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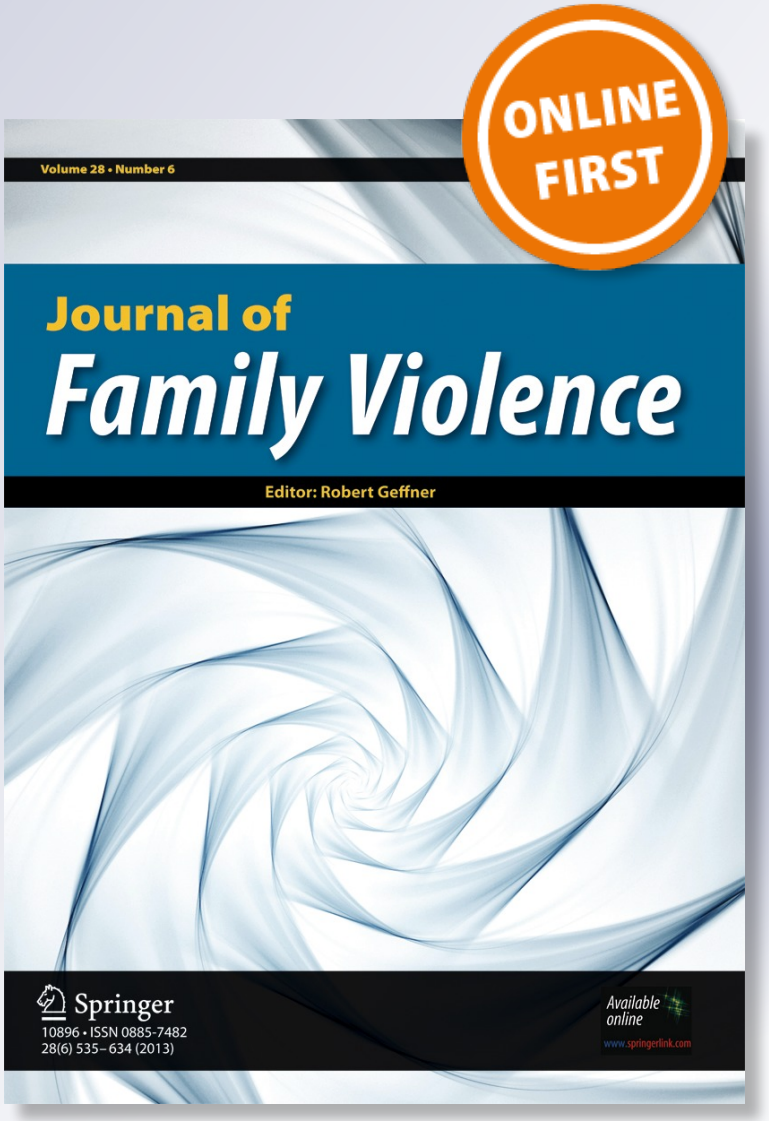

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CONCEPTUALIZATION & TRAUMA-INFORMED ISSUES

Traumatized Youth in Residential Treatment Settings: Prevalence, Clinical Presentation, Treatment, and Policy Implications

Amanda D. Zelechoski · Ritu Sharma · Kari Beserra · Jennifer L. Miguel · Mia DeMarco · Joseph Spinazzola

Abstract Children and adolescents with histories of traumatic exposure comprise a substantial portion of youth in residential treatment programs. However, until recently, little has been known about this specific population. Given the well-documented unique treatment considerations for traumatized youth, it is important to understand how the distinct needs of this population factor into the particular residential treatment setting approach. This paper presents a comprehensive overview of the current understanding of this vulnerable youth population, the impact trauma exposure can have on their clinical presentation and response to treatment, and the available empirical research regarding effective intervention strategies. In addition, policy implications specific to traumatized youth receiving treatment in residential settings are discussed.

Keywords Complex trauma · Residential treatment · Posttraumatic stress · Developmental trauma · Continuum of care

Youth with severe emotional and behavioral problems are often treated in out-of-home or residential treatment programs when they are unable to be managed in less restrictive settings, such as therapeutic foster homes or community-based programs. This is particularly true for youth who have histories of trauma exposure or maltreatment, including neglect. Until recently, little has been specifically known or studied about traumatized youth receiving treatment in residential treatment programs. Given that the majority of youth in residential treatment settings have histories of trauma exposure (Briggs et al. 2012; Jaycox et al. 2004), it is important to consider the unique characteristics of these youth, the impact trauma exposure can have on their response to treatment, and the available empirical research regarding effective strategies for intervention. In addition, commentators have emphasized the importance of ensuring the appropriateness of residential treatment for traumatized youth given its restrictiveness and substantial expense (e.g., Bates et al. 1997; Boyer et al. 2009).

Traumatized Youth in Residential Treatment Settings

Substantial research exists on youth in residential treatment programs and on youth who have had traumatic experiences; however, there is considerably less information available about youth for whom these phenomena converge. In 2003, 65,949 youth were in residential care, of which 42,015 were reported to be in residential treatment programs as opposed to other out-of-home care (Warner and Pottick 2003). Researchers have noted that the number of children and adolescents admitted to residential treatment programs has increased significantly since 1980, despite a national movement towards non-residential or community-based mental health treatment of seriously emotionally disturbed children (Connor et al. 2004). Traumatized youth make up a substantial portion of youth in residential treatment programs with reported rates as high as 71 % (Jaycox et al. 2004).

Demographic Characteristics

A fair amount of research has been conducted examining the specific demographic characteristics of youth placed in

A. D. Zelechoski (✉)
Department of Psychology, Valparaiso University,
1001 Campus Drive, Valparaiso, IN 46383, USA
e-mail: amanda.zelechoski@valpo.edu

R. Sharma
Tufts University, Medford, MA, USA

K. Beserra · J. L. Miguel · M. DeMarco
Justice Resource Institute, Needham, MA, USA

J. Spinazzola
Trauma Center at Justice Resource Institute, Brookline, MA, USA

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residential treatment programs (e.g., Baker et al. 2009; Child Welfare League of America 2005; Connor et al. 2004; Griffith et al. 2009; Warner and Pottick 2003). One large-scale national study (Warner and Pottick 2003) found that approximately 75 % of youth in residential treatment programs are between the ages of 13 and 17 and there tended to be a higher representation of male (61 %) and White youth (65 %), as compared to Black (21 %) or Hispanic (12 %) youth. Although generally consistent with United States population demographics (http://www.childstats.gov/americaschildren/demo.asp), these findings are surprising given the high prevalence rates of Black and Hispanic youth typically found in social service and juvenile justice programs (Warner and Pottick 2003).

