PEDIATRICS PERSPECTIVES

Children in the Opioid Epidemic: Addressing the Next Generation's Public Health Crisis

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THE PROBLEM

The United States is experiencing unprecedented rates of drug overdose deaths and drug-related problems. This epidemic is driven primarily by opioids. Although most responses to this opioid epidemic are focused on preventing harm to adults, there are at least 5 pathways by which opioid-related problems can spill over and affect child health and safety:

1. child or adolescent poisoning and overdose: this could happen because of intentional misuse or accidental ingestion of prescription drugs by young children;
2. opioid misuse in pregnancy: opioid misuse in pregnancy is associated with inadequate prenatal care, preterm birth, low birth weight, respiratory depression, and neonatal abstinence syndrome[1];
3. impaired parenting and attachment: parents' opioid misuse may impair their ability to adequately supervise, bond with, and care for their children;
4. material deprivation: money spent on drugs may come out of family finances needed to care for children; and
5. extended separation from parents: children may be separated from a parent with an opioid-related problem because of a parent's incarceration, residential psychiatric or drug treatment, or death or because of a child's placement in foster care.

Indeed, quantitative and qualitative studies suggest that increases in parental opioid misuse and overdose death have resulted in concomitant increases in these adverse childhood experiences and that many children are ending up in foster care.[1–3] Three decades of evidence now make clear that this type of childhood adversity increases the risk of physical and mental health problems and many of the leading causes of adult death.[4] There is, therefore, an urgent need to meet the needs of these children and their families to prevent and remediate the long-term developmental consequences of parental opioid misuse.

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POSSIBLE SOLUTIONS AND CHALLENGES

Effective opioid use disorder treatment of parents is the first step to keeping children safe and healthy. Medication-assisted treatments (MATs) with buprenorphine or methadone have significantly improved outcomes for patients with opioid use disorder compared with treatments that do not include medication. This is true for both women who are pregnant and parents who are involved with child welfare, among whom research reveals that MAT is associated with improved birth outcomes and child safety, respectively.[1,5] MAT also increases engagement in obstetric care, which may facilitate access to family planning and prevent further unwanted pregnancies. Providers should review safe storage practices with patients and may consider the presence of children in the household when determining dosage and the frequency of follow-up visits to avoid accidental ingestion by children.

However, accessing treatment may be challenging because of financial barriers and a shortage of specialty programs for women who are pregnant.[1] In addition, substance use treatment alone is necessary but not sufficient because the needs of families affected by opioid use disorder are complex and are often intertwined with a host of other problems. These include poverty, co-occurring mental health conditions, use of other substances, domestic violence, and homelessness. Cross systems collaboration (collaboration that moves beyond the implementation of isolated evidence-based practices to a "best systems practice" approach) is needed to ensure comprehensive, collaborative care for these parents and their children. Unfortunately, substance use treatment programs are often not well equipped to meet the needs of families,[1] and child welfare systems often lack knowledge, guidance, and/or resources to adopt best practices for substance use treatment.[2]

Since 2007, the Children's Bureau's Regional Partnership Grants (91 grants in total) have been used to explore ways in which the child welfare, behavioral health, and justice systems can collaborate more effectively to serve families. Promising approaches have emerged. Shared outcome measures, joint trainings for professionals, and formal data sharing agreements can increase coordination across these 3 systems. Expanding both parenting programs for parents in substance use treatment and peer recovery programs for parents involved with child welfare has improved substance use and child welfare outcomes. Family drug courts (specialized dockets used to divert parents who are using drugs into treatment) increase treatment retention and reduce foster care time. Adopting trauma-informed practices and addressing housing needs also improve outcomes.[6]

THE CHANGING POLICY LANDSCAPE

Two recent changes in federal policy have major implications for the ability of states to address the pediatric impact of the opioid epidemic.

First are changes in Medicaid policy. The 2014 expansion of Medicaid to more adults with low income sharply reduced the uninsured rate for adults with opioid use disorder[7] and is likely helping to facilitate parents' access to MAT of opioid use disorder.[2] In contrast, in 2018, states were permitted for the first time to deny Medicaid coverage to parents who neither worked nor had a disability that prevented working. Intended to incentivize workforce participation, this policy may be counterproductive for parents with opioid use disorder, who cannot legally confer eligibility for disability. Without insurance, these parents may be unable to afford the treatment they need to remain in the workforce.

