

Special Article – Occupational Therapy

# Effectiveness of Occupational Therapy in Early Intervention of Global Developmental Delay: Case Presentation

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## Abstract

Many young children may be delayed in motor, self care and self regulation which Occupational Therapy in early intervention can play an important role in facilitating their development. This case report demonstrates family centered best practice strategies for a young child with global developmental delay in early intervention. Occupational therapists play an important role in early intervention when provided within the context of the family's daily routines. This case shows how an occupational therapist begins to facilitate this young child's development of postural control, feeding and sleeping behaviors within her family's daily routines. Occupational therapists need to be creative and flexible to promote our distinct value as we help family's promote the development of their young children. Currently, this philosophy of family centered best practice guides early intervention practice, but there is little research or information about specific strategies on how this might look when intervention is actually provided. More research and sharing are necessary among early intervention providers to discuss best practice strategies that are effective with the families we work with.

**Keywords:** Family centered best practices; Early intervention; Global developmental delay

## Introduction

This case report is important because it depicts one of the most common reasons for referrals I have seen in Occupational Therapy (OT) practice in Early Intervention (EI) in my OT career. M. is like so many children who are referred to EI. The cases that perplex us as providers because parents search for answers to: Is there something wrong with my baby? Should I be concerned about this? Providers think they should know all these answers, but in truth I have found that none of this matters at such an early age for children who present with global delays. We need to focus on their strengths and weaknesses, and promoting skills so that they catch up. Parents need to be educated, reassured, and guided on parenting and therapeutic practices which then can be incorporated into their lives so that they are meaningful to their daily family routines. Providers should not be the recipients of the child's first milestone achievements, the parent should. Providers should work to facilitate these magic moments for families.

Young children may be delayed in motor, self care and sensory regulation which OT can play an important role in facilitating. EI is based on family centered best practice strategies which treat the child in the context of their family in their natural environment rather than treating only the child [1,2,3]. This is incredibly important in the early years of life since young children rely on their caregivers for many of their daily living tasks and learning these skills for themselves.

## Case Presentation

M. is a six month old girl who was born full term to a family

consisting of her mom, dad, and four year old sister. M's dad is a policeman and her mom is a teacher. She is watched by her paternal grandmother while they both work full time. Her EI Evaluation showed delays in all five developmental domain areas: adaptive, cognitive, language, motor and social-emotional. She was referred for an OT Evaluation through her Early Intervention Evaluation which indicated delays in fine motor, and adaptive domains.

## Occupational Therapy Evaluation

M. is a quiet, and alert baby who smiles and watches everything around her. She pushes up on her arms when on her belly, but does not maintain position. She rolls with coaxing from her stomach to her side and her back to her stomach. She sits on her own when placed there, but falls over if she tries to reach for a toy. She holds a toy with a tight grasp, but does not bring them to midline. She touches her bottle, but does not hold it on her own yet. M. spits out cereal and fruits. M. cries during diapering, dressing and to fall sleep, and wakes often throughout the night. Her parent have to hold and bounce her to calm her. In the fine motor section of the PDMS-2, M. scored -1.8 standard deviations below the mean, and she was determined eligible for OT. She was eligible to receive Physical and Speech Therapy as well through EI.

## Occupational Therapy Interventions and Results

The Occupational Therapist initially spent time talking to M.'s family while observing their interactions with her. Since her parents both work, the first session was arranged on a Saturday when both

parents could be present. Providing family centered intervention begins with understanding the family's routines and helping the family with areas they identify as challenging for them. M's parent's described their frustrations with M.'s poor feeding and sleeping behaviors. The next visit was done during a feeding time to observe M.'s typical feeding routine. M. sat leaning to one side in her high chair. The therapist showed her parents how to reposition M. more upright for feeding. This not only would help M. be more active in the feeding experience, but she would be in a safer more optimal sitting posture. She guided them to place rolls in her high chair to support M. She asked them to try this at each feeding, and let her know how it worked for the following visit. She gave them a notebook to write down anything they did and wanted to address on future visits.

The next visit was scheduled to observe grandma. The therapist could follow up with grandma to see if parents shared techniques, and to identify challenges grandma was having that may be different than parents. She also discussed using the notebook with grandma so that they all could communicate as a team. Grandma had adjusted M.'s posture in the high chair, but didn't seem to have the spitting out behavior that the parents were. The therapist observed grandma singing to her, letting her remain messy and allowing her to play with her food during feeding time. They discussed how wonderful this observation was and reinforced how she could model her relaxed feeding techniques with M.'s parents.

On another visit, the therapist observed M. with her mom. She stated that she was grateful for the notebook because she could write down questions as they happened which she would have forgotten. She also could write down positive changes she observed, and share the information with other caregivers. Although M's posture was observed to improve, it was noticed that with each new presentation of solids, M. spit it right out. A pre-feeding play routine was discussed with mom including mouth play with toys, rubbing her gums with a finger brush and giving her lots of love and kisses around her mouth before she gives her food, and as often as she remembers throughout the day in order to make any "mouth" experiences positive. The therapist also noticed that when M. spit out the food, mom cleaned her up immediately, as well as mom was holding her bottle for her. The therapist suggested that if mom was comfortable, she should let her stay messy before cleaning her up. She could model for M. to lick her own face with her tongue and let her hands stay messy too if she touches the food for as long as mom could handle before wiping her hands. Strategies were reiterated to mom that were working for grandma. A discussion of ways that mom and dad could incorporate them into M.'s current feeding routines to create positive feeding experiences for all. The therapist suggested to mom to hold M.'s bottle a little out of her reach to encourage M. to bring her hands to the bottle instead of holding it for her, and to gradually take her hands away once she was holding it herself.

On subsequent visits, they discussed sleeping routines including calming strategies, and the therapist arranged to come closer to naptime so she could observe this routine. Parents reported that feeding was better including M. staying messy, trying new foods, no spitting out food, and reaching to hold her bottle. She loved all the oral feeding activities, and even her sister was instigating fun mouth games with her including teaching her to make raspberries with her mouth.

## Discussion

It is not as challenging as early interventionists think to provide family centered best practices. It begins with being a good investigator. Be sure to observe and look at all the pieces of the family's daily routines that need help. Emphasis should be placed on listening to the family's perspective of what they are finding challenging. It is important to be open your minded to identify their routines and the difficulties they are having in their everyday family routines, and let go of your therapeutic agenda of how we think it should be done. Experiment and try things within the family's naturally occurring activities that are reasonable for them to do. As much as possible, it is necessary for interventionists to be flexible with their scheduling. Regular scheduled visits are important, but there will be times we have to come and observe the actual routine when it is happening with families. Most importantly, continuous communication with all of the caregivers is essential every step of the way.

## Conclusion

Using family centered best practices were necessary for M. and her family, and are for many children like her. It became apparent when caregivers were made aware of how to incorporate these strategies into daily routines. If we starting with routines that are challenging for families then make tweaks and changes within their routines. This can empower families within the context of their daily lives. This case illustrates the beginning of a shift in the way we can provide OT in EI. It gives us food for thought about effective strategies to build on family's daily routines in order to improve the delays of young children who receive OT in EI. More research and sharing of our ideas is necessary to show the effectiveness of our family centered best practice strategies.

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