A recent study (Briggs et al. 2012) focused specifically on traumatized youth found a higher rate of females (66 %) in residential treatment programs, which is not surprising given the well-established higher prevalence rate of traumatic exposure among female youth (Collin-Vézina et al. 2011; Connor et al. 2004). Notably, Briggs and colleagues (2012) found similar racial prevalence rates among traumatized youth in residential treatment (i.e., White: 66.5 %, Black: 21 %, and Other: 12 %).

Trauma History

Research suggests rates of trauma exposure among youth in residential treatment programs ranging from 50 % to over 70 % (e.g., Bettmann et al. 2011; Jaycox et al. 2004; Warner and Pottick 2003) When youth in residential treatment settings are compared with youth receiving non-residential community-based treatment, Briggs and colleagues (2012) recently found that 92 % of traumatized youth in residential care reported experiencing multiple traumatic events, compared to 77 % of traumatized youth not in residential care. Specifically, they found the mean number of traumatic events for traumatized youth in residential care was 5.8 exposures, compared to 3.6 for traumatized youth not in residential care. Another study examining co-occurring types of maltreatment for youth in residential treatment and revealed that 20 % of youth experienced sexual abuse only, 36 % experienced sexual and physical abuse, 9 % experienced sexual abuse and neglect, and 36 % experienced all three types (Baker et al. 2006).

Consistent with the child and adolescent trauma literature (Griffin et al. 2009), research varies in terms of the most prevalent types of trauma exposure. Hussey and Guo (2002) found that childhood neglect was the most prevalent type of traumatic exposure among youth in residential treatment programs (69 %), followed by physical abuse (63 %) and sexual abuse (47 %). Similarly, another study found high levels of neglect (51 %), physical abuse (42 %), and sexual abuse (18 %) for youth in residential care (Dale et al. 2007). Baker and colleagues (2006) found that slightly less than one in three children in a residential treatment program had a documented history of sexual abuse. Likewise, compared to youth in therapeutic foster care, Boyer and colleagues (2009) found that children placed in residential treatment programs are significantly more likely to have histories of sexual abuse.

In contrast, Briggs and colleagues (2012) found prevalence rates of trauma types in a sample of over 500 youth in residential treatment as follows: emotional abuse (68 %), traumatic loss/bereavement (62 %), impaired caregiver (60 %), domestic violence (58 %), physical abuse (54.5 %), sexual abuse (40 %), community violence (31 %), and school violence (20 %). Additional types of trauma exposure are also highly prevalent among youth in residential treatment settings including witnessing community violence, school bullying and violence exposure, and physical assault by peers (Singer 2007). Perhaps even more concerning, Dale and colleagues (2007) found that traumatized youth in residential treatment were significantly more likely to have been psychiatrically hospitalized, taken psychotropic medications, and have histories of juvenile delinquency and substance abuse than were youths admitted to the same residential program ten years earlier.

With respect to gender differences among traumatized youth in residential treatment programs, Connor and colleagues (2004) found that girls were more likely to have been physically abused (60 %) and sexually abused (64 %) than were boys (43 % and 27 %, respectively), and Collin-Vézina and colleagues (2011) found that girls had higher rates of sexual abuse and trauma symptoms and were more likely to exhibit problematic sexualized behavior. Girls were also more likely to have experienced both sexual and physical abuse (46 %) than were boys (18 %). Similarly, Boyer and colleagues (2009) highlighted research demonstrating the significantly higher likelihood of females in residential treatment programs to have histories of emotional abuse and sexual abuse than do their male counterparts. In that study, gender differences also emerged with respect to perpetrators: 59 % of girls were abused by a parent or caregiver, compared to 43 % of boys (Connor et al. 2004).

Family History

Additional robust trends observed for youth placed in residential treatment programs are related to family characteristics. Griffith and colleagues (2009) summarized the research to date as follows: youth in residential treatment programs tend to enter the program from a setting other than their biological family home (e.g., state protective services), come from families who live in a variety of geographical locations (e.g., in the same state or different states), and have families who engage in a number of risk behaviors (e.g., substance abuse, criminal involvement). More specifically, for youth in residential treatment programs, 60 % of youths' caregivers had substance abuse problems, almost 15 % had a history of psychiatric problems, and almost 20 % had been incarcerated (Baker et al. 2005; Griffith et al. 2009).

Accordingly, in their examination of admission data for 566 youth in a residential treatment program, Griffith and colleagues (2009) found that 84 % of youth had experienced at least one prior out-of-home placement and 35 % were classified as dependent (i.e., wards of the state). They also found that the families of most of these youth experienced a high number of risk factors including substance abuse problems (51 %), use of inappropriate discipline (47 %), parental abandonment (42 %), parental neglect (39 %), parental marital/relationship problems (38 %), parental arrest or incarceration (30 %), mental health issues of family member (24 %), domestic violence (23 %), parental abuse (23 %), parental unemployment (17 %), and family isolation (11 %).

Clearly, there exists substantial overlap in terms of demographic, clinical, and family characteristics among youth receiving treatment in residential care settings. However, the most striking commonality for these youth may be the extremely high prevalence of traumatic exposure (Spinazzola et al. 2013). Accordingly, Boyer and colleagues (2009) emphasized the notion that, when research findings reveal a prominent characteristic in a treatment population, such as the high prevalence of trauma exposure in youth in residential treatment programs, it is indicative of the type of care necessary in order for this population to improve.

Diagnostic and Treatment Considerations for Traumatized Youth in Residential Treatment Settings

Given the notable differences highlighted above between youth in residential treatment programs with and without histories of traumatic exposure, it is important to examine the range of unique problems and challenges this specific population poses to treatment providers and systems of care. It is well established that the high level of victimization and traumatic exposure for youth in residential treatment programs is often underreported and, thus, underestimated (Singer 2007). Consequently, careful assessment and detailed clinical information gathering is crucial to understanding the unique symptom presentation of these youth and implementing appropriate and effective interventions.

Psychiatric Diagnoses

It is well-established that the prevalence of particular psychological disorders in youth in residential treatment settings far exceeds the prevalence found in youth in the community. For example, in a large sample of youth in residential treatment, Connor and colleagues (2004) found that 49 % of youth were diagnosed with a disruptive behavior disorder (e.g., conduct disorder, attention-deficit/hyperactivity disorder (ADHD)) and 31 % were diagnosed with affective or anxiety disorders. These prevalence rates contrast the ADHD rates of 3 % to 12 %, conduct disorder rates of 6 % to 16 %, and depression rates of up to 8 % found in community samples of youth (Connor et al. 2004).

