

Attachment Disorders



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ABSTRACT

The ability to form attachments with other human beings is an essential skill that typically begins early in life. The parent/caregiver–child relationship is the first crucial relationship that an infant forms, and the health of this relationship has a profound effect on the child's social and emotional development. Children who form secure relationships with their parent or other primary caregiver have fewer internalizing and externalizing behaviors, are more socially competent, and have better-quality friendships. Conversely, children with attachment disorders exhibit a varying capacity to form and sustain relationships and demonstrate emotional depth, they and experience a higher level of peer conflict. Children with insecure attachments have a greater likelihood for physical health morbidities and impaired social, psychological, and neurobiological functioning extending into adulthood. It is crucial that pediatric nurse practitioners implement practice behaviors to better identify children at risk for attachment disorders and link them with appropriate interventions. This continuing education article will explore attachment; and attachment theory; and attachment disorders in terms of types, risk factors, consequences, and treatment and will also provide implications for practice. *J Pediatr Health Care.* (2019) 33, 612–622

KEY WORDS

Attachment disorder, neglect, child maltreatment

The ability to form attachments with other human beings is an essential skill that typically begins early in life. The parent/caregiver–child relationship is the first crucial relationship that an infant forms, and the health of this relationship has a profound effect on the child's social and emotional development ([Brumariu, 2015](#)). Children who form secure relationships with their parent or other primary caregiver have fewer internalizing and externalizing behaviors

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(Brumariu & Kerns, 2010), are more socially competent, and have better-quality friendships (Pallini, Baiocco, Schneider, Madigan, & Atkinson, 2014). Conversely, children with insecure attachments have a greater likelihood for physical health morbidities and impaired social, psychological, and neurobiological functioning (Snyder, Shapiro, & Treleaven, 2012). Children with attachment disorders essentially suffer from an early onset of a disturbance in social relatedness, which results in maladaptive behaviors such as excessive inhibition or ambivalence (Mikic & Terradas, 2014). It is difficult to estimate the prevalence of attachment disorders. Minnis, Marwick, Arthur, and McLaughlin (2006) state that approximately 45% of children in foster care suffer from mental health problems, and it is very likely that many of these children suffer from an attachment disorder. It is crucial that pediatric nurse practitioners (PNPs) implement practice behaviors to better identify children at risk for attachment disorders and link them with appropriate interventions. This continuing education article will explore attachment; attachment theory; and attachment disorders in terms of types, risk factors, consequences, and treatment and will also provide implications for practice.

ATTACHMENT AND ATTACHMENT THEORY

John Bowlby, a British psychologist, revolutionized thinking about the infant—mother (primary caregiver) relationship and the importance and function of all close relationships (Bretherton, 1997). Bowlby (1969, 1973, 1980) is credited with the formulation of attachment theory, which expanded the understanding of human development and the importance of relationships. Working with orphaned/homeless children in Europe after the World War II and charged with assessing their mental health, Bowlby concluded that to grow up mentally healthy, the infant and young child must experience a warm, intimate, and continuous relationship with his/her mother (or primary caregiver). This relationship should be one that both find satisfying and enjoyable (Bowlby, 1952). From his initial observations, Bowlby developed a psychological theory of human connection called *attachment theory* (Bowlby, 1988). The fundamental tenets of attachment theory include the following: (a) human beings are designed to connect with others emotionally and to form intimate relationships; (b) the social and cognitive development of children is powerfully influenced by how they are treated by their parents, especially their mothers; and (c) early experiences can explain tendencies in later relationships (Snyder et al., 2012). Attachment theory states that patterns of relating to others acquired in the early parent/caregiver—child relationship are internalized and form the basis from which individuals enter and also maintain other close relationships. Nondefensive, open communication between child and caregiver results in healthy patterns of relating to others. Conversely, miscommunication, especially deliberate miscommunication, whereby a caregiver attempts to falsify a child's actual experience, results in the development of abnormal behaviors and negatively affects an individual's subsequent relationships. Thus, the family

relationships of those who grow up to be relatively stable and self-reliant are characterized by unfailing parental support when needed, steady encouragement toward developing autonomy, and open communication by caregivers that validate a child's actual experiences (van Rosmalen, van der Horst, & van der Veer, 2016).

