AT Case Study 2

M.R is a 3 years old boy diagnosed with Cerebral Palsy left hemiplegia. He is a brother of 2 older boys who like to play with him. He has a good routine with spending lots of time with family. M.R was referred to OT to improve self-feeding and playing functioning.

The family used to have meals while sitting on floor while M.R is sitting with wall support. He sits upright for 2 minutes before leaning in a kyphotic posture with W sitting. M.R uses his right hand for finger feeding, and drinking with lots of spillage.

He uses only his right hand while playing with closing the other hand. He needs lots of cues to use the left hand. He likes playing with bubbles. He also likes listening to music and dancing with his brothers.

Prognosis:

 A hemiplegic CP case can improve and ambulate independently with using assistive technology.

OT evaluation results:

- Sitting: The child sits in W sitting with kyphotic posture.
- ROM: Limited left side AROM
- Muscle strength: Functionally inadequate muscle strength in left side more than right side.
- Tone: Low facial muscles tone.
- Sensory function: Inadequate vestibular processing (Positioning and balance issues)
- Coordination: Limited bilateral and hand to mouth coordination.
- Mental functions: Vestibular and proprioceptive perception are not adequate affecting motor planning (apraxia)
- Environment: Parents are not aware of the environmental modification need
- Social interaction skills: He is able to indicate for needs by pointing and facial expressions. Not able to produce sounds.

Target outcome:

- To improve self-feeding
- To improve playing abilities

The occupational therapist suggested a variety of adaptive devices before evaluating the effectiveness and suitability of each device and reevaluate the effectiveness after usage.

Feeding AT:

 Corner Chair with Activity Table, for floor sitting with proper body upright position. It helps to improve feeding independently. In addition, the proper position improves swallowing.

• Swivel utensils with build-up handles, for easy stronger grip. They turn

around to prevent the food from spilling everywhere

- Utensils straps, for more stability
- High-low scoop plate, for easy scoop without spillage. It has a non-skid rubber-coated base to prevent plate sliding
- Two handled snorkel cup, for better stability of cup grip, to encourage using of both hands for coordination, and for easier drinking without spillage.

Communication:

 Communication bracelet, the child can point on the square that represents his need to express his necessary needs. Can be worn on right hand to point with left hand and improve bilateral coordination.

Mobility:

 Adaptive Stroller, to facilitate mobility for more fun playing with brothers. It can help to encourage using left leg to move and go after his brothers.



Playing:

- Bubbles machine. As he is not able to blow the bubbles, it automatically blows them and encourages him to move and use his hands to touch the bubbles.
- Band jam, 2 of it can be placed at right and left sides to encourage the child to use both hands for pressing and producing louder sounds.