Compared to children receiving any type of mental health services, youth in residential treatment programs tend to have a higher prevalence of family problems (72 %), school problems (57 %), skills deficits (22 %), aggression (66 %), delinquent behavior (34 %) and substance abuse problems (31 %) (Warner and Pottick 2003). Almost all youth (92 %) in residential treatment receive more than one psychiatric diagnosis (Connor et al. 2004), and the vast majority are prescribed at least one psychotropic medication (Baker et al. 2007) and have had at least one prior psychiatric hospitalization (Baker and Curtis 2006). In addition, 40 % of youth in the residential treatment program surveyed by Connor and colleagues (2004) were diagnosed with a medical problem such as asthma, obesity, seizure disorders, and other neurological conditions. Somatic symptoms also tend to be highly prevalent among traumatized youth, further complicating the diagnostic picture (Kugler et al. 2012). Regarding the prevalence of substance use problems, Baker and colleagues (2009) reported that 33.6 % of youth in residential placements had used illicit drugs, as compared to 21.7 % of youth with no child welfare involvement. Notably, Garland, Pettus-Davis, and Howard (2013) found that self-medication (i.e., substance use) acted as a mediator between trauma and psychological symptoms, reinforcing the importance of accurately assessing substance use concurrent with diagnostic conceptualization and subsequent treatment planning.

For traumatized youth in residential treatment programs, one of the most salient challenges that emerges is appropriate psychiatric diagnosis. Because of the vast discrepancy in the way traumatized children display emotional and behavioral difficulties, it is increasingly difficult for providers to diagnostically classify these youth in the way that current psychiatric and medical systems require. Some experts have emphasized the need for a better system of classifying the problems of youth in residential treatment programs and highlighted the mismatch between youth's mental health needs and the services they are often provided in these settings (Lyons et al. 1998). Others have suggested that one of the reasons for the substantial diagnostic discrepancy may be the absence of inadequacy of screening for trauma-related symptomatology (Miele and O'Brien 2010).

Given the degree to which many traumatized children demonstrate symptoms such as irritability, impulsivity, anger, aggression, learning problems, and difficulties with attachment (Levin 2009; Zegers et al. 2008), among a myriad of other emotional and behavioral issues, it is not surprising that these youth receive numerous and varied diagnoses throughout their involvement with child welfare systems (D'Andrea et al. 2012). One study of youth in a residential treatment program—the majority of whom (71 %) had experienced at

least one traumatic episode—found that the most prevalent psychiatric issues were behavioral disorders (43 %), followed by posttraumatic stress disorder (PTSD; 39 %), ADHD (34 %), mood and anxiety disorders (32 %), and psychotic disorders (14 %; Boyer et al. 2009). In that study, Boyer and colleagues also found that children who were exposed to two or more forms of trauma were significantly more likely to carry a PTSD diagnosis than were children with exposure to one or no types of trauma.

It is somewhat surprising then, that PTSD is not the most common psychiatric diagnosis in children with histories of chronic trauma exposure (D'Andrea et al. 2012; van der Kolk 2005). Rather, traumatized youth often meet diagnostic criteria for a host of other psychiatric disorders including depression, ADHD, oppositional defiant disorder (ODD), conduct disorder, anxiety disorders, eating disorders, sleep disorders, communication disorders, separation anxiety disorder, and reactive attachment disorder (Cook et al. 2005). One study found that the most common diagnosis in a large sample of abused children was separation anxiety disorder, followed by ODD, phobic disorders, PTSD, and ADHD (Ackerman et al. 1998). As chronically traumatized youth get older, research indicates they are more susceptible to additional psychiatric disorders including substance abuse, borderline personality disorder, antisocial personality disorder, eating disorders, dissociative disorders, affective disorders, somatoform disorders, and cardiovascular, metabolic, immunologic, and sexual disorders (van der Kolk 2003, 2005) as well as neurobiological deficits (D'Andrea et al. 2012; Perry 1994).

However, some commentators (e.g., D'Andrea et al. 2012; Levin 2009; van der Kolk 2005) have expressed concern about the tendency for these youth to receive numerous comorbid diagnoses, as a result of the PTSD diagnosis' failure to fully capture traumatized youths' emotional and behavioral symptoms. For example, van der Kolk (2005) observed, "Many problems of traumatized children can be understood as efforts to minimize objective threat and to regulate their emotional distress. Unless caregivers understand the nature of such re-enactments, they are likely to label the child as" "'oppositional,' 'rebellious,' 'unmotivated,' or 'antisocial'" (pp. 403–404). He further cautioned that incorrectly attributing trauma-related symptomatology to disparate conditions can result in implementing inappropriate or inadequate interventions.

Similarly, Levin (2009) emphasized the high frequency of misdiagnosis in residential facilities and the inability or failure of many providers to distinguish symptoms of other disorders from a child's reaction to trauma. He also critiqued the failure of PTSD to account for the differing developmental impact of early childhood traumatic exposure, particularly when the trauma is chronic and involves caregivers. As such, Levin and others (e.g., D'Andrea, et al. 2012) have endorsed van der Kolk's conceptualization of Developmental Trauma Disorder (van der Kolk 2005) as a diagnostic alternative to PTSD for children exposed to chronic and pervasive maltreatment. This proposed diagnosis: 1) broadens the definition of a traumatic event to include neglect, emotional abuse, and traumatic loss, 2) accounts for the differential impact of multiple exposures to interpersonal trauma (e.g., abandonment, witnessing domestic violence, physical or sexual abuse), and 3) takes into account the individual's altered attributions and expectancies as a result of the trauma (van der Kolk 2005). Similarly, Hillary and Schare (1993) examined children and adults diagnosed with PTSD and observed that children present a different form of PTSD than do adults, which can play a substantial role in this misdiagnosis phenomenon.

High-Risk Behaviors

It is well-documented that traumatic experiences interfere with normal child development and may result in behavioral responses such as aggression, avoidance, or dissociation (Ford and Hawke 2012; Griffin et al. 2009; Perry 1994; Pynoos et al. 1997). Griffin and colleagues (2009) noted these behaviors may be considered adaptive in that they facilitate the individual's survival during the traumatic situation; however, such responses can become problematic when relied upon in other situations, such as within the context of a residential treatment program. When youth engage in high-risk behaviors such as violence toward self or others, delinquent or reckless behavior, and substance abuse, it is often attributed to one or more mental health disorders, as opposed to their traumatic experiences. However, history of trauma exposure is highly correlated with high-risk behavior (D'Andrea et al. 2012; Griffin et al. 2009). This is an important relationship to bear in mind, given the substantial impact such behavior can have on placement (i.e., requiring the higher level of care provided by a residential treatment program). Griffin and colleagues (2009) stressed the robust relationship between the number of types of trauma experiences and severity of behavior; specifically, the more trauma exposure types, the greater the likelihood of high-risk behavior.