Building on Bowlby's work, Ainsworth and Bell (1970) defined three major categories of attachment: secure, avoidant (insecure), and anxious/ambivalent (insecure). Main and Solomon (1990) added a fourth category: disorganized (insecure). Avoidant, anxious, and disorganized are all types of insecure attachment. Human infants need a consistent nurturing relationship with one or more sensitive caregivers to develop into healthy individuals (van Rosmalen et al., 2016). Infants are social beings from birth, and by the second half of the first year of life, infant attachment behaviors become focused on a single person or small number of caregivers. The infant who has a caregiver who is consistently responsive to his/her needs develops a secure attachment with this individual. From this secure base, the infant feels comfortable exploring; self-reliance develops. Autonomy throughout the course of life operates optimally because of supportive attachment relationships (Bretherton, 1997). Insecure attachments are characterized by an infant who does not seek out his/her caregiver when distressed or an infant who has difficulty moving away from the caregiver, likely due to the caregiver exhibiting unresponsive, rejecting, inconsistent, or insensitive care (Chambers, 2017). Secure attachment has proven to have beneficial results for the child (Chambers, 2017); however, insecure attachment presents developmental risks for the child (Bowlby, 1988; Feeney, Alexander, Noller, & Hohaus, 2003; Schore, 2001; Siegel & Hartzell, 2003). Longitudinal studies of children with insecure attachments have found these children to have negative outcomes (Greenberg & Speltz, 1988; Schore, 1994, 2001; Sroufe, 1988). Children with insecure attachment in infancy have shown an increased likelihood for impaired social, psychological, and neurobiological functioning over time, which leads to a vulnerability for these children to develop psychopathology during their lifetimes.

These various patterns of attachment are deeply influenced by a caregiver's personal experiences, especially with their own parents or caregivers (Snyder et al., 2012). In a meta-analysis of 18 attachment studies with a combined sample of 854 parent—child dyads, Van Ijzendoorn and Bakermans-Kranenburg (1997) found intergenerational transmission of attachment patterns to occur frequently in families. However, intergenerational transmission of attachment pattern is not thought to be unchangeable. Bowlby (1988) states that attachment can be negatively affected by adversity at any time and also affected by favorable influences at any time.

Nondefensive, open communication between child and caregiver results in healthy patterns of relating to others.

Individuals have the capacity for *earned security*, a term describing how an individual with an insecure attachment style can learn and develop a secure attachment style over time (Siegel & Hartzell, 2003). Supportive relationships and a capacity toward self-understanding are crucial to the ability to develop earned security (Siegel & Hartzell, 2003). A parents'/caregivers' abilities to learn to change their styles of attachment bode well for their children (Snyder et al., 2012).

TYPES OF ATTACHMENT DISORDERS

It is now widely accepted that in early childhood, attachment disorders result from inadequate caregiving environments and can manifest as two distinct clinical patterns, an emotionally withdrawn/inhibited phenotype and an indiscriminately social/disinhibited phenotype (Zeanah & Gleason, 2015). Recognizing the significant differences in the clinical disorders, the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V; American Psychiatric Association [APA], 2013) designated two separate attachment disorders, reactive attachment disorder (RAD) and disinhibited social engagement disorder (DSED), to describe these clinical symptoms. Previously, in the DSM-IV, the two phenotypes were defined as subtypes of the same disorder, known as *reactive attachment disorder* (APA, 1994). RAD and DSED, although both attachment disorders, differ in important ways: phenotype, correlates, course, and response to intervention (Rutter, Kreppner, & Sonuga-Barke, 2009; Zeanah & Gleason, 2015). To meet the diagnostic criteria for either attachment disorder, the child must have experienced serious social neglect early in life and have a cognitive age of at least 9 months to ensure that the child is developmentally capable of forming attachments (APA, 2013).

Both attachment disorders are relatively rare. RAD can be found in young children exposed to severe neglect before being placed into foster care or raised in institutions. However, less than 10% of these children experiencing severe neglect will develop the disorder. Children developing RAD most often experience severe social neglect within the first months of life. Symptoms of RAD develop at a young age, between the ages of 9 months and 5 years (APA, 2013). In young children, RAD is characterized by the absence of focused attachment behaviors directed toward a preferred caregiver; failure to seek and respond to comforting when distressed; decreased social and emotional reciprocity; stunted response to others; and disturbed emotional regulation, such as negative affect and unexplained fearfulness or irritability, even when interacting with familiar adults attempting to provide comfort (Mikic & Terradas, 2014; Zeanah & Gleason, 2015). Children with RAD may engage in self-soothing behaviors, exhibit discomfort in social interactions, and be aggressive toward peers (Haugaard & Hazan, 2004; see Box 1 for DSM-V criteria). The diagnostic criteria for RAD focus more specifically on absent or aberrant attachment behaviors across settings rather than social behaviors (Zeanah & Gleason, 2015). The core deficit of the disorder is the demonstration of the absence of attachment behaviors. Thus, the diagnosis of RAD should include

