

Tutorial

Orofacial myofunctional therapy with children ages 0-4 and individuals with special needs

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OROFACIAL MYOFUNCTIONAL THERAPY WITH CHILDREN AGES 0-4 AND INDIVIDUALS WITH SPECIAL NEEDS

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ABSTRACT

Purpose: The purposes of this paper are to 1) define variations in terminology and treatment methodology for orofacial myofunctional disorders (OMDs) in children 0-4 years of age and in special populations, and 2) compare and contrast service delivery models for children ages 0-4 and individuals with special needs versus older children and children who are neurotypical. **Method:** A literature review of scholarly articles, professional presentations, poster presentations, blogs, and social media were analyzed using three tiers of evidence-based practice to include: 1) clinical expertise/expert opinion; 2) external and internal evidence and 3) client/patient/caregiver perspectives. **Results:** Professional texts and publications used consistent language when discussing treatment of OMDs in young children and children with special needs. Terminology and treatment approaches for young children and/or children with special needs who present with OMDs were inconsistent in social media and professional presentations. **Discussion:** The treatment modalities used in orofacial myofunctional therapy to stimulate oral motor responses depend upon age and cognitive status. OMDs should certainly be treated in infants, young children and individuals with special needs according to the methods of the pediatric feeding specialist. Orofacial myofunctional therapy requires volitional control and self-monitoring; as such, it is contraindicated for infants and toddlers as well as those individuals who cannot actively engage in therapeutic techniques.

KEYWORDS: orofacial myofunctional disorder, orofacial myofunctional therapy, evidence-based practice, tethered oral tissue, dysphagia, feeding, scope of practice

INTRODUCTION

It is understood that orofacial myofunctional disorders (OMDs) can occur across the lifespan. It is important, however, to understand that the treatment of OMDs varies based on the age and/or the cognitive ability of the patient. The semantics of treatment modalities are important. They help both professionals and the public understand the nature of services delivered and received. The Oral Motor Institute, founded by Pamela Marshalla and Diane Bahr, developed monographs to ease the confusion regarding these important therapy modalities (Bahr, 2008; Marshalla, 2007, 2008). Oral motor therapy is an umbrella term with various associated treatment methodologies including oral sensory-motor, orofacial myofunctional therapy (OMT/OFMT/MFT), pre-feeding and oral placement therapies. Bahr and Rosenfeld

(2010) made an effort to define these terms and provide clarity to differentiating evidence-based therapy from non-speech oral motor exercises.

Defining Orofacial Myofunctional Disorders

According to the definition by the International Association of Orofacial Myology (IAOM), an OMD includes one or more of the following:

abnormal labial-lingual rest posture, bruxism (teeth grinding), poor nasal breathing, tongue protrusion while swallowing, poor mastication and bolus management, atypical oral placement for speech, lip incompetency and/or digit habits and sucking habits (such as nail biting). These conditions can co-occur with speech misarticulations. In these instances, the articulation disorder is not developmental or phonological in

nature, but rather a result of poor oral placement and inappropriate muscle development. OMD may reflect the interplay of functional behaviors, physical/structural variables, genetic, and environmental factors. (Billings et al., 2018, p. 1; Doshi & Bhad-Patil, 2011; Hanson & Mason, 2003).

D’Onofrio (2019) went on to define that an OMD includes “dysfunction of the lips, jaw, tongue, and/or oropharynx that interferes with normal growth, development, or function of other oral structures, the consequence of a sequence of events or lack of intervention at critical periods that result in malocclusion and suboptimal facial development” (p. 1). Both definitions point to the fact that 1) OMDs occur across the lifespan; 2) OMDs are the nexus of function and structure; 3) the diagnosis considers the interaction of how atypical movement patterns result in structural changes; 4) and how structural anomalies impact functional skills. Billings and colleagues (2018) pointed out that OMDs can be seen in newborns, infants, and toddlers. Given that children in the 0-4 age range may present with OMDs, clinicians must be able to identify symptoms of the OMD and know what

methods are appropriate to treat it. Oral motor and feeding therapy are consistently cited as appropriate methods as described below.

