cause greater damage than the cocaine itself. Full-term babies with known exposure

to cocaine seem to have “fairly mild” effects of the drug. While cocaine-exposed newborns do exhibit behavioral differences in comparison to drug-free newborns, the differences are within the normal range, according to Smith.

Other observers do report identified cocaine-exposed children with a range of common behavioral and developmental delays, some of which could be caused by other substance abuse, including alcohol. The phenomenon of poor state control is one typical characteristic.

“These babies have a lot of

difficulty in adjusting to any environmental situation. So, for instance, they tend to be exceedingly apathetic or hyperexcitable,” Korones, the Memphis pediatrician, says.

Jane W. Schneider, Dan R. Griffith and Ira J. Chasnoff at Northwestern University describe four patterns among such newborns.

1. Deep sleep. These babies do not awaken in response to handling by caregivers. The Northwestern researchers say this is an instinctive mechanism that protects the babies’ fragile nervous systems.

PRENATAL COCAINE EXPOSURE

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2. Agitated sleep state. In this pattern, the babies sleep poorly, often startling or whimpering but not fully awakening.

3. Vacillation between extremes of sleep and crying. "For example, when unwrapped from a blanket they immediately cry and show agitation, but when wrapped up again, they quickly fall asleep."

4. Panicked awake state. These babies need great help to remain calm. (Schneider *et al.*, 27).

Unfortunately, each of these patterns makes visual contact and other communication between mothers or caregivers and the babies difficult. In addition, many newborns appear tremulous or shaky until around the third month.

Cocaine-exposed children appear to overcome some of their early problems in reacting to stimuli. But other problems apparently persist. They typically exhibit motor delays, particularly an inability to relax their arms and legs. Tense, stiff limbs can cause various other problems, including difficulty maintaining balance and imperfect perception of objects around them. Observers in California associate these problems with trouble that some cocaine-exposed babies have with eye contact. They also "exhibit jerky eye movements when they attempt to track. ... These characteristics can interfere with social and emotional development and the development of attending skills..., motor performance, and visual-motor skills" (Lewis, Bennett & Schmeder, 326).

Not all experts agree on the prevalence of such motor delays. Shirley Davis, director the Child Development and Family Guidance Center in St. Petersburg, Florida, says she has seen no such motor problems among the 65 cocaine-exposed children

with whom she has worked. (see "We can be encouraged".)

Others in the South confirm the motor problems but say they have been able to help the children defeat them. Pamela Phelps, Ph.D., director of the Creative Pre-School in Tallahassee, Florida, describes an 18-month-old who was slow to hold her head up, sit up and "track" moving objects with her eyes but now is able to use riding toys and feed herself with a spoon. Another drug-exposed child did not walk until he was two years old, but his main challenge now is learning to talk.

At ARChild, the child care center for children with developmental delays in Little Rock, Arkansas, Moseley has had some success with the drug-exposed children she has treated so far. One child who came to the center at 18 months could not pull up, crawl, or stand. She was unable to reposition herself in a carseat and did not talk at all. Thanks to physical therapy, that child, now two years old, can walk, although she exhibits the arched back frequently described in medical literature. She seems to careen about the classroom, frequently colliding with furniture and picking up and then abandoning toys with little apparent focus. And she still does not talk.

Todd, the medical social worker in Memphis, has worked with about 100 children between birth and three years, who were known to have suffered prenatal exposure to cocaine. Although delays in using language are typical among the children, Todd emphasizes a passive, withdrawn personality that prevents them from playing with others and from paying attention to classroom activities.

"They are slower to get involved in activities. You're not able to penetrate. They have limited play

skills. We think it's a distinctive characteristic of drug kids," Todd says. Todd predicts that many of the children her center has seen will need special instruction and attention for years.

Carol Cole is a child development specialist and teacher educator with the Los Angeles Unified School District in California. She has been working with drug-exposed preschoolers and kindergarteners for four years and now offers her expertise to districts around the country.

She says that the delays in play skills are not unique to drug-exposed children. Cole does confirm the phenomena of hyperactivity and its opposite, a withdrawn personality. Some cocaine-exposed children have "mood swings" between the two extremes, Cole says.

