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Exploring Child Welfare Practices to Care for Children with Prenatal Substance Exposure

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Abstract

This article presents findings from a mixed-methods study exploring child welfare agency practices addressing children with prenatal substance exposure and their families. Data sources include: (a) interviews with 159 professionals in child welfare; (b) surveys with 271 professionals in child welfare; and (c) a systematic review of state and local child welfare documents guiding processes in the five states in the study sample. Findings from descriptive statistics of survey data, grounded theory analysis of interviews, and content analysis of documents suggest practices center on infants identified by hospitals as affected by prenatal substance exposure. Without practice guidance and access to treatment services, the needs of older children whose prenatal exposure to substances, including alcohol and other types of legal and illegal substances, is not recognized at birth may be overlooked.

The child welfare (CW) system has increasingly received referrals to coordinate care with families of children prenatally exposed to substances such as alcohol and other drugs. Studies have found that the number of children reported to CW due to prenatal opioid exposure has grown (Lynch et al., 2018), with a corresponding increase in professionals in CW[1] working with these infants and their families (França et al., 2016). Studies suggest that infants who are prenatally exposed to one substance are likely to have been exposed

Note: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the Children's Bureau of the Administration for Children and Families (HHS).

[1]Throughout this article, references made to "professionals in CW" could include the following types of CW roles/positions: hotline/intake, investigative, frontline, family needs assessors, ongoing case management, supervisors, local and state CW directors, and CW specialists such as prevention, permanency, and developmental assessors.

to others. Metz and colleagues (2018) found that among pregnant women who reported using opioids, over 70% also reported using alcohol. The high rates of comorbidity between alcohol and other drug use among women who are pregnant suggest that when a child has been identified as prenatally exposed to illicit drugs such as opioids, professionals should consider whether there may be alcohol exposure as well (Waite, 2023).

The child welfare system plays an important role in coordinating services to children prenatally exposed to substances, as exposure can have harmful short- and long-term physical, cognitive, behavioral, and developmental effects on children (Guille & Aujla, 2019; Kocherlakota, 2014). Alcohol may be the most harmful substance to the developing fetus, as it can cause significant long-term neurocognitive impairments (Mattson et al., 2019; Wozniak et al., 2019). Fetal alcohol syndrome disorder (FASD) is an umbrella term that refers to diagnoses related to alcohol exposure during the prenatal period, including fetal alcohol syndrome, partial fetal alcohol syndrome, neurobehavioral disorder associated with prenatal alcohol exposure, alcohol-related neurodevelopmental disorder, and alcohol-related birth defects (Centers for Disease Control and Prevention, n.d.). While children with an FASD may not be immediately identified at birth and may meet development milestones, children whose prenatal exposure to alcohol leads to an FASD may experience lifelong impacts that impair their ability to regulate emotions and behaviors, reduce their cognitive functioning, and impede their learning (Mattson et al., 2019).

Prompt services for children affected by prenatal substance exposure[2] can help parents and caregivers understand and navigate the developmental and behavioral challenges that these children may experience. In turn, these services may help to reduce family conflict (Petrenko et al., 2019). However, children impacted by prenatal alcohol exposure may not receive timely services. Facial features that can indicate alcohol exposure may not be present in 40% of children diagnosed with an FASD (May et al., 2018). Children may be left without services if professionals have insufficient knowledge of the indicators of FASDs (Morehouse et al., 2023). Professionals in CW also may be unaware of services to diagnose children with an FASD, leaving children without services to mitigate the long-term effects that can occur without prompt and specialized care (Chasnoffet al., 2015).

Federal legislative efforts such as the Child Abuse Prevention and Treatment Act/ Comprehensive Addiction Recovery Act (CAPTA/CARA[3]) have sought to address the needs of infants with prenatal substance exposure and their families. CAPTA/CARA legislation requires health care providers involved in the delivery or care of infants affected by prenatal substance exposure to notify child welfare. Amendments to CARA in 2016 outlined new state requirements, including reporting the number of infants affected by withdrawal symptoms resulting from prenatal substance exposure, or an FASD. States now are required to develop “plans of safe care” to address the needs of these infants and substance use treatment for parents.

[2]Throughout this article, “prenatal substance exposure” includes both alcohol and other types of legal and illegal substances (e.g., opioids, cocaine, nicotine, etc.). In some instances, the article will explore findings that are unique to prenatal alcohol exposure vs. other types of substances.

[3]The Child Abuse Prevention and Treatment Act (CAPTA), originally enacted on January 31, 1974 (P.L. 93–247), is federal legislation that provides funding and guidance to state public CW systems.