Problematic sexualized behaviors represent a specific type of high-risk behavior that is especially prevalent among traumatized youth, particularly those that have experienced sexual abuse. Baker and colleagues (2001) evaluated children in foster homes, a residential treatment program, and in the community and found that problematic sexualized behaviors were more prevalent in the residential treatment center sample than they were in the community or foster home samples. In addition, children who demonstrated problematic sexualized behaviors were more clinically disturbed, had more instances of prior trauma exposure, and were more negatively perceived by caregivers. The authors of this study noted that children who engaged in problematic sexualized behavior put themselves and their peers at an increased risk of harm because of their disturbing behaviors. They also emphasized this is

particularly problematic in residential treatment settings because staff are not typically trained to effectively handle these challenging and triggering behaviors (Baker et al. 2001). They summarized this vexing problem by stating, "Children's sexual behaviors may be confusing, disturbing, and provocative for substitute caregivers…Clearly, such feelings are problematic in the context of an adult-child relationship as they are antithetical to the development of a positive attachment relationship" (p. 22). Similarly, Biswas and Vaughn (2011) found a significant association between trauma exposure, inpatient treatment, and risky sexual behavior among juvenile offenders, particularly for female youth.

Differential Impact of Residential Treatment for Traumatized Youth

When a traumatized child is placed within a residential setting, the impact may be intensified and re-traumatizing as the displacement is often sudden, unexpected (Bloom and Reichert 1998; Lovelle 2005), and the child is now required to live in an unfamiliar environment with unfamiliar people (Lovelle 2005). However, residential treatment settings provide a unique context in which the full impact of trauma may be witnessed; whereas, in an outpatient clinical context or school, these symptoms may be more easily overlooked (Spinazzola et al. 2013). For example, specific impacts of trauma within a residential setting can include sleep disturbances (e.g., nightmares), interrupted sleep patterns, and idiosyncratic strategies to maintain safety at night (e.g., sleeping on a couch versus a bed; Bebout 2001).

The more extensive the trauma exposure has been for the child, the greater and more complicated the residential treatment needs are. For example, Boyer and colleagues (2009) found that exposure to multiple types of trauma was the single greatest predictor of improvement or deterioration in residential treatment. Specifically, the more types of trauma a child was exposed to, the less likely improvement was seen in residential treatment. In fact, Collin-Vézina and colleagues (2011) found higher rates of anger, posttraumatic, and depressive symptoms among youth in residential treatment who had experienced multiple trauma exposures. Similarly, Briggs and colleagues (2012) found that, as the number of trauma exposures increased, the percent of youth in residential care experiencing various forms of functional impairment (i.e., academic problems, behavior problems, attachment problems, substance abuse, self-injury, etc.) also increased. It is imperative, then, that residential treatment programs and policymakers consider how standard practices may differentially impact traumatized youth.

For example, given the frequency of misdiagnosis, traumatized youth in residential treatment programs are often treated with high doses of various psychotropic medications. Levin (2009) cautioned that, because many of these youth are misdiagnosed and thus, incorrectly medicated, the use of the medications they were prescribed may not only be ineffective, but may actually be counterproductive. He suggested that severely traumatized youth could benefit more from approaches that directly address their trauma histories than from increasingly intensive psychopharmacological interventions. Specifically, he described a clinical case example in which a young female received multiple diagnoses and had been prescribed several psychotropic medications in an attempt to manage her behavior. He suggested that, in addition to the numerous side effects experienced by the patient, the treatment providers were failing to address and treat her trauma history through the use of medication. He proposed that residential treatment programs work toward re-conceptualizing youth who have been affected by trauma in an effort to more appropriately and adequately characterize their underlying behaviors and, thus, reduce the need for poly-pharmacologic approaches.

In addition to the ineffective use of medication with traumatized youth, traditional seclusion and restraint techniques used in some residential treatment programs are often futile, and can be re-traumatizing and harmful. Youth with a history of maltreatment and neglect are likely to have a paucity of self-regulation skills (Bebout 2001; Cook et al. 2005; D'Andrea et al. 2012; Ford 2005). Poor regulation may be viewed as acting out or aggressive behaviors that need to be managed, which could lead some residential settings to utilize seclusion and restraint techniques during crises or dangerous situations (Conte et al. 2008). Many residential settings employ restrictive behavioral management methods (Farragher 2002; Visalli et al. 1997) that tend to limit an individual's choices and reduce the likelihood of accessing adaptive coping strategies (Conte et al. 2008). Moreover, a client with a history of trauma may experience the restrictive setting and behavioral management strategies (i.e., restraint or seclusion) as a reminder of past events or a situation of perceived threat, which could activate the "fight, flight, or freeze" response system (van der Kolk 2005). However, some residential treatment facilities are increasingly implementing trauma-informed debriefing and notification strategies following incidents involving seclusion or restraint (Brown et al. 2012b).

Finally, more subtle aspects of the residential treatment structure can also be triggering for traumatized youth. According to van der Kolk (2005), children with a pervasive history of trauma have great difficulty with novelty. Consequently, standard rules and protective measures relied upon in residential treatment may be perceived as threats and authority figures as potential perpetrators (Streeck-Fischer and van der Kolk 2000). In addition, the nature of residential treatment often means that traumatized youth live with other traumatized youth, which places them at risk of being frequently re-triggered. Given the particularized presentations of traumatized youth, flexibility on the part of the residential program staff may be necessary to increase the child's

sense of safety. Privacy and boundaries are important issues for youth with trauma histories (Bebout 2001). Thus, even within the important context of safety-monitoring, care must be taken to be sensitive to privacy needs while a client is, for example, in the bathroom or bedroom.

It is clear there are many considerations when working with traumatized youth in residential treatment settings. Although there is limited research available regarding treatment with this specific population, there is substantial information available related to working with traumatized youth, as well as with respect to implementing evidence-based practices in residential treatment settings (e.g., James et al. 2013). Accordingly, it is reasonable to examine the applicability of evidence-based trauma-informed treatment approaches to traumatized youth in residential treatment.