There are many citations in the literature that reference therapeutic techniques with this population. For example, in the text *Nobody ever told me (or my mother) that! Everything from bottles and breathing to healthy speech development!*, Bahr (2010) describes specific, detailed assessment measures and therapeutic strategies for infants and children and toddlers including those with special needs. Several years thereafter, Overland and Merkel-Walsh (2013) carefully outlined oral motor normative data and a task analysis approach to feeding assessment and remediation. The co-authors later penned a text (2018) specifically related to Tethered Oral Tissues (TOTs), otherwise known as lingual, lip and buccal ties. Specific assessment and therapeutic strategies with the use of tactile and oral sensory-motor cues were suggested to work from passive to active, depending on the age and cognitive status of the patient. Tables 1 through 4 list the many signs and symptoms of OMDs in these populations according to the available literature.

TABLE 1: FEEDING AND SWALLOWING

- Aerophagia (excessive swallowing of air while feeding)
- Deficits in oral motor development such as not integrating the rooting reflex or failure to develop a rotary chew
- Difficulties with oral preparation or oral transit including tongue thrust swallow, poor or inefficient chewing, messy eating, and/or audible eating
- Difficulties with suck-swallow-breathe coordination
- Difficulty nursing
- Difficulty transitioning from breast/bottle to straw/cup
- Difficulty transitioning to pureed and/or solid foods
- Failure to Thrive
- Gagging/vomiting before or after meals
- Immature or disordered swallowing patterns
- Inadequate mastication
- Picky eating habits
- Poor latch during breast- or bottle-feeding
- Prolonged hard-spout sippy cup usage
- Prolonged sucking habits
- Self-limited diet
- Tongue protrusion past the lower lip during feeds

TABLE 2: ORAL HABITS

- Bruxism (teeth grinding)
- Daytime breathing habits including open mouth posture and audible breathing
- Excessive mouthing of objects
- Low jaw posture
- Nail biting
- Open mouth posture at rest
- Prolonged non-nutritive sucking habits
- Tongue protrusion past the lower lip at rest
- Tongue suckling/sucking

TABLE 3: STRUCTURAL and MEDICAL

- Airway obstruction including sinus congestion, enlarged tonsils and adenoids and enlarged turbinates
- Crowded teeth
- Dental malocclusion (overbite, open bite, overjet, deep bite etc.)
- Deviated septum
- Diastemas of teeth (spaces between the teeth)
- Differential dental eruption
- Dry lips
- Genetic syndromes which are associated with dental malocclusions and/or hypotonia (such as Down syndrome)
- High vaulted palate
- Lip blisters
- Narrow palate
- Nighttime breathing habits including restless sleeping through the night, nocturnal bruxing, and enuresis
- Neurological disorders (i.e. degenerative diseases in the elderly or developmental sensory-neural delays)
- Orofacial hypotonia
- Poor lingual range of motion
- Poor oral hygiene
- Sleep apnea
- Sleep disordered breathing
- Tethered oral tissues (TOTs, tongue, lip and /or buccal ties)
- Tongue scalloping
- Torticollis
- Torus palatinus
- Upper Airway Resistance Syndrome (UARS)
- Xerostomia (dry mouth)

TABLE 4: SPEECH

- Atypical speech sound elicitation with abnormal lingual dental articulatory placement for /t, d, l, n/ due to low forward tongue position, ankyloglossia and/or atypical swallowing
- Challenges with palatal sounds which require back tongue side spread such as /tʃ, dʒ, ʃ, ʒ, r/ secondary to ankyloglossia, high vaulted palate, hypotonia or inability to stabilize the tongue blade with elongation of the lateral margins of the tongue
- Distorted productions of /s, z/ often with an interdental or lateral lisp correlated with a tongue thrust swallowing pattern and/or ankyloglossia
- Fronted velar phonemes /k, g/ due to ankyloglossia, low forward tongue carriage and/or weakness with lingual retraction
- Hyper- or Hypo- nasal speech
- Lateralized air emission on all fricative and affricative phonemes
- Poor overall intelligibility
- Weakness for bilabials and labiodentals due to inadequate lip closure, open mouth posture, lip tie and /or labial insufficiency