CAPTA/CARA requirements have led to child welfare guidance in how professionals are to respond to infants with prenatal substance exposure and their families (Lloyd et al., 2019). However, less is known about responses to children who come to the attention of child welfare agencies at an older age who may be impacted by a prenatal exposure to substances that was not recognized at birth (Richards et al., 2020; Usher et al., 2016). Some studies suggest the needs of children prenatally exposed to alcohol may not be recognized because hospital toxicology data may be inadequate for detecting alcohol (Wozniak et al., 2019; Usher et al., 2016), yet it may be the primary method used by professionals in CW to identify these children (Richards et al., 2020; Usher et al., 2016). CAPTA/CARA requirements have led to the study of CW agency service referrals provided to infants prenatally exposed to substances and their families (Deutsch et al., 2022). Yet there is little information on the types of service referrals provided to children who are older and experiencing long-term impacts of prenatal substance exposure (Richards et al., 2020).

This article describes select findings from a multi-state mixed methods study that explores practices used in CW to respond to children prenatally exposed to substances, including alcohol and other types of drugs, in five states. Results are presented for three key research questions: (1) How does written state and local CW guidance direct professionals in CW to assess and provide care to children prenatally exposed to substances? (2) How do professionals in CW describe their practices for gathering information on known or suspected prenatal substance exposure? And (3) how do professionals in CW apply information about known or suspected prenatal substance exposure to inform service referrals? Study results draw from a document review of state and local CW guidance, along with descriptions of practices used to recognize and respond to the needs of children with prenatal substance exposure reported during interviews and surveys with professionals in CW.

Methods

Research Design

Results were derived from a cross-sectional, mixed-methods descriptive study in 22 public CW agency sites across five geographically diverse states.[4] The mixed-methods design facilitated triangulation across quantitative and qualitative data sources within and across sites and states. Triangulation of multiple types of data sources explored the extent to which there was convergence and to ensure that interpretation of results were rich and comprehensive (Noble & Heale, 2019). Data were derived from: (1) a systematic review of state and local child welfare written guidance in five states; (2) interviews with professionals in CW; and (3) surveys of professionals in CW (see footnote 1 for a description of the roles/positions of professionals in CW). Data collection occurred between September 2018 and October 2020. Instruments and data collection methods received approval from the Office of Management and Budget (OMB Control Number 0970–0511) and the Institutional Review Board (IRB) at ICF (FWA: 00000845) and as required by the respective IRBs in the sample of CW sites.

[4]A comprehensive summary of study methods and findings is available at https://www.acf.hhs.gov/sites/default/fi les/documents/cb/paode-in-cw-fi nal-report-rev.pdf.

State and Site Sampling Methods and Recruitment

States and sites (e.g., local public child welfare offices within selected states) were identified by applying a purposive sampling strategy. The site selection plan intentionally produced a sample of states and public CW agencies that displayed a range of characteristics (e.g., county or state CW administration, diverse geographic location) while ensuring inclusion of a few states and public CW agencies where practices of interest (e.g., presence of diagnostic clinics for prenatal substance exposure) were known to be present. The team prepared a matrix representing characteristics of states in the sampling frame (all 50 states). Candidate states were selected, and replacement states for each candidate were identified if needed. After agreeing to participate, the team worked with state leadership to identify four to five local sites where a single public CW agency was located. The final sample included states from the following geographically diverse regions of the United States: Midwestern, Mountain, Southeast, Mid-Atlantic, and Western, with three states being state-administered and two states being county-administered CW systems.

CW local directors designated a local point of contact (liaison) at each site. Th is local study liaison applied selection criteria provided by the study team to identify participants for the interviews and surveys. This method resulted in an intentionally diverse mix of CW agency roles, such as professionals conducting intake processes and those working with families in ongoing cases. Depending on preference or state IRB regulations, the local study liaison either provided the study team with contact information or contacted participants directly to schedule data collection. A passive consent process was used for interviews and surveys with professionals in CW to describe the voluntary nature of data collection and steps taken to ensure the privacy of interview and survey results (e.g., aggregation of data and personally identifying information being removed from findings). Professionals in CW who participated in interviews and surveys did not receive compensation for study participation.

Sample of Data Sample by Data Source

The number and sample sizes by data collection method are detailed in Table 1.

Guidance Document Review—Guidance documents directing mandatory practices for professionals working in the sample of public CW agencies were obtained. These included state laws defining child maltreatment and CW manuals documenting required responses to children prenatally exposed to substances. State laws and CW manuals were located through online searches of publicly available documents. The currency of documents identified via online searches were confirmed by consulting with state CW agency leadership. To obtain written guidance for local public CW agencies included in the sample, interviews included questions asking if there were documents used by their agency to guide practices related to prenatal substance exposure and requested copies if they existed. Twenty-two documents were collected from professionals in CW in five sites using this method.