BOX 1. Reactive attachment disorder diagnostic criteria

1. Consistent pattern of inhibited, emotionally withdrawn behavior with adult caregivers (both must be met):

Child does not seek comfort when distressed AND
Child does not respond to comfort when distressed

2. Social and emotional disturbance that is persistent (at least two must be met):

Responsiveness (social and emotional) to others is minimal

Limited positive affect

Periods of unexplained irritability, sadness, or fear evident even in nonthreatening interactions with adult caregivers

3. Child has experienced a pattern of extreme insufficient care (at least one must be met):

Ongoing social neglect and lack of having basic emotional needs for comfort, stimulation, attention, and affection met by caregivers

Multiple changes of primary caregivers such that opportunities to form attachments are limited

Rearing in unusual settings that severely limit opportunities to form selective attachments

4. Experiencing the pattern of insufficient care resulted in the symptoms listed in #1 and #2

5. The symptoms in #1 and #2 are evident before age 5 years

6. The child has a developmental age of at least 9 months

7. The criteria for autism spectrum disorder are not met

Note. Adapted from the *American Psychiatric Association (2013)*.

observations of how the child interacts with his/her primary caregiver, not only with unfamiliar adults (Zeanah & Gleason, 2015). Cognitive delays, language delays, and stereotypies, are common comorbidities with RAD (APA, 2013). Depressive symptoms may also be seen in children with RAD. Children with RAD may have accompanying medical conditions such as severe failure to thrive, skin lesions, and severe hygiene concerns.

The aberrant social behaviors noted in young children with RAD can mimic those of autism spectrum disorder (ASD). RAD must be differentiated from ASD. Children meeting diagnostic criteria for RAD must have experienced severe social neglect; children with ASD will have rarely experienced this type of neglect. Children with both disorders may exhibit stereotypic behaviors such as rocking or flapping (APA, 2013). Children with ASD often exhibit restricted interests and repetitive behaviors, whereas children with RAD do not, and, most notably, children with ASD show developmentally appropriate attachment behavior, whereas children with RAD do not.

Although symptoms of RAD can persist for several years, caution must be taken when making the diagnosis in a

child older than 5 years of age (APA, 2013). Children with RAD typically respond well to intervention, and RAD often resolves completely with access to a stable and loving caregiver. Therefore, the prognosis for children affected by RAD appears to be dependent on the quality of caregiving after the serious neglect (APA, 2013). However, children with RAD may exhibit continuing impairment in family and social relationships even when placed in an adequate caregiving environment (Smyke et al., 2012).

DSED is characterized by an inappropriate friendliness and approach to unfamiliar adults, lack of wariness of strangers, and a tendency to wander off with strangers (Zeanah & Gleason, 2015; see Box 2 for DSM-V criteria). Although slightly more prevalent than RAD, with about 20% of high-risk children developing the disorder, DSED is also rare (APA, 2013). Children with DSED must experience severe social neglect early in life; there is no evidence that neglect after age 2 years is associated with development of the disorder. Children with DSED exhibit a lack of appropriate social and physical boundaries; they will interact with adult strangers in close proximity in a way that the adult perceives to be invasive. Verbal boundaries may also be violated by DSED children by asking overly intrusive and familiar questions of adult strangers. The core deficit in DSED is indiscriminate and unmodulated social behavior, particularly noted in initial approaches to and interaction with unfamiliar adults (Zeanah & Gleason, 2015). The DSED phenotype is expressed as aberrant social behavior. Numerous studies have reported this indiscriminate behavior in institutionalized (Zeanah, Smyke, Koga, Carlson, & Bucharest Early Intervention Project Core Group, 2005), postinstitutionalized (Lawler, Hostinar, Milner, & Gunnar, 2014; Smyke et al., 2012), and emotionally/socially deprived children in foster care (Bruce, Tarullo, & Gunnar, 2009). These children may show focused attachment behaviors and preferential comfort seeking from familiar adults yet also continue to approach and engage strangers nonselectively.

