Abstract
The problem of drug-exposed infants has been a societal concern for more than a decade. The *Future of Children* devoted its first journal issue in spring 1991 to this topic and has provided information updates in subsequent journal issues. The 1991 issue reviewed the major trends in judicial, legislative, and treatment responses to this problem, reporting that, for the most part, appellate courts were rejecting attempts to prosecute pregnant substance-abusing women, and state and federal legislative efforts were creating more treatment programs for, rather than punishment of, these women. With only limited exceptions, these trends continue today. Evaluations of treatment programs funded through the federal initiatives of the late 1980s and early 1990s show some level of treatment effectiveness. However, they also highlight the continuing need for rigorous evaluations of treatment outcomes.

This update reviews recent judicial and legislative responses, and includes preliminary results from the major federal funding initiatives for treatment programs and evaluations. A local community treatment program funded under one of these initiatives is described briefly.

Judicial Activity
In 1997, it continues to be true that no state statute has created criminal laws specifically applicable to pregnant women who use illicit drugs. However, prosecutors continue to use other statutes protecting children to charge women for actions that potentially harm the fetus. Appellate courts reviewing guilty verdicts have typically ruled in favor of the mothers, finding that legislatures did not intend these statutes to apply to fetuses. A significant exception to this is the South Carolina Supreme Court case *Whitner v. State* decided on July 15, 1996. In this case, the court affirmed conviction of the mother for criminal child neglect because her baby was born with cocaine in her system after the mother used cocaine in the third trimester of pregnancy. The court held that the broad language of South Carolina’s criminal neglect statute and its underlying policy of prevention supported the legislature’s intent to include viable fetuses within the definition of persons under the statute. The South Carolina Supreme Court did not address federal and state constitutional issues relating to due process and privacy, because these issues were not raised in the lower court. Attorneys for the mother have filed a motion for rehearing, claiming that the South Carolina Supreme Court must reach a decision on the constitutional claims. At this time, the court has neither granted nor denied the motion for rehearing.
Legislative Activity
State legislative activity continues to focus on increasing opportunities for treatment and creating task forces to further explore solutions to the problem of perinatal substance abuse. For example, a law enacted in Arizona in 1995 created an Advisory Council on Perinatal Substance Abuse to develop a statewide strategy for addressing substance abuse by pregnant women and mothers. A 1994 Michigan statute requires that substance-abusing pregnant women and women with dependent children have priority in receiving treatment for substance abuse in state-funded facilities. And a 1995 Illinois statute now permits counties in that state to retain revenues from drug-related fines to support community-based treatment for pregnant women addicted to alcohol and/or drugs. The American Academy of Pediatrics tracks such legislative developments.

Federal Initiatives
In the late 1980s and early 1990s, heightened attention to perinatal substance abuse prompted significant federal efforts to increase the availability of drug abuse prevention and treatment programs for women. The following describes briefly the four major federal initiatives and reports available to date for each.

Programs for Pregnant and Postpartum Women and Their Infants
Between 1989 and 1992, the federal Center for Substance Abuse Prevention initiated five-year grants for 147 Pregnant and Postpartum Women and Their Infants (PPWI) projects. These projects provide comprehensive prevention, intervention, and treatment services to substance-abusing pregnant and postpartum women, as well as health and related services to their infants. An example of a PPWI program in Santa Clara County, California, is described in Box 1.

A 1997 evaluation of 90 PPWI demonstrations claims that these programs have been highly successful in improving the coordination, availability, and accessibility of health care and alcohol and drug treatment for pregnant and postpartum women. The study also found that at least one-third of the women served by these programs reduced their drug use.

The Perinatal 20 Projects
The National Institute on Drug Abuse (NIDA) funded a total of 20 projects in 1989 and 1990 to create new treatment opportunities for women with children and to conduct treatment research. These projects, which are no longer funded, were research driven; treatment approaches were designed to answer hypothetical research questions posed by the grantees.

Compilations of findings from project evaluations primarily address methodological issues related to research. Individual program evaluators were encouraged to publish treatment outcomes in peer-review journals. An annotated bibliography on treatment outcomes for women lists many of these published studies.

The Abandoned Infants Assistance Act
In 1988, Congress passed the Abandoned Infants Assistance Act (AIA) to support comprehensive intervention programs to serve drug-exposed and HIV-affected infants and their families. Approximately 30 programs are funded annually. They provide a variety of services, including case management, pediatric health care, housing assistance, and respite care for primary caregivers.