Semi-structured Interviews—Interview questions were uniquely tailored to each type of respondent based on their role within the CW agency. Individual interviews typically lasted up to 60 minutes and were conducted in person, by teams of two data collectors, except in one state where interviews took place virtually due to the emergence of the COVID-19

pandemic. Interview questions covered a range of topics. In this article we focus on content related to how professionals in CW respond to children prenatally exposed to substances, including: how professionals in CW recognized children who could be impacted by their exposure, the processes used and types of service referrals that were provided, and gaps and opportunities to improve practices in caring for these children and their families.

Surveys—Online surveys that lasted up to 30 minutes were conducted with professionals in CW on topics aligned with interviews were similarly structured and included a mix of closed- and open-ended items, as well as case scenarios. Survey content presented in this article focus on practices used to recognize children prenatally exposed to substances, the types of referrals that would be provided, and service gaps and needs.

Analysis

Guidance Documents—Laws in each state defining child maltreatment were reviewed and coded using a study specific instrument to capture whether and how states defined prenatal substance exposure as a type of child maltreatment. Guidance documents directing mandatory statewide CW practices were obtained for review. In four out of the five states, these practices were documented in CW agency policy manuals. In one state there was no statewide manual; for that state, their Department of Human Services regulations described required CW practices related to children prenatally exposed to substances. Guidance documents were reviewed and coded using a study specific instrument to categorize state and local guidance related to CW agency practices for assessing and referring children who were known to be, or who were suspected of being, affected by prenatal substance exposure. Codes were operationalized in a spreadsheet and organized by whether information was state-specific or local agency-specific. Coding was conducted by one analyst and was reviewed by a study principal investigator. Content analysis was applied to quantify information and facilitate cross-state understanding.

Interview Data—Grounded theory techniques (Chun et al., 2019) were adapted to systematically explore and analyze qualitative data from interviews. Interviews were transcribed verbatim and subsequently uploaded and coded using an online software (Dedoose[5]) designed to facilitate qualitative coding and analysis. A codebook operationalized codes using definitions with relevant inclusion and exclusion criteria (i.e., descriptions of when to apply a code and when not to apply a code). An initial codebook was developed before collecting qualitative data and included priori codes based on the study's research questions and main study constructs that aligned with ways professionals in CW described practices related to prenatal substance exposure identification and services. Additional emergent codes were identified that surfaced after a review of data across states (e.g., reported methods for identifying or suspecting prenatal substance exposure).

A dynamic coding process was used with initial codes developed prior to coding based on stated research questions and the coding scheme was updated to accommodate emergent findings. A team-based, iterative, and collaborative approach facilitated the coding and

[5]Dedoose Version 8.3.47 (2021). SocioCultural Research Consultants, LLC. www.dedoose.com.

analysis as this has been shown to increase fidelity and dependability when analyzing large volumes of qualitative data (Cascio et al., 2019). Twenty-five percent of transcripts were double coded for inter-rater reliability checks and resolution and refinement of codes. A team of five analysts were trained on a common set of coding procedures to help ensure coding validity, transparency, and consistency. An iterative-inductive, and systematic process helped establish inter-coder consensus and reliability (Cascio et al., 2019).

Survey Data—Data were analyzed using descriptive statistics (SPSS Statistics 22 & EXCEL), including measures of central tendency and frequencies. Response frequencies and percentages were calculated where appropriate. Means or medians (and corresponding measures of variability) were calculated for survey questions answered on ordinal level Likert scales as well as for other numeric variables. Survey respondents answered most questions on the surveys. Survey items were not forced choice; respondents could choose to not respond to any items. Survey response rates exceeded 80% across all states except for one state that had a comparatively lower response rate at 58%. Th is lower response rate is attributed to competing priorities with a large statewide initiative that overlapped the survey window. In one state, the response rate was not calculable because of the state's IRB and data sharing agreement which prohibited sharing identifying information to track individuals that completed survey. A small amount of missing data occurred across close-ended variables in the survey. The rate of missing data for typical close-ended items in aggregate analyses hovered around 12–16%.

Results

State and Local CW Agency Guidance Related to Prenatal Substance Exposure

The document review for the five states included in the sample revealed that state laws and CW agency guidance addressing prenatal substance exposure described children who are young (e.g., infants zero to three years of age). Four of five states defined prenatal substance exposure as a type of child maltreatment. Of these states, all four definitions of child maltreatment included prenatal exposure to illegal drugs, and two states also included alcohol exposures. To identify children, three of four state laws described medical testing, and one state described withdrawal symptoms and medical diagnoses related to prenatal substance exposure, which included FASD. Th ree states referred to children with prenatal substance exposure as newborns or infants; one state described children up to age four.