Patty Florey, drug education manager for the Region VIII Education Service Center in east Texas (the agency that provides home visitation to drug-exposed children and their families), also expects cocaine-exposed children to need continuing special educational services.

"They're not going to fit where we've normally placed problem children. They don't like to bond; they don't like to get close to people. The most profound problems in special education ... respond to bonding, and they don't bond well. That's the main problem, in my opinion," Florey says.

But others, including Phelps, the Tallahassee preschool director, are more optimistic. The two drug-exposed children currently in Phelps' program have responded to intensive, developmentally-appropriate early childhood care.

"Everything we do is whole language, child-oriented. (The children) are in a one-to-six adult-child ratio

class. There are constant experiences with other children, with close adult interaction," according to Phelps. Outside the classroom, those preschoolers have been helped because their families were helped. One child's parents both have gone through drug rehabilitation programs. The other child has been adopted by her foster parent.

The question of "structure" seems paramount to early childhood educators who find that some drug-exposed children exhibit hyperactivity rather than the passive behavior Todd describes. Miami's Lambert, who has adopted four drug-exposed children himself, puts it simply.

"If you get to kindergarten and nobody has ever made you sit in a chair, of course you're not going to sit in a chair. If you have never had a routine in your life, of course (you're) not going to handle the routine." Lambert maintains that these children's

problems are primarily environmental rather than the result of the prenatal drug exposure. Excellent early childhood education and care can ameliorate the developmental problems if the children grow up in safe, loving homes.

"One of the solutions is intervention day care programs, not regular day care but therapeutic programs in which every child has a treatment (plan). We know that makes a difference. If you figure by doing that, you may stop children going into learning-disabled classes in school, invest money in the first three years of life, we'll avoid having to spend that over the school age of the child," Lambert says.

Keith Turner, Ph.D., an associate professor of early childhood special education at the University of Texas in Austin, is enthusiastic about the potential for classroom strategies that can help drug-exposed children

adapt their behavior.

"There are ways you can interact with them to increase their attending and to decrease their acting out," Turners says.

Making sure that these children get appropriate therapy and play and learning opportunities early in life, and that they are not unnecessarily steered into special education classes, is the challenge for the early childhood field.

Question: How should schools prepare for and assess drug-exposed children?

Answer: Many children suspected to have been prenatally exposed to drugs will have no serious learning or behavior problems. However, teachers will need training and support in order to guide children who may have attention deficits or other disadvantages. They will also need to continue the work of social service agencies by

Active learning, routines help drug-exposed kids

The Hillsborough County Public Schools in Tampa, Florida have developed a 17-hour course for teachers of young children who were prenatally exposed to alcohol or drugs.

The course provides a background on children at risk of failure because of drug alcohol exposure, stressing that effects "vary for each child from no effects to serious problems".

This in-service training course also covers classroom appearance and organization, scheduling and routines, assessment and evaluation, discipline, and the social-emotional development of drug-exposed children.

The following concepts are reproduced from an outline of the course.

- It is important to establish a responsive, nurturing environment conducive to active learning so the child can build a positive self concept.

- Children with prenatal drug exposure have difficulty expressing their feelings and need assistance in learning to do so."

- These children may have trouble exploring their environments.

- Children at risk needing a setting in which classroom materials and equipment can be removed, to reduce stimuli, or added to enrich the activity.

- The "at risk" child needs

assistance in self organization by interacting within an orderly, child appropriate environment.

- Children at risk need a classroom setting that is predictable. A child's ability to predict and anticipate the order of daily activities reduces anxiety.

- Positive reinforcement is more successful in bringing about a long term change of behavior than is negative reinforcement.

- Lack of attachment in infancy puts the child at greater risk for developing mistrust, suspicion, and fear. These attitudes may carry through to later stages of development and manifest themselves behaviorally.

involving parents in their children's development.

As hospitals and social service agencies identify and follow more newborns with prenatal drug exposure, teachers and school administrators will have to consider those children's histories carefully. Linda Delapenha, supervisor of primary diagnostic services for the Hillsborough County Public Schools in Tampa, Florida, describes administrators who call asking for "emergency" help when such children arrive at their schools.