Data on AIA programs compiled in annual reports are largely descriptive, rather than evaluative. Individual program evaluations have been conducted, and a monograph summarizing services outcomes for eight of the programs is forthcoming. In October 1996, the collection of client-level outcome data was begun to better assess and refine AIA programs.

Residential Treatment Grants
The federal Center for Substance Abuse Treatment (CSAT) initiated two demonstration residential programs in 1993: the
Residential Treatment Grants for Pregnant and Postpartum Women and Their Infants (PPW) and the Residential Treatment Grants for Women and Their Children (RWC). Both were designed to support comprehensive residential treatment services, including primary health care, mental health assessments and counseling, and other social services for substance-abusing women and their children. In 1996, some 74 residential programs were funded and approximately 2,700 women and 2,900 children received services. In 1997, another 65 residential programs were funded.

A summary of evaluation data for both programs is available. The program follows a one-stop shopping model of providing to substance-abusing pregnant women and mothers a comprehensive array of services at one location. These services include individual case management and counseling, 12-step program meetings to help clients combat their addictions, parenting and prevocational skills (such as reading, math, and GED) classes, and on-site child care while mothers are in program activities. A program physician is available two days a week to all clients for consultation and to monitor the clients on methadone maintenance.

The treatment program is designed to take 18 months to complete; however, clients can remain in the program for a longer period of time if they are motivated and it is clear that they need extra time. In the program’s first five years, 535 women were enrolled, and 177 births occurred.

Toxicological tests taken from July 1992 through June 1995 revealed that 84% of the women enrolled in the treatment program reduced their substance use. Eighty-two percent of infants born to 71 women (for whom data were available) had negative toxicological screens at birth. Seventy-five percent of births to women in treatment produced infants of normal birth weight. The designers of this program believe, based on their experience, that the number of drug-exposed infants and low birth weight infants would have been higher if the program had not been available to these pregnant women. However, it was beyond the scope of the evaluation to examine comparative birth weights and toxicology results for infants born to drug-abusing women who were not in treatment during pregnancy.

For more information about this program, see the final report for CSAP grant #SPO1498-01, available through the Office of Women’s Treatment Services, Perinatal Substance Abuse Program, Anthony J. Puentes Center, 2425 Enborg Lane, San Jose, CA 95128, telephone (408) 885-4060.

Though self-referred women are welcome, most of PSAP’s clients were either referred by child protective services or ordered by a court to attend a treatment program.

Conclusion

Since the early 1990s, there has been considerably more experience in providing treatment to substance-abusing pregnant women and mothers. Although the results discussed above suggest some level of effectiveness, for the most part they rely on incomplete data. They demonstrate how difficult it is to study program effectiveness in a rigorous way.

There are many variations of community treatment programs; PSAP, described in Box 1, is just one example. The need for treatment services for substance-abusing pregnant women and mothers remains great. It is hoped that more experience in providing such services, as well as sound evaluations, will help to improve treatment approaches and the lives of these women and their children.
3. Whitner v. State, WL 393164 (S.C. 1996). The mother was sentenced to eight years in prison.
5. Seven such state bills were enacted from 1993 through 1995. See American Academy of Pediatrics. Drug-exposed infants. Elk Grove Village, IL: AAP, Division of State Government and Chapter Affairs, 1996.
11. See note no. 10, Center for Substance Abuse Prevention, pp. 1, 4. This evaluation included the 26 fully implemented PPWI programs that met data collection criteria. In on-site visits, evaluators collected both quantitative and qualitative data on more than 80 variables. Client outcome data on 3,641 women and 2,757 infants were collected by program grantees.
12. See note no. 10, Center for Substance Abuse Prevention, p. 9. Data on maternal drug use were limited to women who had positive toxicology test results at intake. These women were retested after having received program services.
14. For more information about the results of the Perinatal Twenty project, contact Dr. E.R. Rahdert, NIDA, Division of Clinical and Service Research, 5600 Fishers Lane, Rockville, MD 20857, (310) 442-0107.
17. For more information regarding this monograph, write to Reneé Robinson at the National Abandoned Infants Assistance Resource Center, Family Welfare Research Group, 1950 Addison, Suite 104, Berkeley, CA 94704, or call (510) 643-7020.
20. The analysis used CSAT Quarterly Report Tracking System data collected at intake, discharge, and postdischarge on 800 women from 45 programs. Only women with an intake record, discharge record, and at least one postdischarge record were included. On average, follow-up data were collected six months after discharge. All postdischarge records were aggregated. See note no. 19, Center for Substance Abuse Treatment, pp. 8–9.