A court team model for young children in foster care: The role of prenatal alcohol exposure and Fetal Alcohol Spectrum Disorders

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Prenatal alcohol exposure (PAE) is common with about 80,000 women continuing to drink through all three trimesters of pregnancy each year. PAE is also associated with postnatal adversities, including abuse and neglect, which increase risk for foster care placement. Each day 700 children enter the foster care system. A diagnosis of Fetal Alcohol Spectrum Disorders (FASD) also increases the risk for foster care placement. Among children diagnosed with FASD 70% are or have been in foster care. FASD prevalence rates are increased 10- to 15-fold in foster care systems. Foster care is an important opportunity to detect FASD and provide services to infants and children with FASD. FASD is the third most common identifiable cause of mental retardation in the United States. We describe a court-team-based model of care developed to improve management of children with PAE or FASD entering foster care. The programmatic objectives include: enhancing detection of PAE; screening for FASD; increased consideration of FASD as a potential issue in treatment planning with foster parents; improved entry into treatment; and increased surveillance for parents with an FASD.

KEY WORDS: *Fetal Alcohol Spectrum Disorders, exposure, prenatal alcohol exposure, infants, children, mothers, courts, foster care, and social services.*

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"We can envision few things more certainly beyond one's control than the drinking habits of a parent prior to one's birth" Dilbeck v. State 643 So 2d 1027 Fla 1994 (1994)

The adverse effects of alcohol on the developing fetus have been reported for centuries. Medical research on the effects of drinking during pregnancy were reported over 120 years ago by a physician working in an English women's prison who reported that alcohol increased rates of birth defects and mortality in their children (Sullivan, 1899). Despite these early observations linking prenatal alcohol exposure (PAE) and adverse outcomes, the first clinical account of alcohol's teratogenic effects was not published until the late 1960s. Lemoine and colleagues described abnormal facial features, growth impairment and abnormal neurodevelopment in children born to mothers who drank heavily during pregnancy (Lemoine, Harousseau, Borteryu, & Menuet, 1968). Jones & Smith (1973) documented consistent patterns of physical and developmental abnormalities in infants and children born to mothers with alcoholism who drank during pregnancy and provided the diagnostic label of Fetal Alcohol Syndrome. This combination was crucial in the world-wide recognition of PAE as a common cause of birth defects and developmental disabilities.

Exposure

In the United States, approximately 1 in 8 women (500,000 pregnancies annually) report using alcohol during their pregnancy and nearly 2% of pregnant women (80,000 pregnancies annually) report heavy drinking (Centers for Disease Control and Prevention, 2009; Floyd & Sidhu, 2004). However, in most pregnancies the exposure is of very limited duration and comprised of very few drinking episodes. The mother finds out she is pregnant and then quits for the duration of her pregnancy. Research to determine a "safe" level of alcohol exposure during pregnancy (below which there are no observable adverse effects) has yet to identify a level of exposure considered safe.

The women at highest risk appear to be those women who engage in binge drinking (four or more drinks in one episode) and continue alcohol use into the second and third trimesters with very high blood alcohol concentrations. Women who continue to drink after confirmation of pregnancy require increased attention from prenatal care providers and assessment to determine if substance abuse treatment is needed.

In a previous article in part one of this special issue we discussed diagnosis of Fetal Alcohol Spectrum Disorders (FASD) (Burd, Fast, Conry, & William, 2011). The diagnosis of FASD during infancy is complex (Little, Snell, Rosenfeld, Gilstrap, & Gant, 1990; Stoler & Holmes, 2004) and we recommend considering infants and young children with PAE as a population requiring ongoing surveillance for increased risk of mental retardation, developmental disorders, mental health disorders, and growth impairment (Burd et al., 2011; Burd & Wilson, 2004). The development of the fetal brain continues throughout pregnancy and thus the central nervous system is the organ system with the greatest opportunity for developmental aberrations from PAE. Damage from PAE occurs via multiple toxicokinetic mechanisms on the developing fetal central nervous system (Goodlet, Horn, & Zhou, 2005; Riley & McGee, 2005).

FASD prevalence rates are in the range of 1% of live births (May et al., 2009). Recent research has demonstrated high recurrence rates for PAE and FASD in families, across generations of families with increased mortality rates for children with FASD and their mothers (Abel, 1998; Burd et al., 2008). The societal cost is huge, with an annual cost in the United States exceeding $3.6 billion per year (Lupton, Burd, & Harwood, 2004). The lifetime cost of care for a child with FASD exceeds $2 million per case (Lupton et al., 2004). The annual health care utilization costs for FASD have been estimated to be increased 9-fold ($16,782 for FASD versus $1,859 for controls without FASD) (Amendah, Grosse, & Betrand, 2010). While the attributable cost to the foster care system is

not known, the increased prevalence of FASD suggests that the costs are substantial.

Foster Care

In 2009, there were 423,773 children in foster care in the United States (AFCARS, 2010). Each year, 255,418 children enter the foster care system in the United States (one every 2 minutes or 700 per day) at a mean age of 7.9 years (AFCARS, 2010). The mean duration of stay is 26.7 months and 16% of these children will be placed in five or more homes (Foster care statistics, 2011). Of the children in foster care, 114,556 are waiting to be adopted of whom 50% are adopted each year (AFCARS, 2010).