There was guidance describing how professionals in CW were expected to respond to newborns reported to the agency due to prenatal substance exposure in four of five states. Guidance for service referrals were directed toward infants and children under five years old and was related to the development of plans of safe care required by CAPTA/CARA. In three states, policies directed professionals' decisions on whether families should be offered voluntary services or whether a formal investigation of maltreatment should ensue. There were no guidance documents in any of the participating states directing professionals in CW to seek additional information that could uncover a child's potentially unidentified prenatal exposures. No guidance was found directing professionals in CW to work with CW system partners, such as professionals in medical or developmental fields, to consider

whether older children could be showing indicators of long-term impacts of an unidentified prenatal substance exposure.

While there were no specific processes to assess for indicators of prenatal substance exposure, study states had processes to meet children's medical and mental health needs. All five states had procedures to meet federal requirements outlined in the Fostering Connections to Success and Increasing Adoptions Act of 2008, which requires referrals of children for medical examinations when they are placed in foster care and referrals to early intervention/developmental services.[6] There were also processes in all five states to review a child's medical, behavioral, and academic needs as part of granting foster care providers a higher subsidy rate for children requiring more time and supervision as well as guidance describing eligibility and referral processes for behavioral/mental health services for children.

CW Agency Practices for Gathering Information on Prenatal Substance Exposure

How Often Professionals in CW Report Assessing for Prenatal Substance Exposure—Professionals in CW across the five states in the sample reported inconsistent assessment for prenatal substance exposure, which may reflect the lack of written guidance directing practice. Forty percent of interview respondents said they assess for prenatal substance exposure with "some" children in their agency, 46% assess prenatal substance exposure with "most" children, and 12% did not routinely assess prenatal substance exposure (see Figure 1). Comparisons of the reported frequency of assessing for prenatal substance exposure revealed that professionals working with families on a longer term basis (e.g., ongoing case management) were more likely than professionals who work with families at the front end of a case only (e.g., frontline) or in both roles (e.g., frontline and ongoing case management) in CW to report that they assess prenatal substance exposure with "most" children who enter their CW agency.

There was some variation in reported practices for assessing prenatal substance exposure across states. More than one half of interview respondents from one participating state were more likely to indicate that they assess prenatal substance exposure with "most" children (see Figure 1). The largest proportion of professionals in CW (63%) who indicated they assess "most" children for prenatal substance exposure were from a state where prenatal substance exposure is listed as a checkbox on the intake tool.

Prenatal Substance Exposure Information-gathering Practices Reported by Professionals in CW—There was a lack of widely used, structured assessments to consider whether children could be impacted by prenatal substance exposure. Of the 152 interviews conducted with professionals in CW in the five states,[7] less than 5% mentioned using a specific screening tool to guide them in recognizing a child's exposure or conduct

[6]The P.L. 110–351 Fostering Connections to Success and Increasing Adoptions Act of 2008 requires state CW agencies to work with their state Medicaid agency to create a plan to coordinate health care for children in foster care, to ensure screenings, assessments and follow-up treatment. Medicaid provides health care benefits for children called Early, Periodic, Screening, Diagnosis, and Treatment (EPSDT) services, which is a federal benefit program under Medicaid that provides health care entitlement services for children who are enrolled in Medicaid. Each state administers its own EPSDT program, which is financed by funds from both the state and the federal government.

case planning for such children. Of the few respondents who mentioned screening tools, they noted that professionals in CW did not routinely use them. When public CW agency directors and other professionals in CW (n = 152) were asked to describe how they gather information on known or suspected prenatal substance exposure, there was less focus on youth of older ages and less emphasis on screening for exposures to alcohol compared to other types of substances. Identification by hospitals at the time of birth was the top reported method for gathering information related to prenatal substance exposure with 93% of professionals in CW referring to that practice when asked how prenatal substance exposure might be identified or suspected. According to one professional, “I can’t say that in the 13 years that I’ve been doing CPS [child protective services] that I’ve ever had a referral come in for prenatal exposure that wasn’t for a substance-exposed infant.” While less attention was made for screening for prenatal substance exposure with youth who are older, professionals in CW did describe other methods for gathering information on prenatal substance exposure that might lead them to identify or suspect prenatal substance exposure (see Table 2). Although there were slight differences, these methods of information gathering remained largely consistent across the five states.