BOX 2. Disinhibited social engagement disorder diagnostic criteria

1. Child exhibits a pattern of behavior involving actively approaching and interacting with unfamiliar adults and at least two of the following:

Decreased or absent hesitation in approaching and interacting with unfamiliar adults

Overly familiar verbal or physical behavior

Does not check back with adult caregiver after venturing away, even in strange settings

2. The behaviors in #1 are not the result of impulsivity (as in attention deficit hyperactivity disorder) but include socially disinhibited behavior

3. Child has experienced a pattern of extreme insufficient care and at least one of the following:

Ongoing social neglect and lack of having basic emotional needs for comfort, stimulation, attention, and affection met by caregivers

Multiple changes of primary caregivers such that opportunities to form attachments are limited
Rearing in unusual settings that severely limits opportunities to form selective attachments

4. Experiencing the pattern of insufficient care resulted in the symptoms listed in #1 and #2

5. The child has a developmental age of at least 9 months

Note. Adapted from the *American Psychiatric Association (2013)*.

There are symptoms of DSED that overlap with those of attention deficit hyperactivity disorder (ADHD). The socially inhibited behavior of DSED must be distinguished from the impulsivity of ADHD. Although disinhibition may be common to both ADHD and RAD, studies suggest that the behavior may result from distinctly different underlying pathologic mechanisms (Kay & Green, 2013). Mizuno et al. (2015) suggest that a more severe dopaminergic dysfunction exists in children with DSED than in those with ADHD.

As with RAD, DSED may co-occur with language delays, cognitive delays, and stereotypies (APA, 2013). DSED is predictive of functional impairment, difficulties forming close relationships, and more need for special education services due to the social, cognitive, and behavioral abnormalities of the disorder (Smyke et al., 2012). Other signs of severe neglect may be noted, such as malnutrition. Unlike RAD, symptoms of DSED may persist even when neglect concerns have been alleviated. DSED may be seen in children who have suffered social neglect who lack attachments or whose attachments to their caregivers vary from disturbed to secure (APA, 2013). DSED is less responsive to a normative caregiving environment than RAD. Although improving the caregiving environment can moderate the course of DSED, some children show persistent signs of the disorder extending into adolescence.

RISK FACTORS

Experiencing serious emotional neglect or insufficient care early in life (before age 3 years) is the essential element for the development of attachment disorders (APA, 2013). Factors that interfere with a caregiver's ability to consistently meet the emotional and physical needs of an infant are risk factors for the development of attachment disorders. Factors that impede the availability of a consistent caregiver are also risk factors for attachment disorders. See Box 3 for risk factors.

Historically, attachment disorders were

Factors that interfere with a caregiver's ability to consistently meet the emotional and physical needs of an infant are risk factors for the development of attachment disorders.

studied in institutionalized children deprived of a consistent primary caregiver. The link between attachment disorders and institutionally raised infants has been firmly established (Ainsworth, Blehar, Waters, & Wall, 1978; Bakermans-Kranenburg et al., 2011; Lionetti, Pastore, & Barone, 2015). However, even among this very high-risk group of infants, differences in attachment disorder development have been noted. Smyke, Dumitrescu, and Zeanah (2002) found increasing signs of RAD and DSED in institutionalized young children on a unit with an unrestricted number of caregivers when compared with children in the same institution on a unit with a restricted number of caregivers. Institutional care places a child at increased risk to develop an attachment disorder; however, variability exists in that risk.

BOX 3. Risk factors for attachment disorders

Factors that impede the availability of a consistent caregiver

- Institutional care
- Frequent foster care placements and/or changes in placements
- Loss of parent/caregiver
 - Death
 - Imprisonment
 - Abandonment

Factors that interfere with the caregiver's ability to meet the infant/young child's needs

- Parental/caregiver insecure attachment style
- Mental health concerns
 - Prenatal depression
 - Postpartum depression
 - Depression
 - Anxiety
 - Bipolar disorder/schizophrenia
 - Other mental health diagnosis
- Substance abuse concerns
- Intimate partner violence
- Physical health concerns
- Separation/divorce
- Presence of child maltreatment (multiple types are frequently simultaneously experienced)
 - Neglect (emotional and physical)
 - Sexual abuse
 - Physical abuse
 - Emotional abuse
 - Medical child abuse

Note. Adapted from Zeanah, Chesher, Boris, & American Academy of Child and Adolescent Psychiatry Committee on Quality Issues (2016).