Second, in 2019, state child welfare agencies will, for the first time, be able to receive partial federal reimbursement for time-limited substance use, mental health, and parental training services provided to families with a child at risk for entering foster care. This could offer child welfare agencies the freedom to fund new services for families with substance use problems. In addition, these services will have to meet certain standards of evidence to qualify for reimbursement. Interventions for family substance use disorders are of mixed quality, and new reimbursement incentives and best practice guidelines should motivate child welfare agencies to increase the proportion of evidence-based practices in their existing portfolio of services for families with substance use disorders.

WHAT NEXT?

It is urgent that states begin planning immediately to leverage new federal reimbursement for preventive services to better support families involved with the child welfare system because of opioids. A new investment in evidence-based programs that simultaneously offer MAT and evidence-based parenting interventions can help address long-term consequences of this epidemic for children. The extensive evidence provided by regional partnership grants can help inform the adoption and implementation of these and other best practices across public and private agencies.[6] States should also reconsider establishing work requirements for Medicaid; these requirements will likely impede access to precisely the services that are needed to protect children and preserve families negatively affected by opioids.

For researchers, there is an urgent need to consolidate evidence about

both the consequences of the opioid epidemic for children and how these consequences can be prevented or ameliorated. Currently, there are not even accurate estimates of the number of children growing up in a household with a parent who has an opioid use disorder. There are no estimates of the substance use treatment or parenting services that these families are already receiving nor of the gap between the need for these services and states' capacities to provide them. There is also substantial opportunity for the refinement of existing interventions and the development of improved interventions for families affected by opioid-related problems. As states seek to meet the needs of children affected by the opioid epidemic, a better evidence base can help guide decision-making.

Finally, pediatricians and other child-serving medical, social service, and research professionals must be vocal advocates for the needs of children whose families are affected by opioid-related problems. Public officials must be made aware of the imperative to act on behalf of the next generation, whose long-term health depends on our ability to meet the unique needs of children in this opioid epidemic.

ABBREVIATION

MAT: medication-assisted treatment

REFERENCES

1. Patrick SW, Schiff DM; Committee on Substance Use and Prevention. A public health response to opioid use in pregnancy. *Pediatrics*. 2017;139(3):e20164070
2. Radel L, Baldwin M, Crouse G, Ghertner R, Waters A. Substance use, the opioid epidemic, and the child welfare system: key findings from a mixed methods study. 2018. Available at: https://aspe.hhs.gov/system/files/pdf/258836/SubstanceUseChildWelfareOverview.pdf. Accessed March 23, 2018
3. Committee on Substance Use and Prevention. Medication-assisted treatment of adolescents with opioid use disorders. *Pediatrics*. 2016;138(3):e20161893
4. Anda RF, Felitti VJ, Bremner JD, et al. The enduring effects of abuse and related adverse experiences in childhood. A convergence of evidence from neurobiology and epidemiology. *Eur Arch Psychiatry Clin Neurosci*. 2006;256(3):174–186
5. Hall MT, Wilfong J, Huebner RA, Posze L, Willauer T. Medication-assisted treatment improves child permanency outcomes for opioid-using families in the child welfare system. *J Subst Abuse Treat*. 2016;71:63–67
6. Stedt EV, DeCerchio K. Regional partnership grants collaborative approaches: lessons learned from the RPG program. In: Child Welfare League of America National Conference; August 2, 2016; Orange County, CA. Available at: https://www.cwla.org/wp-content/uploads/2016/09/D3_Workshop_RPG_Final.pdf. Accessed May 22, 2018
7. Feder KA, Mojtabai R, Krawczyk N, et al. Trends in insurance coverage and treatment among persons with opioid use disorders following the Affordable Care Act [published correction appears in *Drug Alcohol Depend*. 2018;182:122]. *Drug Alcohol Depend*. 2017;179:271–274

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