Similar to interviews with professionals in CW, surveys also revealed an emphasis on prenatal substance exposure identification at the time of birth via records such as hospital toxicology reports. Survey respondents identified the top three commonly reviewed sources of information to determine whether a child had been prenatally exposed to alcohol or other drugs as birth records (71%), conversations with mothers (49%), and other medical records (46%). Surveyed professionals were then asked to indicate their perceptions of the top three most accurate sources of information that can be used to determine whether a child has been prenatally exposed to alcohol or other drugs, which included birth records (81%), other medical records (64%), and developmental assessments (42%). Survey respondents rarely cited conversations with mothers of origin as an accurate source of information; this finding was echoed during interviews, where 16% of respondents expressed concerns about a mother providing accurate information about substances she may have used while pregnant.

There were some practices that promoted routine information collection and aided decisions related to prenatal substance exposure. One state’s intake information system featured a screen that would automatically prompt professionals in CW to ask if the child is experiencing symptoms of substance withdrawal for every intake for children under age one. This state also has established strategies to avoid automatic entry of families into the CW system, such as guidance revisions that direct “alternative response” processes to help connect families of newborns with prenatal substance exposure to appropriate supports and services. This type of systematic screening by hotline call centers could be expanded to better “flag” the possibility of prenatal substance exposure across the developmental stages for children (beyond infancy). In another state, a decision-making tool was developed in response to the large volume of calls from hospitals for infants with prenatal substance

[7]As previously noted, a total of 159 interviews were conducted with professionals in CW. Of these interviews, seven interviews were conducted with state CW directors who received a unique set of questions. References made to 152 interviews reflect a subset of the total interview sample not including state CW directors.

exposures, including neonatal abstinence syndrome. This state is using the tool to help professionals in CW decide whether a child should be screened-in for investigation of maltreatment or placed on an alternative response track. The tool specifies what type of information must be collected and what contacts should be made by professionals in CW.

CW Agency Practices for Providing Care and Accessing Services for Children Who May Be Affected by Prenatal Substance Exposure

Services for Children with Known or Suspected Prenatal Substance Exposure—Across all five states, almost a quarter of interviewed professionals in CW said they were unaware of local services specifically directed toward children with prenatal substance exposure (e.g., diagnostic clinics or specialized assessment or treatment centers for FASDs and/or neonatal abstinence syndrome). About one quarter of those interviewed stated there were no services specifically for prenatal alcohol exposure. When asked about services for children known or suspected to be affected by prenatal substance exposure, most indicated making referrals to development/early intervention services and medical providers for children ages zero to three. Interviews with professionals in CW in five states most commonly cited making referrals to their state or local developmental assessment agency that also provides early intervention services (70%) or making medical referrals (45%). Other services for children with prenatal substance exposure that were less often described included mental health, physical therapies (e.g., occupational, speech, vision), and behavioral therapy (see Table 3).

Barriers to Services for Children with Known or Suspected Prenatal Substance Exposure—Professionals in CW cited specific challenges related to availability and access to prenatal substance exposure services. Almost a quarter of professionals in CW across the five states were unaware of local services specifically for children with prenatal substance exposure (e.g., diagnostic clinics or specialized assessment or treatment centers for FASDs and/or neonatal abstinence syndrome). About a third of survey respondents indicated that diagnostic services related to prenatal alcohol exposure were not available or they did not know if they were available. Professionals in CW in all five states brought up the issue of limited services, particularly for children who are older, as their main challenge related to service provision. Professionals in more rural contexts described specialized services as located in metropolitan areas far from their CW agency, but professionals across all states and sites also described long waiting lists for prenatal substance exposure services: “We do have providers like the specialty clinic, but it’s like a six-month waiting list. We need more.” Low availability of assessment and/or diagnostic services for children with prenatal alcohol exposure and an FASD was a specific challenge noted across all states and sites.

Almost a third of professionals across the five states said that services for children who are older with known or suspected prenatal substance exposure were primarily received through schools, mentioning individual education plans or special education programs. Most professionals across the five states indicated that case planning and service referrals did not vary by the substance to which a child was prenatally exposed; however, interviewees did note that their awareness of services was influenced by the types of substances they perceive

to be most common in the locality. According to one professional in CW, “At least in this area, we have so much more exposure and knowledge to opioids vs. alcohol … there’s probably more services that are more directly for children who have been substance exposed to something like an opioid or having withdrawals … vs. fetal alcohol.”