Unfortunately, attachment disorders can also develop in family-reared children if they experience seriously adverse, neglectful caregiving environments (Gleason et al., 2011; Pears, Bruise, Fisher, & Kim, 2010; Zeanah & Gleason, 2015). As we begin to understand more about the

neurodevelopmental processes involved in attachment, a shift has been made to note the increased importance of the prenatal period (Chambers, 2017). Although psychological interaction between mother and infant does not develop prenatally, studies show that an infant is born with a preference for his/her mother's smell, milk, and voice (Vaglio, 2009). Maternal prenatal depression has been associated with disorganized (insecure) attachment styles at 12 months (Hayes, Goodman, & Carlson, 2013). Interventions to ensure that prenatal depression does not continue into postpartum depression are crucial. Studies indicate that higher-quality caregiving in the first 3 months of life can decrease the risk of disorganized attachment due to prenatal depression (Hayes et al., 2013). This suggests that an interplay between the prenatal period and the first 3 months of life, which is crucial for attachment (Chambers, 2017).

Experiencing child maltreatment places a child at risk for attachment disorders. Any one type of child maltreatment—sexual abuse, physical abuse, emotional abuse, and neglect (physical and emotional)—rarely occurs in isolation, placing a child at yet increased risk of experiencing insufficient care (Jackson, Kissoon, & Greene, 2015). Familial psychosocial risk factors diminish a caregiver's ability to adequately meet the needs of a young child, placing the child at increased risk of developing an attachment disorder as well as experiencing child maltreatment (Hornor, 2013; Zeanah & Gleason, 2015). These familial psychosocial risk factors include parental mental health concerns, parental drug and/or alcohol concerns, intimate partner violence, and parental separation and divorce. Placement into foster care, a potential consequence of experiencing child maltreatment, also increases the risk of young children developing an attachment disorder, especially if multiple foster care placement/disruptions occur. Symptoms of attachment disorders, especially DSED, may be more strongly related to the number of placements into foster care or the number of disruptions while in foster care than to the severity of child maltreatment experienced because of both resulting in the lack of a stable, consistent caregiver (Lehmann, Breivik, Heiervang, Havik, & Havik, 2016). Zeanah et al. (2004) examined the rate of attachment disorders in maltreated children in foster care in the United States. Based on DSM-IV diagnostic criteria for RAD (at that time defined as *inhibited* and *disinhibited* types) 38% of the children ($n = 94$) were identified as meeting RAD diagnostic criteria at 10 to 47 months. Findings indicated that 35% exhibited the inhibited type, 22% the disinhibited type, and 17% a mixed version (Zeanah et al., 2004). Overall, a greater number of changes in foster care placements was found to be more closely associated with development of RAD than a greater length of time in foster care. Sex, ethnicity, and time in foster care did not seem to be related to the type of RAD exhibited by the child. Maternal mental health disorders were associated with both inhibited and disinhibited RAD, whereas maternal substance abuse was associated with only the disinhibited type (Zeanah et al., 2004).

CONSEQUENCES

It is important to understand that the symptoms of attachment disorders and the long-term consequences exist on a continuum. Children with attachment disorders exhibit a varying capacity to form and sustain relationships and demonstrate emotional depth (Zeanah, Chesher, Boris, & American Academy of Child and Adolescent Psychiatry Committee on Quality Issues, 2016). Children with attachment disorders tend to develop superficial relationships and experience a higher level of peer conflict. Trust is essential for the development of secure, healthy relationships. A sense of trust in family and peers is primarily based on environmental factors (Miellet, Valdara, Gillberg, Raju, & Minnis, 2014). Having the ability to trust can decrease the likelihood of problems such as isolation, bullying, and depression (Sakai, 2010). Trust also promotes prosocial behaviors, including caring and helpfulness (Rotenberg, MacDonald, & King, 2004) and academic achievement (Goddard, 2003). Children with attachment disorders have problems with trust. Those with the RAD type have difficulty truly trusting anyone, even a kind, consistent caregiver, whereas those with DSED trust indiscriminately, and this poor judgement places them at increased risk for physical, sexual, and emotional harm (Miellet et al., 2014). Children with attachment disorders also lack empathy (Zeanah et al., 2016). Empathy is important to forming deep and lasting relationships.