Working with Traumatized Youth in Residential Treatment Settings

Given the prevalence and pervasive impact of trauma, trauma-focused interventions within residential treatment settings are crucial. Specifically, a meta-analysis of psychological interventions for child maltreatment indicated that 71 % of children who received treatment were functioning better than untreated children (Skowron and Reinemann 2005). Adopting a trauma-informed perspective, ranging from the initial identification of a client's trauma history (Boyer et al. 2009) to accessing trauma-informed resources, is helpful across all potential settings a client may encounter, from first-responders to schools (Ko et al. 2008) to residential treatment programs. An important initial step toward becoming a trauma-informed system is to educate all staff about the nature and impact of trauma (Brown et al. 2012a; Doyle and Bauer 1989). Understanding and accurately diagnosing a client with complex or developmental trauma may lead to increased empathy and understanding of the context of the client's current presentation, as well as increase efforts to offer adaptive coping and problem-solving strategies (Levin 2009; van der Kolk 2005). Without this necessary formulation, the child may be inaccurately labeled as "oppositional, unmotivated, or antisocial" (Streeck-Fischer and van der Kolk 2000, p. 909).

Accordingly, perhaps the most integral aspect of providing trauma-informed treatment in residential settings is related to institutional and systemic changes in approach (Brown et al. 2012a). Given the high frequency of aggressive and dangerous behaviors demonstrated by youth in residential treatment programs, the primary focus of most programs is necessarily on safety, which can indirectly result in an emphasis on maintaining power or control over youth. However, when working with traumatized youth, residential treatment program staff need to concentrate less on control and become more informed about trauma and resulting attachment issues (Brown et al. 2012a; Dvir et al. 2012; Levin 2009). Accordingly, promising trauma-informed staff training programs and policy initiatives are continually being advanced and evaluated (e.g., Brown et al. 2012a; Farro et al. 2011; Gillen 2012). For example, issues related to trust and intimacy are particularly prevalent among traumatized youth, and thus, require heightened sensitivity on the part of staff (Baker et al. 2009). In addition, involving direct care staff in the treatment process, rather than simply notifying them about the interventions being implemented, could be one way to facilitate corrective attachment experiences for traumatized youth. Moreover, Baker and colleagues (2009) suggested that it could be beneficial for residential treatment program staff to be informed about the child's perpetrator(s), to better understand that child's ability to work with staff of various genders, as well as potential triggers or feelings of shame when interacting with certain types of individuals.

An important aspect of maintaining safety is managing the degree to which traumatized youth are triggered by other traumatized youth with whom they are cohabiting. This includes creating a culture in which the staff demonstrate their ability and commitment to keeping all residents safe, minimizing youths' exposure to chaos and inappropriate intimacy, and providing secure containment when youth are triggered. A trauma-informed model of care also ensures that the physical space is homelike, soothing, and contains a large array of areas to divide youth when necessary, which allows a youth to struggle while his or her peers continue their predictable and familiar routines.

A related consideration is sensitivity to the fact that staff may have histories of traumatic exposure, as well. There is a substantial likelihood that staff in residential treatment programs may come from backgrounds similar to the youth in their care (Esaki and Larkin 2013). As such, Levin (2009) stressed the importance of staff being treated respectfully and in ways that increase their self-esteem and perception of themselves as professionals and "facilitators of change," as opposed to "agents of control" (p. 533). He underscored the notion that traumatized children are already fearful and distrustful of adults and it is counterproductive to subject them to further threatening interpersonal interactions. Accordingly, supportive resources and training for staff who may be susceptible to re-traumatization or vicarious trauma are a necessary and vital component to increasing programmatic success (McNamara 2010).

Aside from safety, Levin (2009) proposed that the primary goal of residential care should be the encouragement and cultivation of self-control in the child, as opposed to conformity to externally imposed control. Similarly, van der Kolk (2005) cautioned that providers often expect compliance and rational decision-making on the part of the child and overlook the fact that children need time to modify the "maladaptive" or "problem" behaviors that previously ensured their survival.

In addition to shifting the overall programmatic focus away from control when dealing with traumatized youth, research also indicates the importance of moving conceptualization and interventions to more strengths-based models. Griffin and colleagues (2009) proposed a theoretical shift away from mental health diagnoses and trauma symptoms toward a focus on strengths, resilience, and developmental impact. In their evaluation of risk factors and strengths of traumatized children in the child welfare system, they found that strengths had a greater moderating effect on behavior as the number of traumatic experiences increased. Specifically, the more strengths the child had developed, the less likely that child was to engage in high-risk behaviors. Based on these findings, they concluded that developing treatment plans that only address clinical problems is not adequate; rather, treatment that builds strengths and reduces the impact of traumatic experiences is optimal.

Similarly, Lyons et al. (2000) found that building strengths for children in residential treatment programs improved functioning independent of any reduction of psychopathology. Interestingly, they found the most common strengths for youth in residential treatment were sense of humor, ability to enjoy positive life experiences, and having a strong relationship with a sibling. The least common strengths included involvement in a religious group, involvement in a community services group, and identification of a career goal. Clearly, a focus on increasing traumatized youths' strengths should be an important component of the overall treatment approach in the residential setting.

With respect to trauma-informed approaches, treatment for youth with complex trauma histories should include an emphasis on the following core components: safety, self-regulation, self-reflective information processing, traumatic experiences integration, relational engagement, and positive affect management (Cook et al. 2005). Specific treatment models for treating children and adolescents within a residential setting are outlined below and include the Sanctuary Model, Attachment, Regulation and Competency (ARC), Cognitive Processing Therapy (CPT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), Structured Sensory Intervention for Traumatized Children, Adolescents and Parents—At-risk Adjudicated Treatment Program (SITCAP-ART), and Trauma Affect Regulation-Guide for Education and Therapy (TARGET).

One trauma-informed approach for changing the organizational culture in residential treatment programs is the Sanctuary Model (Bloom 1997), which emphasizes the importance of the therapeutic community environment coupled with empowering residents to take the lead in creating effective treatment strategies and influencing their overall lives and community (Bloom and Farragher 2010; Rivard et al. 2004). This model offers a comprehensive, trauma-focused approach that integrates trauma theory with the principles of a therapeutic community. There is a shared vision for staff and clients that includes fostering democratic ideals and encouraging the participation of residents in all aspects of the program. Moreover, it offers a phase-oriented approach to treatment, with a focus on safety, affect regulation, grieving, and emancipation (Rivard et al. 2004).

ARC (Blaustein and Kinniburgh 2010) represents a components-based, contextual model of trauma-focused treatment that allows the clinical provider to integrate unique aspects of the client and caregiver into the intervention. It emphasizes building self-regulation skills, enhancing competency, and fostering a stable caregiver system (Kinniburgh, Blaustein, Spinazzola, & van der Kolk 2005). This treatment model offers flexibility so that it can be effectively implemented within numerous settings, including residential treatment programs (Blaustein and Kinniburgh 2010). Further information about the ARC framework, including treatment outcome data, is provided later in this special issue (Hodgdon et al. 2013).