Suggestions to Enhance Care for Children Affected by Prenatal Substance Exposure Reported by Professionals in CW—Professionals in CW suggested avenues that may lead to enhanced care for children with known or suspected prenatal substance exposure. Suggestions include: improved training on the effects and expression of prenatal substance exposure for children who are younger and older; enhanced information sharing agreements between medical providers and professionals in CW to promote collection of maternal prenatal substance history and to facilitate coordinated implementation of plans of safe care; improved training on how to interview parents in a non-judgmental way to build trust and rapport; modification of existing screening tools or the creation of new ones to screen for indicators of prenatal substance exposure; and more education for caregivers to understand how prenatal substance exposure can present in a child and ways to manage difficult behaviors. To strengthen services and supports for children at risk or affected by prenatal substance exposure, professionals in CW suggested decision-making tools to help match child and family needs to effective interventions at different developmental stages and enhanced cross system collaboration across interdisciplinary agencies to ensure continuity of care.

Discussion

Gaps in Practices Used to Recognize Children Impacted by Prenatal Substance Exposure

This article presented results on the extent to which state and local CW guidance directs professionals in CW to assess and provide care to children prenatally exposed to substances; ways professionals in CW describe their practices to assess and gather information on known or suspected prenatal substance exposure; and ways professionals in CW apply information about known or suspected prenatal substance exposure to inform service referrals. A common finding across guidance documents, interviews, and surveys included a narrow focus on prenatal substance exposure for infants and children who are younger with less attention given to prenatal substance exposure as a potential area of need for children and youth who are older. Professionals in CW agencies referenced existing guidance to explain their practice related to infants, yet there was no clear guidance to help them recognize children who may have service needs related to the impact of a prenatal substance exposure that was not evident at birth. The reliance on hospitals and medical tests to identify prenatal substance exposure at birth served almost as a “catchall” in the minds of many professionals whereby attention toward assessing children who are older was less commonly described. This may reflect CAPTA/CARA requirements that states develop guidance to respond to the needs of infants with prenatal substance exposure. It could also reflect the fact that much of the population of children coming to the attention of child welfare are younger in age. However, such a focus on younger children could lead to under-identification, and subsequent lack of services, of children with prenatal alcohol exposure since many of the

neurodevelopmental challenges for these children emerge after the infant period during preschool and transition to early school years (Mattson et al., 2019; Wozniak et al., 2019).

Diagnosis of a child with an FASD is facilitated by gathering a history of maternal alcohol use during pregnancy (Mattson et al., 2019); however, survey and interview respondents rarely cited conversations with mothers of origin as an accurate source of information related to a child's prenatal exposure. This may reflect distrust that families have towards sharing information due to their concerns of a punitive response by professionals in CW. This emphasizes the importance of steps the CW system can continue to take to become more focused on family engagement, prevention, and family preservation, topics which are discussed in greater detail in the article by Richards and colleagues in the second half of this special double issue.

Opportunities to Enhance Care for Children with Known or Suspected Prenatal Substance Exposure

While clear gaps exist, there are opportunities to improve recognizing and caring for children affected by prenatal substance exposure who are older. Interview findings suggest that behavioral and mental health indicators are used by professionals to consider whether a child has been impacted by prenatal substance exposure. If professionals in CW know how neurocognitive and self-regulation impairments may be observed in children of different ages, such as school age and adolescence (Hagan et al., 2016), they may identify more effectively children who may have an unrecognized substance exposure. Professionals in CW were aware of prenatal substance exposures that were most common in their community. Improving their knowledge of the likelihood of co-occurring alcohol use could improve their recognition of possible impacts caused by alcohol exposure when children are known to be exposed to other substances.

Decision-making tools could be developed to help professionals in CW consider whether a child who is older may show indicators of long-term impacts of prenatal substance exposures. They could be employed as part of an agency's existing processes to assess children's needs, such as procedures used to make placement decisions, or when determining if a child may have mental health needs that warrant further assessment. Existing processes could be used as a scaffold to help professionals in CW consider whether referrals to professionals could be warranted to screen for possible effects of unrecognized prenatal substance exposures, which may present in children through behavioral, social, and developmental challenges.

Professionals in CW most frequently described referrals to developmental and early intervention services for children with prenatal substance exposures. These services can give important information and support to facilitate a child's developmental progress in early childhood. However, as these referrals are directed toward children aged three and under, they echo the recurring focus of professionals on the needs of children who are very young. Professionals noted specific challenges finding appropriate assessment and/or diagnostic services for children with prenatal alcohol exposure and an FASD, noting low availability across all states and sites. Early intervention and medical care referrals were described by professionals as useful service referrals to identify children with prenatal

substance exposure and assess their needs. General developmental or medical assessments often do not include obtaining a prenatal substance exposure history, especially for alcohol, which is essential to understand and tailor specialized services and interventions to address a child's needs (Chasnoff et al., 2015). However, if these services were to routinely integrate focused attention on the possible effects of prenatal substance exposure (including prenatal alcohol exposure), they could support initial assessments of whether a child may be showing evidence of long-term impacts.