Attachment disorders have been linked to a variety of mental and physical health consequences extending into adulthood. Fan et al. (2014), in a 30-year prospective study of infants exhibiting insecure attachment at 8 months of age, found insecure attachment to be linked with a higher risk for mental health concerns at age 30 years. Insecure attachments have been linked with depression, anxiety, and substance abuse (Heim & Nemeroff, 2001). Adult separation anxiety, a symptom of attachment dysregulation, is common in adults with anxiety disorders, especially those that are nonresponsive to treatment (Milrod et al., 2016; Newman, Castonguay, Jacobson, & Moore, 2015).

Numerous physical health morbidities have been linked to insecure attachment, including chronic pain, cardiovascular disease, and inflammatory diseases (Davies, Macfarlane, McBeth, Morriss, & Dickens, 2009; McWilliams & Bailey, 2010; Puig, Englund, Simpson, & Collins, 2013). Insecurely attached individuals were also found to be three times more likely to have nonspecific physical complaints (Puig et al., 2013). Insecure attachment in young children can affect the quality of an individual's relationships for a lifetime. A lack of close relationships has been associated with poorer adult health behaviors: tobacco use, other substance use, obesity, and inactivity (Puig et al., 2013). These negative health behaviors correlated with negative health consequences, including diabetes, cardiovascular disease, and stroke (Puig et al., 2013).

Attachment insecurity can lead to mental and physical health consequences later in life via several neurobiological mechanisms, including the stress response, inflammatory responses, neurocircuitry changes, and epigenetics (Chambers,

2017). By diagnostic criteria, individuals with attachment disorders (RAD or DSED) have experienced severe emotional and or physical neglect very early in life. These individuals have experienced profound trauma, very similar to that experienced by participants of the Adverse Childhood Experiences Study, where childhood exposure to child maltreatment, domestic violence, caregiver drug or alcohol concerns, caregiver mental health diagnosis, and parental separation and divorce were linked to a variety of negative adult physical and mental health consequences in a dose-related exposure gradient (Felitti et al., 1998). Numerous studies have solidified the link between experiencing adverse childhood experiences and adult mental and physical health disease (Anda et al., 2006; Felitti et al., 1998).

TREATMENT

The most important intervention for young children diagnosed with RAD or DSED is ensuring a consistent, sensitive caregiver who is emotionally invested in the child and emotionally available to the child (Zeanah et al., 2016). Children with RAD do not have secure attachments to adult caregivers. Although some children with DSED will have healthy secure attachments to foster or adoptive parents, many have no true secure attachments, only insecure attachments. In children with RAD or DSED who lack secure attachments, forming robust and healthy attachments is the first priority of treatment (Zeanah et al., 2016). The child and caregiver should be linked with a pediatric mental health provider skilled in the assessment and treatment of attachment disorders. Therapy will focus on the tenet that the caregiver's sensitively attuned behavior serves to help the child develop an internal sense of security (Zeanah et al., 2016). First, the mental health provider will work through the caregiver, helping the caregiver manage the child's behavior and addressing the caregiver's own feelings of anxiety, frustration, or anger with the difficult-to-connect-with child. Caring for a child who does not connect with the caregiver can be very labor intensive and unrewarding. It is not unusual for a caregiver to feel disconnected to the child and to feel anger or frustration (Zeanah et al., 2016). To further interfere with the child's attachment behaviors, discipline can become harsh and disciplinarian. The mental health provider will assist the caregiver in working through these feelings and becoming consistently emotionally available to the child. Therapy with the child and primary caregiver, dyadic interactive therapy, is often used to address symptoms of RAD (Zeanah et al., 2016). For young children with DSED, limiting contacts beyond immediate family for the first several months after a new placement may be helpful in reducing or eliminating indiscriminate behavior (Zeanah et al., 2016). Psychopharmacological intervention is not indicated for RAD or DSED. However, children with comorbid disorders, such as ADHD, anxiety, or mood disorders, may benefit from medication to treat these disorders. Non-traditional attachment therapies that involve non-contingent physical restraint or coercion, "reworking" of trauma,

or promotion of regression for “reattachment” have no empirical support and have been associated with serious harm, even six child deaths (Zeaneh et al., 2016).