TREATMENT OF OROFACIAL MYOFUNCTIONAL DISORDERS IN INFANTS AND CHILDREN AGES 0-4 AND INDIVIDUALS WITH SPECIAL NEEDS

Orofacial myofunctional therapy (OMT) aims to improve facial proprioception, improve the appearance of tone, and maximize orofacial mobility (Homem et al., 2014). While there is little debate that infants can present with an OMD diagnosis such as ankyloglossia, the way in which these infants and toddlers would be treated is different than how older patients, or children who are neurotypically developing would be treated. The volitional control, ability to follow directions and self-monitor are all important considerations when embarking on a treatment protocol to improve clinical manifestations of an OMD.

According to Billings et al. (2018), OMT is recognized as an effective treatment for a variety of symptoms in ages 4 and up, but oral motor/feeding strategies that apply to infants and young children are as follows:

- To improve nasal breathing post tonsilloadenoidectomy (Huang et al., 2014).
- To improve infant nursing (Ferrés-Amat et al., 2016; Steeve et al., 2008).
- To improve chewing and feeding (Baxter et al. 2020; He et al., 2013).

- To improve the oral preparatory and oral transit phases of swallowing and symptoms of oral dysphagia (Averdson, 2008; Brackett et al., 2006; Calis et al., 2008).
- To improve articulation (Daggumati et al., 2019; Messner & Lalaka, 2002; Ray, 2003).
- To eliminate detrimental oral habits (Aizenbud et al., 2014; Borrie et al., 2015).
- To improve symptoms such as mouth breathing, open-mouthed posture, and muscle-based dysfunction in special populations such as children with cerebral palsy, Down syndrome or dysarthria (Ray, 2001, 2002).

While these goals can be addressed in infants and toddlers as well as in children with special needs, the terms used to describe treatment are controversial. To ease some of the confusion, Merkel-Walsh (2018a) penned a blog for Ages and Stages®, LLC, to differentiate pediatric oral motor and feeding therapies from orofacial myofunctional therapy. Portions of this work were presented at the 2018 IAOM Convention and this information was also shared via webinar (Merkel-Walsh, 2018b). The following is extracted from the article (Merkel-Walsh, 2018a) and presentation with additional information included to reflect more recent data.

Pediatric Feeding

Feeding is a function of daily living that starts at birth. In order to understand abnormal development that occurs with OMDs that impact feeding, one must understand normal development (Bahr, 2017) and how feeding and swallowing are a part of the OMD puzzle. An infant is born with hard-wired synergies, or central neural pathways (Singh et al., 2018), which affect infantile reflexes that support feeding. For example, a baby innately is able to root their head to turn to the mother's breast at birth and draw the nipple into the oral cavity (Overland, 2010; Overland & Merkel-Walsh, 2013). When a structural anomaly or muscular imbalance interrupts the oral sensory-motor system or when atypical reflexes are present, feeding problems often occur. There are four modern texts that thoroughly describe infantile reflexes, pre-feeding, and feeding:

- 1) *Pre-Feeding Skills* (Morris and Klein, 2000);
- 2) *Nobody Ever Taught me (or my Mother) That! Everything from Bottles and Breathing to Healthy Speech Development!* (Bahr, 2010);
- 3) *A Sensory Motor Approach to Feeding* (Overland & Merkel-Walsh, 2013);
- 4) *Feed Your Baby and Toddler Right: Early Eating and Drinking Skills Encourage the Best Development* (Bahr, 2018).