Comparisons of the reported frequency of assessing for prenatal substance exposure revealed that professionals working with families on a longer-term basis (e.g., ongoing case management) were more likely than professionals who work with families at the front end of a case only (frontline) or in both roles in CW to report that they assess prenatal substance exposure with "most" children who enter their CW agency. Th is finding may reflect the more extensive timeframe that professionals who work with families on a longer basis have in working with children to gather prenatal substance exposure-related information. Th ese findings indicate that ongoing case management workers may serve an important role for connecting children to services for known or suspected prenatal substance exposure due to the ongoing nature of their relationship with children and families and opportunities to build trust and rapport.

Study Limitations

States and sites from this descriptive study were purposively selected and, therefore, are not representative of or generalizable to CW agencies across the United States or even within the participating states. States differed in the type and specificity of their written guidance directing practice, which may make comparisons of information incomplete. While a review of the state laws in the study sample found differences in whether and how states defined prenatal substance exposure as child maltreatment, small sample sizes precluded using this information to understand how these definitions could influence practices. Another limitation is that this study collected largely self-perception data from professionals in CW who described their practices related to assessing for prenatal substance exposure and seeking service referrals for prenatal substance exposure. A more objective measure might include documentation of actual practice that could be captured via more extensive case record reviews or direct observations.

This study collected little data pertaining to racial and socioeconomic equity issues. For example, the team did not explore professionals' attitudes toward and approach to screening for prenatal substance exposure among families of color. Other research has shown racial and socioeconomic disparities in hospital screening of prenatal substance exposure and subsequent reports to CW (Rebbe et al., 2019; Roberts et al., 2015). Opportunities for enhancing CW guidance and practices to promote effective, equitable treatment for children who are referred to the CW system, and for exploring the importance of adopting practices that seek to minimize bias against populations that are marginalized such as families of color, American Indian communities, or children who experience economic disadvantage, would be important focus areas for future research.

While not directly addressed in this study, other studies have described inconsistent responses by CW to prenatal substance exposure, which may be influenced by state policies (Atkins & Durrance, 2020) and agency and individual factors (Peddireddy et al., 2022). There is concern that increased identification of children prenatally exposed to substances may have the unintended consequence of unnecessarily bringing families who are safely parenting their children into child protection processes (Lloyd et al., 2019). A further concern is that this will negatively impact communities of color (Rebbe et al., 2019) and may contribute to disparities in reporting to child protection and child removal (Rebbe et al., 2019; Roberts et al., 2015).

Summary

Despite limitations, important information was obtained in this study. Findings for the five states indicated that CW guidance and practices relied primarily on reports from hospitals to identify infants and children who are very young with prenatal exposure to substances, which can lead to under-identification of children with prenatal alcohol exposures (Wozniak et al., 2019). Federal legislation has led to an increased focus on prenatal substance exposure, but it is narrowly focused on children at the time of birth. Th is means children who are older and children affected by prenatal alcohol exposure (vs. other types of drugs) may be receiving little or no attention to their unique needs due to limited screening and service referrals. Gaps in services point toward a need for more specialized services for this population. Coordinated service provision across various systems that are designed to promote child well-being is needed, particularly for children who are older and children who may have been exposed to alcohol prenatally but not identified at birth. This study suggests that gaps in state and local CW guidance and practices in the five geographically diverse states may be limiting the child welfare system's ability to ensure equitable care for children of different ages and children exposed to different substances.

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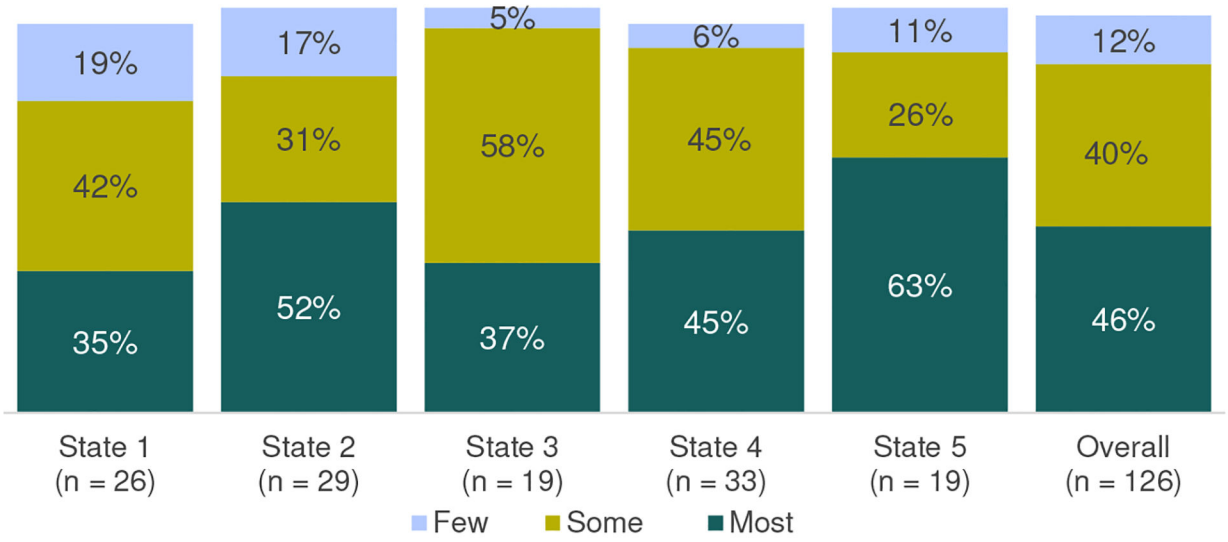