There are multiple causal factors associated with removal of children from a parent's home, substance abuse is one of the most common. While illicit drug use is often reported, the co-occurrence of alcohol use by the parents can be overlooked. The detection of alcohol use is essential since PAE has potentially severe teratogenic effects during fetal development and is closely linked to increased postnatal environmental adversity including foster care placement. In Alaska, 65% of children with FASD are in foster care, adoptive homes or living outside of their biological parents' homes (Alaska's Comprehensive FASD Project, 1997). In North Dakota, 75% of children with FASD are or have been in foster care (North Dakota FAS Center, 2000). In the state of Washington, FASD is 10-15 times more prevalent in foster care than in the general population (Astley, Stachowiak, Clarren, & Clausen, 2002).

Several important links exist between foster care placement and PAE:

1) Alcohol use/abuse is a common cooccurring condition among people who have substance abuse disorders. Parents with substance abuse disorders are overrepresented in foster care.

2) Alcohol use is transgenerational and many people with FASD

may have affected relatives. Children with FASD can have one or more parents with FASD.

3) FASD is often familial and it is not uncommon to find multiple affected siblings in a family. As noted above, early detection of PAE and entry into treatment can protect subsequent pregnancies from exposure. Furthermore, younger siblings with FASD tend to be more severely affected than older siblings. This supports the need for evaluation of all siblings in these families (Abel, 1998).

4) There is a strong link between PAE and multiple other prenatal risk factors including smoking, other drug use, delayed and infrequent prenatal care, decreased educational achievement, being unmarried, poverty, violence, and parental depression (Burd, Cotsonas-Hassler, Martsolf, & Kerbeshian, 2003; Burd, Roberts, Olson, & Odendaal, 2007).

5) PAE is closely linked to labor and delivery complications, birth defects, prematurity, and extended hospitalization for the treatment of these complications (Burd, Olson, et al. 2007; Stratton, Howe, & Battaglia, 1996).

6) PAE increases risk for postnatal exposure to neglect, abuse, poor nutrition, cigarette smoking, violence, and maternal depression (Burd & Wilson, 2004).

7) Adults with FASD are frequently unrecognized. If treatment modifications are not made for them the likelihood of treatment failure for parenting classes and substance abuse treatment is increased.

8) Mortality rates for children diagnosed with FASD are increased 3 to 4-fold. The mortality risk for siblings of a diagnosed case are also increased 3 to 4-fold (Burd & Wilson, 2004). The increased mortality rate is due to birth defects (e. g., congenital heart defects), sudden infant death syndrome, and infectious illness (Burd, Deal, et al., 2007; Burd et al., 2008; Iyasu et al., 2002).

   Recently, increased risk of death from sudden infant death syndrome was reported to be increased on weekends (Phillips, Brewer, & Wadensweiler, 2010). Mortality risk for birth mothers of children with FASD is also increased (Astley, 2010; Berg, Lynch, & Coles, 2008; Kvigne et al., 2003). Thus, FASD, is a severe syndrome with increased lethality for birth mothers, children with a diagnosis of FASD and their siblings.

The risk factors which increase risk for entry into foster care also complicate management of these affected infants and children. Previously these risk factors have been routinely considered in court systems managing these children and their families. In part, this may be a result of lack of awareness of the role of PAE as a one of potential etiologies for the high rates of neurobehavioral disorders which are often severe and have increased rates of comorbidity.

The foster care system is an important service system for identification of children with PAE and FASD. Since detection and diagnosis of FASD can be complex and time consuming, it may be more useful to initially develop a system of care which utilizes information on PAE. In this scenario PAE would be considered as an indicator for increased intensity of developmental follow up. The provision of a specialized system of care before a diagnosis of FASD is made could maximize utilization of existing systems of care after needed training and additional infrastructure development. This may be especially useful for infants and young children where the final determination of FASD may be complex (Little et al., 1990; Stoler & Holmes, 2004).

The court team model

As a part of a multisite project in cooperation with the Zero to Three National Center for Infants, Toddlers and Families in Washington DC, the city of Des Moines, Iowa developed a court team for children entering the child protective system. The Des Moines Court Team is one of the 10 collaborating court teams across the United States and is led by a judge with a longstanding interest in the application of nationally recognized best practices for management of abuse and neglect cases (Publication Development Committee, 1995). The focus of the court team guidelines is to improve how the courts, child welfare agencies, and related service systems interact to deliver timely, issue-appropriate and effective ser-

vices to children and families. This includes ongoing training for all participating providers who work with infants and toddlers. Typical training content focuses on socioemotional, developmental, and the physical and environmental needs of infants and children entering foster care due to abuse, maltreatment, and neglect. These meetings are ongoing opportunities to update providers' knowledge about PAE, drug abuse, and emotional impacts of the interactions of these adversities on child development. Another objective is to change local systems to improve outcomes and prevent future court involvement for the child and the family.