IMPLICATIONS FOR PRACTICE

Pediatric health care provides a unique vehicle for the early identification of children at risk for attachment disorders and, therefore, an avenue to prevention. Attachment disorders typically begin developing very early in life. Infants and toddlers require frequent health care visits before the age of 2 years. This affords the PNP with an opportunity to identify those families with psychosocial dysfunction that predisposes their child/children to developing an attachment disorder, provide necessary intervention to address concerns, and prevent the development of an attachment disorder. The consistent encouragement of positive parenting practices, beginning with the first newborn well-child visit, is crucial (Seay, Freysteinson, & McFarlane, 2014), and should include screening for maternal postpartum depression, assessment for any compromise of mother/infant bonding and maternal ability to care for the infant, and linking with appropriate mental health resources (Chambers, 2017). Encourage parents/caregivers to talk to their babies, stress the importance of eye contact, and holding their babies for feedings. Discuss cuddling—touch is important for an infant’s development. As children grow and develop, providers should make sure that parents understand realistic behavioral expectations for each developmental level. Non-physical methods of discipline should be encouraged (Global Initiative to End All Corporal Punishment of Children, 2015), and parental praise of good behavior, which is a powerful tool in shaping positive behavior (Seay et al., 2014), should be emphasized.

PNPs must know patients psychosocial histories as thoroughly as their medical histories (Box 4; Hornor, 2013). They should be open and without judgement when screening and should explain that these are problems that affect many families and that all families are screened for these concerns. It is also important that they understand a parent/caregiver’s trauma history and their resolution of that trauma exposure. Parent/caregiver processing of their own trauma histories is important for them to be a safe haven for the child (Walker, 2008). Families should be linked with appropriate interventions to address identified concerns, and providers should monitor parental follow-through with suggested interventions (Hornor, 2013). If screening results show a concern for child maltreatment, a report to child protective services is always indicated. The goal of child protective services involvement is to ensure the safety of the child while strengthening the family unit to better care for the child (Sattler & Font, 2018).

Unfortunately, there are situations in which egregious abuse and/or neglect have occurred, necessitating placement into foster or kinship care. These children are at increased risk for the development of an attachment disorder (Follan & McNamara, 2013). Each subsequent change in placement, return to parental care, re-entry into foster

BOX 4. Psychosocial assessment

1. Family tree
 - a. Who is living in the home with the child?
 2. Previous or current familial involvement with child protective services
 3. Previous or current parental/caregiver involvement with law enforcement
 4. Parental/caregiver employment/financial concerns
 5. Parental/caregiver drug/alcohol use
 6. Parental/caregiver mental health concerns
 - a. Low functioning
 - b. Anxiety
 - c. Depression
 - d. Other diagnosis
 - e. Mental health/psychiatric medications
 7. Interpersonal violence/domestic violence
 8. Maternal/paternal/caregiver
 - a. Sexual abuse as a child
 - b. Physical abuse as a child
 - c. Involvement with child protective services as a child
 9. Familial strengths/social supports
- Note. Adapted from Hornor (2013).

care, or disruption of a foster or kinship placement, which results in placement with yet another caregiver, increases that child’s risk of developing an attachment disorder. The PNP working with children in kinship and/or foster care must not only assess the safety of the child in that care setting but also ensure that the caregiver is provided with the necessary resources to successfully care for the child (Hornor, 2014). Discuss the potential impact of the child’s trauma exposure on his/her behavior. Stress the importance of consistent, developmentally appropriate behavioral expectations and the importance of discipline that is not physically or emotionally harsh. Link the child with the appropriate mental health interventions to meet his/her needs, such as trauma-focused mental health care.

The PNP may also be providing care to children who have been adopted. Not all adopted children are at risk for attachment disorders. However, there are factors that increase the risk for attachment disorders in adopted children such as adoption at an older age, international adoption with a history of institutional care, multiple foster care placements, and severe social neglect (Follan & McNamara, 2013). Other children are also at high risk for attachment disorders, such as those who have experienced multiple changes of placement between biological, foster, and kinship care and even those who have remained with biological parents but have suffered severe social neglect in that setting (Smyke, 2015).