Figure 1. Assessment of Prenatal Substance Exposure for Children Who Come into Contact with the CW System

***Source*.** Interviews with professionals in CW in five states; $n = 126$ (does not include interviews with state CW directors or local area directors).

Table 1

Sample by Data Source and State

Data Source	State 1	State 2	State 3	State 4	State 5	Total
State CW director interview participants	2	1	2	1	1	7
Local area director interview participants	5	4	6	6	5	26
Interviews with professionals in CW	26	29	22	33	19	129
Surveys with professionals in CW	76	70	36	52	37	271

Note. The total number of interview participants (n = 162) is greater than the total number of interviews because three interviews had two participants. The counts of thematic codes presented in this article reflect the total number of interviews (n = 159) and not the total number of participants.

Table 2

Prenatal Substance Exposure Information Gathering Methods Reported by Interview Respondents in Five States[8]

Thematic Codes Developed for Qualitative Analysis	Number of Interviews (Percentage)
Identified at birth by a hospital (e.g., professional in CW suspects or identifies prenatal substance exposure based on a hospital referral made for positive toxicology tests or withdrawal symptoms for mom or newborn.)	142 (93%)
Behavioral indicator(s) (e.g., professional in CW suspects prenatal substance exposure due to evidence of attention deficit disorders or Attention-Deficit/Hyperactivity Disorder diagnosis, emotional regulation challenges, and information and referrals from mental health providers from screenings and assessments. This category was also used if the respondent discussed observing behavioral issues with school-aged children.)	117 (77%)
Case record documentation (e.g., professional in CW suspects or identifies prenatal substance exposure in CW case records, child's medical records, or birth records.)	117 (77%)
Developmental milestone(s) (e.g., professional in CW suspects prenatal substance exposure due to indications of developmental delays resulting from developmental assessments.)	111 (73%)
CW screening or assessments (e.g., professional in CW prenatal substance exposure due to safety or risk assessments, family assessments, parental substance use assessments.)	95 (63%)
Mother provides information (e.g., professional in CW identifies prenatal substance exposure after a mother confirms their substance use during pregnancy.)	81 (53%)
Cognitive indicator(s) (e.g., child suspected to have prenatal substance exposure because professional in CW notices the existence of an IEP, learning disability, or cognitive impairment.)	70 (46%)
Collateral source (e.g., professional in CW suspects or identifies prenatal substance exposure due to referral source, other family members, professionals who have contact with the family.)	67 (44%)
Physical characteristics (e.g., professional in CW suspects FASD due to a child's physical characteristics such as growth restriction, small head size or microcephaly, facial characteristics.)	45 (30%)

***Source*.** Interviews with professionals in CW in five states; $n = 152$

[8]Information gathering methods included in Table 2 were developed by the study team when conducting thematic coding of interview data to categorize the various ways that professionals in CW gathered information on known or suspected prenatal substance exposure. Definitions for each category in Table 1 were not drawn from academic sources but were operationalized by the study team to help ensure consistent interpretation of thematic codes applied to interview data across study team analysts.

Table 3

Types of Service Referrals for Children with Suspected Prenatal Substance Exposure

Types of Service Referrals	Number of Interviews (Percentage)
Developmental assessors/early intervention	68 (70%)
Medical providers	44 (45%)
Mental health	34 (35%)
Physical/occupational/speech/vision therapy	32 (33%)
Behavioral therapy	30 (31%)

***Source*.** Interviews with local area CW directors and professionals in ongoing case management were interviewed about service referrals in all five states; $n = 97$ (state CW directors and professionals that work in the front end of a CW case were not asked this question).