Cognitive processing therapy (CPT) is a cognitive-behavioral therapy (CBT) and exposure-based protocol that was recently examined within a residential setting (Zappert and Westrup 2008). Preliminary results indicated that it may be effective in reducing trauma-related symptoms. The intervention structure includes 12 sessions that include psychoeducation about the treatment process, creation of an impact statement indicating how the traumatic event affected the client (including beliefs about self and others), exposure (during which the client recounts the narrative of their traumatic experience while connecting the affective experience), CBT strategies (e.g., challenging underlying beliefs, connecting events to thoughts, feelings, and behaviors), and closure, during which the client creates a new impact statement. In one preliminary outcome study of CPT within a residential setting, 15 of 18 women experienced a clinically significant reduction in PTSD symptoms (Zappert and Westrup 2008). Limitations in that study included the absence of a comparison group, a lack of randomization into treatment conditions, and confounding alternative treatment interventions given the nature of the 24-h residential context.

Trauma-focused CBT (TF-CBT) and multi-dimensional groups (skills, education, and psychotherapy group components) have also been found to be promising in reducing PTSD symptoms for female youth with sexual abuse histories in residential treatment programs (Avinger and Jones 2007). Research on TF-CBT interventions has demonstrated significant reductions in trauma symptoms (Cohen and Mannarino 1997; Deblinger et al. 1996, 1999). This approach utilizes a combination of psychoeducation for child and parent, relaxation skills, affect modulation, trauma narrative, in vivo mastery of traumatic reminders, cognitive restructuring and processing, and enhancement of safety strategies (Little and Akin-Little 2009).

In a two-site, randomized control trial of 229 children with a history of sexual abuse, children in the TF-CBT condition

showed significant reductions in PTSD symptoms, depression, and total behavior problems when compared to participants in the child-centered therapy condition (Cohen et al. 2004). In the TF-CBT group, children also showed improvements in interpersonal trust and reduced shame. Moreover, the parents of the participants in the TF-CBT group demonstrated improvements in their levels of depression, distress related to the abuse, parenting practices, and parental support (Cohen et al. 2004). Specific modifications for implementation of TF-CBT in residential treatment settings are available (e.g., Cohen et al. 2012).

It has been suggested that trauma is often processed in nonverbal realms (Perry 2001; van der Kolk 1994). Accordingly, some child trauma treatment developers argued that utilizing only CBT interventions for adolescents with a trauma history may not be the most effective strategy (Raider et al. 2008). Rather, they proposed that cognitive-behavioral interventions need to be integrated with sensory activities to address both the implicit, sensory memories and the explicit memories. Thus, the SITCAP-ART program was developed to address the missing links within CBT interventions for traumatized, residential clients. This intervention is comprised of approximately seven structured group sessions aimed at treating the sensory experiences of the trauma and three individual sessions for debriefing, processing, and parent education. In a preliminary study examining 20 adolescents, SITCAP-ART was found to significantly reduce PTSD symptoms, anxiety, depression, and internalizing and externalizing behaviors when compared to a waitlist control group (Raider et al. 2008).

Several additional treatment approaches are also worthy of note. First, Lovelle's (2005) combination of dialectical behavior therapy (DBT) and eye movement desensitization and reprocessing (EMDR) treatments has been proposed as an effective model for adolescents within a residential setting. According to Lovelle, this treatment combination allows the client to develop essential skills of self-regulation and awareness to process their traumatic experiences. Moreover, the residential setting may offer critical support for the adolescent engaged in these treatments (Lovelle 2005). In one study, DBT was supported as an effective precursor to trauma treatment, which suggests that it may serve as the first phase of safety and stabilization treatment for individuals with a trauma history (Harned et al. 2010). Another study found that a intensive residential treatment adaptation of DBT for women with PTSD associated with childhood sexual abuse was effective for reducing PTSD symptoms (Steil et al. 2011). Finally, residential implementation of EMDR for traumatized youth has recently been undertaken (e.g., Jarero et al. 2013).

Second, Ford and Hawke's (2012) Trauma Affect Regulation-Guide for Education and Therapy (TARGET) group and milieu intervention program has demonstrated promising results with traumatized youth in juvenile detention facilities. Specifically, the short-term TARGET intervention was associated with reductions in the frequency and severity of dangerous behaviors, disciplinary interventions, and recidivism. TARGET is designed to help youths to understand the biological response to traumatic stressors, including hypervigiliance, and teach skills that enable youths to recognize stress reactions before they escalate. The intervention includes several steps designed to help youth cope with their trauma without having to recount the details of their traumatic exposure: 1) detailed trauma exposure and symptom screening; 2) teaching the TARGET model for understanding traumatic stress; 3) series of psychoeducational groups; and 4) milieu program that includes daily reinforcement of self-regulation skills.

Finally, these additional models also show promise: 1) Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS; Habib et al. 2013), which has notably demonstrated utility in reducing trauma symptoms and increasing functioning for culturally diverse adolescents (Weiner et al. 2009); 2) Trauma Systems Therapy (TST; Brown et al. 2013; and 3) Real Life Heroes (Kagan et al. 2008; Kagan and Spinazzola 2013). These models are each presented in detail in later sections of this special issue.

Across all treatment models, essential principles appear to emerge within the current literature about what is known to be effective in treating traumatized youth. In a residential setting, there are many levels of staffing that influence the outcomes for the residents. Thus, providing comprehensive training to all staff on trauma-informed services, technical assistance and consultation may aid in enhancing the interventions provided and increase the consistency and support offered to youth (Doyle and Bauer 1989; Rivard et al. 2004; Spinazzola et al. 2013; Zappert and Westrup 2008).

The high likelihood of clients within a residential setting having multiple, chronic traumatic exposures (Baker et al. 2006; Griffin, et al. 2009) leads to greater difficulty in directly applying an evidenced-based practice (Amaya-Jackson and DeRosa 2007; Cook et al. 2005). Substantial barriers to incorporating and extending manualized treatments to a complex clinical setting include the presence of treatment-resistant comorbid disorders and multiple traumatic exposures, increased difficulty clinicians face with protocol adherence, and the need to provide therapeutic services outside of the traditional outpatient office (Amaya-Jackson and DeRosa 2007; Blaustein and Kinniburgh 2010; Cook et al. 2005; Kinniburgh et al. 2005). When treating individuals with complex trauma, it is well known that one must critically assess the client's needs, implement appropriate core components of a trauma-focused treatment, and continue to evaluate the progress of the treatment (Amaya-Jackson and DeRosa 2007; Spinazzola et al. 2013). Moreover, individuals with a history of neglect, the most frequently co-occurring traumatic experience, may not be a good fit for narrative processing interventions that focus on a

discrete traumatic event (Griffin et al. 2009). Building on the client's strengths, combined with trauma-focused interventions, may serve as a strong protective factor in reducing the impact of trauma (Cook et al. 2005; Griffin et al. 2009).