"I tell them, 'that's not an emergency. You have to tell me about specific behaviors before I'll send a psychologist over there,'" she says.

Cole, the Los Angeles teacher educator, says that teachers need to hear the message that drug-exposed children may have no learning or behavior problems, or only minor ones. Delays in play and social skills that others have attributed to cocaine exposure may be caused by other factors such as home life, according to Cole.

"We have seen those same delays in play and social skills in other children we know for a fact were not exposed to drugs. To say those delays are the result of drugs is much too simplistic," Cole said recently.

But though she rejects the pessimism about the classroom potential of "crack kids," Cole joins the chorus for parent training and support, warning that preschool and elementary teachers must understand the importance of helping the families of drug-exposed children.

"In that respect, we have a long way to go" in preparing teachers for these children, Cole says.

Jordan, of the Georgia Depart-

ment of Education Division for Exceptional Students, agrees that teachers need to know that drug-exposed children are not impossible to teach.

"We're trying to become a resource unto one another, as educators, and prevent that panic of 'Oh, I've got a crack kid,'" Jordan says.

Turner also argues that educators should not assume drug-exposed children will have serious behavior problems or developmental delays.

"I don't want to see these kids labeled and headed for special education," Turner says. "Special education has been so reactive. Children have to fail before they get services." Turner coordinates graduate training in early childhood special education. He also has been a consultant to the Austin Independent School District. Turner admits he does not have all of the answers for teachers of young children with prenatal substance abuse.

"But as a teacher educator, I better get out there and at least stop the misconceptions."

Turner recalls that when he worked with children in a Head Start program in Seattle, Washington in the 1960s, he and his colleagues were "very, very successful" at keeping children with behavioral problems in regular classrooms. Today he still tells his students that segregating children on the basis of such delays is not always the answer.

"What I do know is if you don't have structure and if you have a negative attitude, you set up (the children) for failure. Teacher expectations can really have a direct influence on outcome. If we focus on differences, it leads to segregation. What we want is integration."

He describes a teacher of four-year-olds at an Austin elementary

Resources

PED Team, C/o Salvin Special Education Center, Los Angeles Unified School District, 1923 Budlong, Los Angeles, CA, 90007.

The PED Team offers booklet with ideas for early childhood teachers. For a free copy, send a self-addressed 10" x 13" envelope with \$1.50 in postage attached.

National Association for Perinatal Addiction Research and Education, 11 E. Hubbard St., Suite 200, Chicago, IL, 60611. 312-329-2512.

NAPARE offers packets of information for nurses and social workers and for adoptive and foster parents. It also holds an annual conference for educators and others.

Perinatal Center for Chemical Dependence, 215 E. Chicago Ave., Suite 501, Chicago, IL, 60611. 312-908-0867.

"Suggestions for Encouraging Your Baby's Development" by Jane W. Schneider, M.S., P.T., is a useful list of tips for carrying and handling babies and putting them in play positions. It strongly advises against using walkers and jumpers for at-risk infants of any age.

Region VIII Education Service Center, P.O. Box 1894, Mt. Pleasant, TX, 75455. 214-572-8551. "Perinatal Substance Abuse Babies" is a video of five children believed to have suffered prenatal drug or alcohol exposure. Available for loan.

school. Some of the teacher's students were drug-exposed.

"You couldn't pick (those) kids out. She had an attitude that said, 'I can handle them.' She treated them like other children. She's helping them. She's not mesmerized by the problem," Turner says.

Turner recommends teachers use developmentally appropriate forms of assessment.

"I guarantee that if they just document the behavior, they (can) get a 20 percent increase in better behavior. Once they start analyzing it, they start changing the behavior. It's an immediate effect. They learn in what context the behavior occurred, if it is predictable."

Harold Smith, director of special education programs for the Fulton County (Georgia) School District, also warns against hasty evaluations. Without hard evidence that children suffered prenatal exposure to drugs, it is difficult if not pointless to draw conclusions about the causes of developmental problems they may have.

