Foster Children: Sensory Processing Challenges Relevant to Occupational Therapy Service

Elaine Jean Struthers, Ph.D., OTR/L

Abstract: *The foster child population is characterized and areas of sensory processing difficulties identified through the AFCARS and related data systems, qualitative data from informal interviews with + 40 foster caregivers, clinical case data from 20 foster families, and intensive qualitative data from three families. Literature review indicates multiple factors contributing to sensory processing deficits in the foster population making it uniquely suited to treatment using a sensory integrative frame of reference. Three sensory processing-based occupational challenge areas are identified specifically to guide practitioners in evaluation and treatment of the foster population.*

Key words: *foster children, sensory processing difficulties, occupational therapy.*

Foster children in the United States face a precarious destiny. Based on the experiences they have had prior to reaching foster care settings and the challenges they may face in non-parental care they are more likely to have difficulties in functional aspects of home and community life. This research evaluates factors of concern to occupational therapists working with children in foster care.

The Foster Child Population is characterized using the Adoption and Foster Care Analysis and Reporting System of the United States Department of Health and Human Services (AFCARS) [4] and related data systems, literature review, qualitative data from informal interviews & questionnaires with 60 foster care providers, clinical case data from 20 foster families, and intensive qualitative data from three families. An identification & characterization of three distinct areas of occupational challenges in the foster child population is made from these sources.

The most recently compiled AFCARS data indicated that collectively the largest group of children entering foster care (FC) are under age 3 years, 48% of FC children went into non-relative foster care, 40% were by ethnicity Anglo, 30 % African-American, 20% Hispanic, and various other ethnic backgrounds with Native American entrants at about 2%. There was approximately equal gender division. Annually over 3 million children (44 States reporting) received abuse intervention services and over 20% of those entered foster care, indicating that abuse is often a co-factor to foster placement.

AFCARS data compiled for 2009 from reporting states indicated that 700, 000 children were served. Of that number 255,000 entered care, and 424, 000 were already in care. From these numbers, 57,000 were actually placed into permanent adoption. Children in foster care may enter and exit such care multiple times. Children who become teen-agers while in the foster care system have been reported to have an average of nine different foster placements. Children in foster care who are able to find a permanent and healthy adoptive home are very fortunate.

Children entering foster care are a population that is at risk. They generally suffer socioeconomic marginalization as a result of their original family, and are then are unlikely to achieve stability during childhood or adolescence unless there is strong family intervention for the original family, or placement in a permanent adoptive home. Risk factors reported for children entering foster care include and higher incidence of single parent households, higher incidence of exposure to drugs and alcohol both perinatally and in childhood, higher incidence of neglect and abuse, and higher incidence of medical neglect for those with chronic conditions [7].

These many factors make the foster child population one of the most vulnerable populations and highly at risk for neurodevelopmental impacts as a result of multiple variables. These children may suffer neurodevelopmental impacts from a variety of conditions including unenriched environments, high rates of abuse and neglect, epigenetic and intrauterine risk factors such as fetal alcohol effects (fae), polydrug exposure,

neurotoxic exposure from living in polydrug exposed environments and poor supervision in the presence of toxins.

These same factors place foster children highly at risk for sensory processing dysfunction as a result. Environmental effects that can adversely impact sensory processing and typical neurological functioning include conditioning, poor nutrition, and poor behavioral and emotional modulation in response to sensory stimuli due to environmental experience. Neurological impacts on development may occur because there are experience-expectant windows of development for neural differentiation which may be missed due to lack of environmental enrichment combined with neglect and trauma. Children may experience dysregulaton of cortisol response mechanisms and experience post-traumatic stress syndrome or developmental trauma syndrome, which interferes with developmental processes [8].

In review of clinical case data for 20 foster families receiving occupational therapy in a clinic setting for children under the age of 8 years, three primary sensory processing areas of deficit were reported by foster parents. Dyspraxia or deficits in motor planning were noted and evidenced by poor initiation of, and memory to sequenced motor planning. Movement, balance and vestibular challenges were reported and observed as avoidance of play, poor confidence in play, and clumsiness. The third area reported as a challenge area was development of successful relationships with others, including the impacts of reactive attachment disorders, this was evidenced by avoidance of touch or avoidance of contact with others.

Research published relevant to motor problems in foster children indicated that general findings for foster care population foster children showed developmental lags on measures of height, head circumference, visual-spatial functioning, language, and general cognitive functioning [5]. Other research in children exposed to fetal alcohol effects and polydrug exposure indicate that dopamine-rich cortical (e.g., frontal cortex) and subcortical (e.g., basal ganglia) fetal brain structures show evidence of vulnerability to intrauterine drug exposure, these structures of the brain are associated with motor control, sequenced motor control and feedback mechanisms, as well as executive functions [3]. Particularly the clinical data reported 14 of 20 children with inability to carry out simple 2-3 step motor activities without assistance, and 8 of 20 with some type of oral motor dyspraxia affecting speech and feeding.

Sensory processing deficits in vestibular or the gravity-based sense were reported in clinical data. Eleven of 20 children had identifiable ocular motor control problems, a sign of vestibular inadequacy, and 17 of 20 had notable reactivity to movement. Dr. A. Jean Ayres [1] who developed sensory integration treatment modalities asserted that vestibular processing challenges are problems in the basic relationship of self-to-gravity and when this sense is not reliable then other relationships to objects-in-space, including people, are also impacted. She identified two distinct types of vestibular processing problems: gravitational insecurity and movement intolerance, both noted in the clinical data as reactivity to movement.

Research related to relationship and bonding in children in foster care has revealed that their abilitiy to regulate neuroendocrine function & regulate emotions in the context of environmental stress and challenges are measurable by cortisol and vagal response patterns [6]. There was a higher incidence of atypical patterns of cortisol production with preliminary evidence of the effectiveness of interventions that targets children's regulatory capabilities, which is the goal of sensory integration treatment. Additionally it was noted that the foster care setting may be beneficial to the child by having a regulating influence on children's cortisol production among children who have experienced maltreatment before being placed into foster care [2].

Qualitative data from the clinical sample indicated many traumatic narratives about the lives of children prior to entering foster care, and foster parents saw these traumatic narratives as the root of the children’s problem in developing healthy relationships with the

adoptive families. All families queried believed that sensory integration based interventions supported improvements in social behavior in foster children being treated.

The inability of children in the clinical date to adequately self-regulate their responses to varied sensory stimuli was often reported by parents. Reactivity was reported to sound, touch, movement and motor activities. Inability to self-regulate responses was noted particularly in feeding and related problems around eating, inability to self-calm once a child has become upset, and disrupted sleep patterns. These problems impacted the social and emotional relationships and bonding within the foster families. Parents reported that they believed sensory integration therapy ameliorated these problems and facilitated improved relationships.

Occupational therapists, when working with foster children and families may specifically observe for problems in these three areas of sensory function; motor planning or dyspraxia, vestibular or movement problems, and relationship issues with sensory regulation aspects.

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Contacts:
Elaine Jean Struthers, Ph.D., OTR/L, e-mail: samiot312@gmail.com

Докладът е рецензиран.