As discussed earlier, an initial focus of residential treatment for traumatized children should be establishing safety (Cook et al. 2005; Streeck-Fischer and van der Kolk 2000). This may be established through creating safe physical spaces for the client to engage in activities that do not trigger the body's alarm system (Streeck-Fischer and van der Kolk 2000). In addition, creating safety within the therapeutic relationship can help traumatized youth explore aspects of self-regulation and interpersonal security (Streeck-Fischer and van der Kolk 2000). Finally, directly involving non-clinical residential program staff in the treatment process can facilitate and model safe, healthy, and appropriate relationships for traumatized youth.

Another core component of trauma treatment is building on the client's capacity to cope and regulate. Many of the treatment models emphasize the importance of regulation to enable an individual to manage the body's natural alarm system (Ford 2005) and to enhance self and affect regulation skills to cope with past and present stressors (Blaustein and Kinniburgh 2010; Cook et al. 2005; D'Andrea et al. 2012; Little and Akin-Little 2009; Rivard, et al. 2004).

Integrating core concepts into the treatment context of what is known about the impact of trauma on youth is vital. Novel situations may elicit fear in an individual with a chronic history of trauma. Thus, offering choices (even in response to a crisis) and opportunities to participate in problem-solving may increase youths' perceived self-control and deescalate a potentially volatile situation (Conte et al. 2008). For example, it is imperative to provide predictable structures and routines (Blaustein and Kinniburgh 2010) throughout the day given the difficulty that children with developmental or chronic, complex trauma have with novelty (van der Kolk 2005). Additionally, the more engaged a child is within the residential community, the more likely the residential treatment unit would be experienced as calmer, as clients who are more engaged are less likely to display disruptive behavior (Levin 2009).

Given the need to develop more adaptive regulation skills, it is also important to offer choices or tools for reducing hyper-arousal or increasing arousal when the client is hypo-aroused. These strategies may include providing individuals with an individual coping strategies toolkit or, possibly, refitting a seclusion room with sensorimotor materials designed to help modulate arousal, such as a balance ball or weighted blankets (Warner et al. 2013). Moreover, emphasis on self-regulation may lead to a more successful transition for the client outside of the residential program, as the focus shifts to internal regulation rather than dependence on external guidance and reinforcement (Levin 2009).

Policy Implications for Serving Traumatized Youth in Residential Care

There appears to be substantial incongruence that exists between the mental health needs of traumatized youth and the services provided to them, particularly with respect to out-of-home care. This is especially concerning, given the high cost of treating youth in residential settings which can, in turn, result in decreased funds available to support community-based services designed to transition youth out of residential treatment programs (Lyons et al. 1998). Whittaker (2000) indicated that youth discharged from residential treatment programs who have supportive community networks have better community adjustment and are more likely to maintain the treatment gains made in the residential setting than do those without such community supports. He emphasized the need to create a more seamless transition from out-of-home placements back into the community. Given the involvement of multiple agencies and the necessity of a coherent continuum of care for traumatized youth being treated in residential settings, several important policy implications emerge.

Collaboration Across Child Welfare Agencies

Research has indicated that residential treatment settings often provide essentially identical treatment approaches and interventions to all youth in their care, regardless of individual needs or clinical indications (Lyons et al. 1998). In addition, youth in residential treatment settings are often being simultaneously served by numerous providers and agencies. One study (Julian et al. 1992) found that 25 children receiving mental health care through one agency were receiving services from 140 different providers. This striking ratio underscores the high likelihood of difficulties regarding treatment planning and coordination across providers and systems.

Collaboration between child welfare, educational, judicial, mental health, and community organizations is essential to successful intervention for children who have suffered maltreatment and are now being served by any combination of these systems. Although each of these distinct sectors must maintain its particular focus and role, utilizing trauma-informed practices across systems would result in a more integrated plan for youth with histories of trauma exposure and, as is typically the case, involvement with multiple child welfare systems.

The objectives of child welfare, mental health, and juvenile justice agencies are typically distinct and, thus, at times in conflict with respect to assessing and treating youth at risk for or in need of out-of-home care. Closing the divide between these discrete agencies may allow for more effective engagement, assessment, and treatment of youth with histories of trauma exposure (see for example, Ford and Blaustein 2013). As previously discussed, the widely variable, complex and

often subtle effects of trauma on children's functioning can lead to misdiagnosis and underestimation by providers of the role of trauma exposure as a primary etiological factor in youth manifestations of psychiatric and behavioral impairment. Because psychiatric diagnosis routinely drives clinical formulation and treatment planning, misdiagnosed youth may inadvertently be administered interventions contraindicated for trauma-related symptomatology, which could be ineffective or even exacerbate problems related to traumatic stress.

Given the potential for cross-system conflict, some jurisdictions are working to integrate the child welfare and service planning process. For example, in Massachusetts, the Departments of Mental Health (DMH) and Children and Families (DCF) are currently evaluating the effectiveness of a program that establishes a single point of entry for youth who are in need of out-of-home placement through either agency. These departments previously had separate structures and processes for assessment, level of service determination, utilization management, quality monitoring, and payment for community-based residential services. Yet, the needs of youth being placed in these programs are similar and many of the providers are the same. Consolidating these functions and establishing common processes to improve access, assessment, treatment, and discharge planning is intended to better serve the needs of children and families, and simplify procedures for consumers, providers, and families.

In addition to being more efficient and, ideally, effective, this integration of systems has also provided an opportunity for the state to create a trauma-informed network of state agencies, providers, consumers, and community leaders. This network enables the child welfare system to provide a better match for youth who have experienced complex trauma and are in need of residential treatment. Such a trauma-informed focus within a system of care provides opportunities to collaborate and provide recommendations for effective treatment and implementation of evidence-based practices for traumatized youth and their families.