The PNP must be able to recognize symptoms of attachment disorders in these high-risk children. Unfortunately, there are no validated screening tools for either RAD or DSED. When the PNP is caring for a young child with a history of severe social neglect of any source, a few screening questions should be asked to determine if the child shows appropriate attachment behaviors with their primary

caregivers and shows appropriate reticence with strangers (Zeanah et al., 2016). See Box 5 for attachment screening questions. The PNP should note that a history of recent and severe neglect should exist to consider RAD in a child older than 5 years of age (Zeanah et al., 2016), because once children with RAD are placed with a loving and attentive caregiver, signs of the disorder typically dissipate (Gleason et al., 2011). On the other hand, symptoms of DSED can persist for years, even after the child has formed relationships with a loving family (Smyke et al., 2012). If screening questions show concern for a possible attachment disorder in a child with a history of suffering severe emotional neglect at a young age, a referral should be made to a pediatric mental health care provider skilled in the assessment and treatment of attachment disorders.

BOX 5. Attachment disorder screening questions

Children 5 years of age and younger

1. Does your child turn to you (parent figure) for comfort, attention, nurturance, and support over other adults?
2. Does your child seek comfort from strangers or little-known adults as easily as from you?
3. Is your child wary of strangers?
4. In unfamiliar environments, does your child protest if you leave?

DSED in older children and adolescents

1. Does your child form “close” relationships quickly with new acquaintances?
2. Does your child appear to demonstrate indiscriminate relationships?

Note. From Zeanah, Cheshner, Boris, & American Academy of Child and Adolescent Psychiatry Committee on Quality Issues (2016).

Pediatric health care providers, especially PNPs, can make a difference in the lives of children at risk for the development of attachment disorders. By understanding the importance of attachment and embracing practice behaviors that address the importance of consistent loving caregiving, the PNP can help prevent attachment disorders in all children. Screening all families for psychosocial risk factors that can impede secure attachment and providing appropriate intervention to address identified risk factors can help to prevent attachment disorders in a

By understanding the importance of attachment and embracing practice behaviors that address the importance of consistent loving caregiving, the PNP can help prevent attachment disorders in all children.

potentially higher-risk population. Finally, PNPs must be aware of symptoms of insecure attachment and understand that children who have experienced severe social neglect at a young age are at particular risk for the development of attachment disorders. Timely linkage of these children and caregivers with appropriate treatment for attachment disorders can be the crucial first step in healing and forming life-long secure and healthy relationships.

SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found in the online version at <https://doi.org/10.1016/j.pedhc.2019.04.017>.

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CE QUESTIONS

- Fundamental tenets of attachment theory include which of the following?
 - Human beings are designed to connect with others emotionally.
 - Early experiences with an infant's mother or other primary caregiver can affect later relationships.
 - Although the social development of a child may be negatively affected by severe social neglect early in life, cognitive development is rarely affected.
 - All the above
 - A and B
- Which of the following attachment styles are insecure?
 - Avoidant
 - Abusive
 - Anxious
 - Disorganized
 - All the above
 - A, C, and D
- Which of the following are true regarding reactive attachment disorder (RAD)?
 - Absent or aberrant attachment behaviors are present across settings.
 - Depressive symptoms may co-occur.
 - Behaviors can mimic autism.
 - All the above
 - A and C
- Which of the following is true regarding disinhibited social engagement disorder?
 - Symptoms typically dissipate with placement with a stable, loving caregiver.
 - The child lacks appropriate social and physical boundaries.
 - The child often engages in self-soothing behaviors.
 - All the above
 - B and C
- Experiencing serious emotional neglect or insufficient care at any point before the age of 18 years is the essential element for the development of attachment disorders.
 - True
 - False
- Which of the following are risk factors for the development of an attachment disorder?
 - Institutionalized care before the age of 3 years
 - Placement in foster care
 - Child maltreatment
 - Parental drug or alcohol concerns
 - All the above
 - A and D
- Which of the following statements is true regarding the consequences of attachment disorders?
 - They exist on a continuum.
 - They involve problems with trust.
 - They are characterized by lack of empathy.
 - The development of superficial relationships is common.
 - All the above
 - B and C
- Evidence-based treatment modalities for attachment disorders include which of the following?
 - Anti-depressant medications
 - Dyadic interactive therapy

- c. Reworking of trauma
 - d. All the above
9. Interventions that can assist in the prevention of attachment disorders include which of the following?
- a. Consistent encouragement of positive parenting from infancy through adolescence
 - b. Screening families for psychosocial risk factors and linking them with appropriate intervention
 - c. Prompt identification and reporting of child maltreatment
 - d. Screening of high-risk children for attachment disorders
 - e. All the above
 - f. B and C
10. Many validated tools exist to screen for an attachment disorder.
- a. True
 - b. False

Answers available online at ce.napnap.org.