The core components of the Des Moines Court Team are:

1) Judicial Leadership and case specific management
2) Local Community Coordinator
3) Active multidisciplinary court teams focused on improving the process and outcomes for children and families
4) Targeting services for infants and toddlers in out-of-home care
5) Placement and concurrent planning
6) Family team meeting each month to review all open cases
7) Child focused services
8) Parent child contact
9) Provision of a continuum of mental health and substance abuse services
10) Ongoing training and technical assistance
11) Data collection on the program objectives
12) Program Evaluation

The Des Moines model includes the multiple community specialty services that are involved with and participate in the identification of developmental, social, emotional, and medical concerns at the point of entry of a child into care. One important element of this system is conducting a pre-removal meeting with the parents. This increases parental involvement

early in the process and helps them to understand the procedures to be utilized in getting their child into foster care. This meeting also allows the parents to meet many of the people involved and to have a voice in the process from the outset.

Visiting nursing services are provided at the initial removal meeting to ask the parents about medical issues or other concerns of the team. This meeting is one of several opportunities for thoughtful assessment of prenatal alcohol and other drug exposure. "When was your last drink?" This strategy is more useful than questions like, "Did you drink?" This opportunity is used to frame this inquiry in the context of other important medical information as a routine part of the nursing assessment. As noted above information about alcohol use after awareness of pregnancy by the mother is useful in risk assessment.

One of the next steps is an assessment at the Regional Child Protection Center. The center is staffed by two pediatricians with special expertise in child abuse assessments and intervention. They initiate the screening and identification of developmental, physical, medical, and cognitive deficits. This includes a careful assessment for pre and postnatal exposure to alcohol and other drugs (Smith et al., 2006; Smith et al., 2008).

Recognition of substance abuse as a primary factor leading to court involvement has led to increased training on recognition of current substance abuse in the parents and attention to effects of prenatal exposure of the infants and toddlers. One component of this effort has been to increase awareness of the need to identify all drug exposures—not just illicit or prescription drug abuse. The training emphasizes that PAE is often more damaging to the developing fetus than drug exposure. Selected community sites have elected to include screening for FASD as a component of their training. This establishes opportunities for routine FASD screening of children entering that specific system of care.

Another important element in the training emphasized that substance abuse is often transgenerational and that some proportion of the parents likely had PAE or have FASD themselves. This information should be used to modify services for those parents. The recommended modifications were covered during inservice training to familiarize service providers with the impact of PAE and FASD on adult learning. The deficits seen in adults with FASD have been covered in a previous article in part I of this special issue (Burd et al., 2011). The training emphasizes the importance of slowing the pace of interventions, especially for parenting programs, anger management, and substance abuse treatment. The strategies also covered the need to provide settings with decreased stimulation for the parents when they are learning. A key issue is assessment of instructional materials to see if they match the reading levels of the parents. The training covered the benefits of repetition of key materials and facts or strategies for the parents to compensate for memory and attention deficits. Another key component discussed the difficulty people with FASD have keeping schedules, remembering important meetings, and planning ahead to be sure they are on time.

The program has some preliminary data. Of the 65 families who have entered the program to date, 84.6% (55/65) had substance abuse identified as one the issues in the removal. Alcohol abuse was reported in 32.7% (18/55) of the parents. Two of the mothers reported they had a diagnosis of FASD. As the program continues it is expected that the detection rates will improve as the team becomes more experienced with the data collection process and develop increased expertise in screening and detection of PAE and FASD.

Discussion

PAE is common in infants and children in foster care. Increased attention to detection of alcohol use during and after pregnancy can lead to earlier entry into treatment. Successful treatment

can prevent alcohol exposure to the fetus in subsequent pregnancies. It can hardly be overemphasized that early detection is the key and this often requires staff training and implementation of routine screening for all mothers and children entering foster care. Careful assessment of substance use can also identify parents with a history of PAE during their own development. PAE may increase risk for cognitive impairment, learning disabilities, memory deficits, and planning or organizational impairments for parents. This could also increase concern about FASD for other family members who are being considered as possible placement options for children.

The court and social services personnel should become knowledgeable about rates of successful treatment for the service systems they utilize as referral sources. It is important to estimate the pretreatment likelihood of success in these programs. If the general success rate for substance abuse treatment is 20%, it is unlikely that most parents required to attend treatment at that program will be successful from a single trial of treatment. Knowledge about outcome data may change the view of the court and the other agencies involved with parents with PAE or FASD who quit treatment prematurely, or are not successful in parenting skills programs, anger management treatment, or achieving abstinence from alcohol or other substance use.

Improving the rates of reunification and reducing the number of children in foster care who are placed in multiple foster homes or treatment programs is an important goal. Meeting this goal will require increased attention to the common but often overlooked triad of PAE, FASD, and postnatal adversity. Change is difficult but it is imperative for optimal outcomes for these children and their families. Clearly, PAE and FASD require increased attention from the foster care systems and the courts. If we are to do our best for this population whose lives are so intertwined and dependent on us, it is time to bring PAE and FASD into the daily deliberations of these systems of care.

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