Continuum of Care Issues

When youth who have experienced trauma enter a residential treatment program, they are often in crisis and in need of immediate stabilization, containment, and safety. Given the urgency of such treatment needs, it is easy to overlook the broader, concurrent need for traumatized youth to develop internal regulation skills that enable long-term success, while simultaneously decreasing the need for external support provided by residential care. A system that is conceptualized from a continuum of care perspective involves collaboration and transitional assistance across all levels of programming, from inpatient to home-based services. This type of treatment delivery model requires substantial commitment by all involved providers and service systems along the continuum of care.

Traditionally, interventions delivered within a particular level of care (i.e., inpatient or residential treatment) follow treatment models that work in the moment to help youth stabilize and progress, while engaged in that specific level of care. Once a child is determined to be stable in that setting, the child is typically moved to the next level of care, where a similar approach to treatment may or may not be implemented. This fragmented approach neither promotes long-term success nor aids youth in developing skills that will decrease the likelihood of out-of-home placement again in the future.

Leichtman and Leichtman (2001) indicated that progress made during residential treatment does not predict success following discharge, and moreover that gains made by youth in residential treatment programs are often lost following discharge. They suggested that the biggest limitation of residential treatment programs is the dearth of attention given to assisting and supporting youth in their transition back into the community, as they are focused solely on what is happening within the residential treatment program, with little to no positive expectations about the future (Thompson et al. 2012).

Recently, some jurisdictions and agencies have started to focus more on the need for treatment along a continuum of care, especially given the decreased funding available for extended out-of-home placements (Sng 2009). These programs are shifting their focus toward helping youth develop skills that will enable their ability to effectively cope with stressors and succeed following discharge from residential treatment settings. Simon and Savina (2005) indicated that the goal for a hospital, for example, should be to ensure the maintenance of gains made during the hospitalization remain following discharge and, consequently, decrease the likelihood that the individual needs to return to a hospital setting. They emphasized the notion that a continuum of care is most effective when the transition between levels of care is seamless and there are no significant periods of time in which care is not provided at all or provided at an inappropriate level.

Accordingly, efforts have been made by many agencies and states (e.g., Massachusetts, as discussed above) to shift treatment planning to look at the larger scope of treatment rather than the time spent within a single agency or level of care. Such efforts are helping to shape a culture that supports integrated models of clinical treatment and case management that exist across the continuum of care.

For traumatized youth in residential treatment programs, focusing on smooth transition and future planning is best accomplished through trauma-informed treatment models that focus on core self-development, such as the models described above and throughout this special issue, as well as frequent communication and collaboration between treatment teams along the continuum of care. Given that a majority of children are readmitted to an inpatient or residential treatment setting within the first 3 months of discharge (Simon and Savina 2005), communication between the participating levels of care

is vital to ensure that services, treatment goals, resources, and connections are in place prior to discharge. For example, a child discharging from residential treatment to community-based care would already have met with a therapist and psychiatrist in the community, reviewed a treatment plan for the next step of treatment, have supportive resources arranged in the community, have attended meetings with the residential staff and family together over several months prior to discharge, and will have follow-up meetings scheduled with the residential staff to ensure continuity and effectiveness of care.

From an implementation perspective, this continuum of care approach can present logistical and financial challenges, including the cost of additional resources, necessary quantity and quality of services, focusing on safety in the present moment while looking forward, and disagreements about service planning between providers and agencies. For example, one study evaluated the implementation of a transitional process in a residential treatment program that included many of the characteristics discussed above, including family involvement in treatment planning, educational support, life skills instruction for the client, and facilitation of community involvement throughout the discharge process (Nickerson et al. 2007). Results of this evaluation revealed that although staff, family members, and clients reported positive perceptions of the process, many involved parties indicated that additional work was necessary, particularly with respect to family education, follow-up after discharge, and communication between providers, schools, and residential treatment center staff prior to discharge. Given the very limited available research examining continuum of care issues for traumatized youth, this study highlighted the challenges of cross-system planning, as well as the necessity of such work.

Taking into account the high rates of traumatized youth in residential treatment and the importance and long-term benefits of addressing trauma in this context, it is imperative that trauma-informed care continues to be provided at all levels of the individual's care, including transitioning to less restrictive or clinically intensive settings. Ensuring that the continuum of care is cohesive and that community-based resources and services with which youth are involved are trauma-informed can substantially improve outcomes and reduce the potential for future out-of-home placements.

Practical Challenges to Implementing a Trauma-Informed Model of Care

Although many agencies, policymakers, and direct care providers recognize the importance and utility of implementing a trauma-informed model of care in residential treatment programs, recent economic pressures have added formidable barriers to doing so. However, adopting trauma-informed best practices, such as those discussed in this article and throughout this special issue, can actually support economic concerns. One way to implement a trauma-informed model of care is to reallocate existing resources, rather then add new costs. For example, a continuum of care model may opt to realign resources to bring some of the therapeutic work into the youth's home (to which he/she will be discharged), instead of providing treatment solely within the residential program. Residential treatment programs can, essentially, unbundle the treatment services provided in the residential program and reach more deeply into the community, while remaining robust and critical partners in the lives of children and their families.

Our experience in instituting this type of trauma-informed model of care at the Justice Resource Institute (JRI) residential programs throughout Massachusetts has demonstrated that discharged youth who follow along our continuum of trauma-informed care are more successful, more quickly in their subsequent placements. Formal tracking studies are currently underway at JRI; however, preliminary results suggest that these youth are getting better faster which decreases costs and increases utilization of programs and services by state agencies.

Given the high stress associated with working with traumatized and seriously emotionally disturbed youth, another practical challenge inherent in this type of service provision is staff retention (Connor et al. 2003). Thus, an important component of implementing a trauma-informed model of care is to provide sound training for staff that includes understanding trauma, its adaptations, the impact of vicarious trauma, and the importance of self-care (Esaki and Larkin 2013; McNamara 2010). In addition, direct care staff should have a strong sense of the prominent role they play in helping youth get better, rather than believing that they are simply there to take care of the daily needs of youth while the clinicians do the "real" work. In this type of model, direct care staff are more invested and better at their jobs, resulting in less staff turnover and, in turn, a significant cost savings. Moreover, weekly staff trainings and consultation should be built into the program to create a culture that supports the work and the staff.

Conclusion

Given the high prevalence, complex clinical presentation, and unique treatment needs of traumatized youth in residential treatment settings, it is critical to conceptualize and attempt to understand this population as distinct from youth without histories of traumatic exposure receiving out-of-home care. This article provided a broad overview of the issues that arise for traumatized youth in residential treatment programs. The rest of the articles included in this special issue further highlight specific considerations and innovations in the treatment of this multifaceted population. The sooner traumatized youth can be more adequately and efficiently treated in residential treatment settings, the more impactful and long-lasting such efforts will be on both individual and systemic levels.

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