"One of the things we're dealing with is a real issue of blaming. If we just try to guess because of how the kid's acting, we don't do the kid or ourselves any good," Smith says.

Smith is widely regarded as one of Georgia's leaders in planning services for drug-exposed children. He estimates that in the future 10 percent of Fulton County district pupils will have experienced prenatal exposure to illicit drugs or alcohol or have lived in an environment of drug abuse. His plan, developed as this report went to press, includes pilot programs for drug-exposed children at selected elementary schools plus school-based case management of parenting classes

and mental health and social services for families. The Fulton County district also is collaborating with local and state agencies and universities in Georgia to develop model programs for drug-exposed children.

Around the region, other school districts and universities also are responding to teachers' need for information and training about children with prenatal substance abuse. Stone of the Pinellas County, Florida Juvenile Welfare Board believes that "cross-training of teachers with special education and/or regular education backgrounds is crucial" for meeting the needs of drug-exposed children and others with developmental problems.

Beth Bridges, community prevention coordinator for Coffee County in rural south Georgia, says teachers are not yet prepared for these children.

"We're just now beginning to try to educate our teachers on how to deal with the behaviors caused in our classroom by alcohol and drug abuse. There's a lot of hyperactivity, which is a class disruption, which teachers are certainly not trained ... to handle," she said.

Florey, the drug education manager for the Region VIII Education Service Center in east Texas, also reports that teachers are having trouble with children whom they believe suffered prenatal drug exposure.

"My suspicion is a lot of them are just sitting in classrooms creating a lot of havoc. The younger ones are being referred to special education, but they don't fit there. They're probably being bounced around a lot, and teachers are gritting their teeth and trying to get through it," Florey says.

The Hillsborough County School District in Tampa, Florida has

offered two 14-hour courses on classroom strategies for drug-exposed children to its teachers. Delapenha, the Tampa, Florida school district psychologist, since has expanded the course to 17 hours.

"The first thing that needs to be there is a developmentally appropriate curriculum. We're just talking about ways to make that curriculum more effective. We look at classroom structure, scheduling, transitioning, how to assist children in being better organized.

"Many at-risk children are simply not well organized. We put our emphasis on developing self-esteem. We're not really in there to do behavior management. It's a little more preventive in nature," Delapenha says.

Courses like Hillsborough County's will be "essential supports" for early childhood teachers and caregivers (Weston et al, 7; Bellissimo, 24).

Drawing upon the pioneering work at Chasnoff's NAPARE, Stone summarizes the developmental outlook for drug-exposed children this way:

"Some kids will show significant developmental disabilities, some will be thriving and resilient, the majority will likely be within the normal ranges of development/intelligence with moderate, more subtle behavioral and social problems, and still others will become low threshold children who will suffer varying forms of dysfunction and who will need a very structured, protective environment" (Stone, *A Challenge for All*, 5).

Educators and others who work with young children have learned a great deal about the problems that maternal substance abuse causes for children and their parents. A few answers are clear.

For example, it appears that careful, developmentally appropriate assessment will be crucial if children with prenatal drug exposure are to receive the best services. Further, those services will not be the same for every child. Fetal cocaine exposure does not create a uniform set of delays; moreover, the problems it tends to cause can be greatly exacerbated by a poor home life. Evaluation is even more complicated by the fact that behavior problems and developmental delays which seem to indicate prenatal drug exposure could be the result of other factors, such as divorce or death in the family.

Yet many Southerners are hopeful that drug-exposed children can succeed in regular classrooms, *if* teachers get enough support and training to cope with the children's special social and behavioral needs. Small classes will also be important for teachers who need to give children extra individual attention.

Finally, prenatal cocaine exposure, like other substance abuse, is not simply a maternal issue. Nor is it unique to poor women, single women, or minority women.

It is a problem of families. To save the South's "crack babies" and their mothers, the region must devote more resources to supporting families. Elimination of child abuse, meaningful vocational training, effective sex education, and continued reforms of welfare to help and encourage mothers to be healthy and independent — this is what it will take.



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SACUS is a 42-year-old association of professionals and para-professionals in early childhood education and care. It has 16,000 members in 13 Southern states.

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