The American Speech Language and Hearing Association (ASHA, 2018) describes feeding/swallowing as having four stages: 1) Oral Preparation Stage — preparing the food or liquid in the oral cavity to form a bolus including: sucking liquids, manipulating soft boluses, and chewing solid food; 2) Oral Transit Phase — moving or propelling the bolus posteriorly through the oral cavity; 3) Pharyngeal Phase — initiating the swallow and moving the bolus through the pharynx and 4) Esophageal Phase — moving the bolus through the cervical and thoracic esophagus and into the stomach via esophageal peristalsis (Logemann, 1998).

It is within the scope of practice (SOP) for a speech-language pathologist (SLP) to assess and treat all four stages of swallowing. When SLPs consider feeding across the lifespan, they also look to International Board-Certified

Lactation Consultants (IBCLCs), nurses, respiratory therapists, occupational therapists (OTs) and physical therapists (PTs) for their roles in the four stages. Pediatric dysphagia often requires a team and it is important for each member to know the others' roles for referral purposes. The oral preparatory and transit stages of swallowing are also targeted by as part of OMT, however, feeding therapy is not within the orofacial myologist's SOP (Holtzman, 2018). Unless of course, it is delivered by an SLP who has specialized training in OMT and pediatric dysphagia.

Pediatric feeding therapy differs from OMT. Features specific to pediatric feeding therapy include:

- Pediatric feeding therapy is based on normal oral sensory-motor development and a task analysis of the pre-feeding skills needed for safe, effective nutritive feeding (Overland & Merkel-Walsh, 2013).
- Pediatric feeding therapy can be passive, requiring no volitional execution of motor skills by the client, but rather motor responses that occur when the therapist uses sensory-motor mapping techniques to elicit a response. For example, by stimulating the lateral borders of the tongue the SLP can elicit lingual lateralization required for maintaining a lateral chew. Or, by providing adaptive equipment, such as a therapeutic recessed-lid cup, the therapist can facilitate improved motor skills for drinking and swallowing (Bahr, 2010 & 2018; Morris & Klein, 2000; Overland & Merkel-Walsh, 2013).
- Pediatric feeding therapy often has nutritional targets and considers optimal weight gain and the child's growth curve. This is coordinated with the medical team (ASHA, 2018).
- Pediatric feeding therapy may involve all four phases of swallowing, which requires a specific skill set through post-graduate training in pediatric

- dysphagia which is not the same as adult dysphagia training (ASHA, 2018).
- Pediatric feeding therapy can occur from 0-18 years of age to include the four stages of handling liquids, purees and solids.
 - Pediatric feeding therapy involves facilitating the oral motor skills required to safely handle various utensils and /or modifies utensils to improve feedings such as nipple shields, therapeutic cups, adaptive forks and straws with lip blocks (Overland & Merkel-Walsh, 2013).
 - A pediatric feeding team may include the: IBCLC, gastroenterologist, endocrinologist, allergist, otolaryngologist, pulmonologist/respiratory therapist, dietician, speech-language pathologist, home health aide, nurse, occupational therapist and /or a physical therapist as well as the educational specialists and caregivers.
 - Pediatric feeding therapists must pay attention to medical considerations (e.g., nasogastric tube, tracheostomy, etc.) and complex medical complications (neonatal intensive care unit stay, traumatic brain injury etc.) in addition to coordinating with a medical team for cardiac and respiratory concerns.
 - Feeding therapy involves learning adaptive strategies to compensate for oral sensory-motor deficits or delays/disorders in pre-feeding skills.
 - Pediatric feeding involves collaborating with a gastroenterologist and/or dietician to establish calorie targets, safe textures, and diet expansion.
 - It also includes working with occupational and physical therapists for optimum posture, alignment, and sensory regulation to maximize progress in feeding sessions.
 - Pediatric feeding therapists coordinate with IBCLCs to assist with transitions from breast/bottle to pureed/solid foods and /or as a part of a tethered oral tissue team.
 - Pediatric feeding disorders are often treated concurrently with speech sound disorders, specifically those that are organic in nature and impacted by structural and/or muscle-based disorders. While there is not a 1:1 correlation between feeding and speech sound production, the two systems overlap (Overland & Merkel-Walsh, 2013; Bahr & Rosenfeld-Johnson, 2010).

Orofacial Myofunctional Therapy

OMT differs from pediatric oral motor/feeding therapy. Those differences include:

- OMT is typically an active approach and often requires volitional execution of a motor plan by the client, such as practicing lingual positioning for isolated swallows (Merkel-Walsh, 2018c; Boshart, 2017).
- OMT requires the patient to know the “why” of the program and the patient has to “work” at their goals (Holtzman, 2018). An infant or toddler would not know the “why” of an OMT program.
- OMT is based on abnormal structure, tone, oral resting posture, habits and swallowing patterns (AOMT, 2018).
- While early signs of OMD can be recognized in infants and toddlers, the initiation of OMT varies in the literature from as early as 4 years to as old as 8 years of age (Holtzman, 2018). Other treatment modalities are available for younger populations.
- An OMD team may include the: pediatrician, physician, SLP, Registered Dental Hygienist (RDH), Certified Orofacial Myologist® (COM®: RDH-COM® or SLP-COM®), dentist, orthodontist, allergist, otolaryngologist,

- breathing specialist, sleep specialist, bodyworker (osteopath, chiropractor, licensed massage therapist, physical therapist, occupational therapist) and /or oral maxillofacial surgeon.
- OMT requires volitional imitation of oral postures such as “tongue to the spot” or practicing oral resting posture and the lingual palatal seal with a conscience effort to self-monitor.
 - OMT involves repetitive practicing of phonemes, articulation drills and/or oral placements of lingual alveolar and palatal phonemes to ensure that not only acoustics are correct, but also the phonetic placements are correct as well (Merkel-Walsh & Overland, 2018).
 - OMT targets oral habits such as thumb sucking and mouth breathing (e.g., Sandra Holtzman’s online *Unplugging the Thumb*, n.d. or Pam Marshalla’s *How to Stop Thumbsucking (and Other Oral Habits): Practical Solutions for Home and Therapy* (2001) with positive reinforcement schedules and self-monitoring.
 - OMT addresses respiratory control with the dentist, otolaryngologist (ENT) and other appropriate medical professionals when the airway is not patent (de Felicio et al., 2018).
 - OMT involves developing self-awareness of saliva management.
 - The OMD team coordinates with dentists and orthodontists regarding appliances and management (e.g., Myobrace, Advanced Lightwire Functional Appliance (ALF), palatal expanders).
 - OMT can alleviate the symptoms of temporo-mandibular dysfunction (TMD) and facial pain (de Felício et al., 2010; Machado et al., 2016).
 - OMT is used to improve symptoms of sleep disordered breathing and obstructive sleep apnea (de Felicio et al., 2016; Diaferia et al., 2013; Huang

& Guilleminault, 2013).

- OMT involves coordination with a medical team to rule out and or treat airway problems/ sleep disordered breathing (Archambault, 2018).
- An OMT program can be used to improve lingual range of motion post-frenectomy (Ferrés-Amat et al., 2016).
- OMT is a part of a dental and orthodontic team, to assist in the prevention of orthodontic relapse.

A COMPARISON OF ORAL MOTOR/FEEDING AND OROFACIAL MYOFUNCTIONAL THERAPIES

When clinicians can differentiate diagnoses and treatment plans, they are empowered to better serve their patients, clients and students. The distinctions between oral-motor/feeding and OMT does not imply that we ignore, or fail to treat OMDs in infants, young children and/or special populations.

Despite variations between pediatric oral motor/feeding and OMT, there are definite overlaps in diagnosis and treatment. For example, an OMT program works on tongue tip swallows and self-monitoring of the swallow, as mentioned previously. These types of tasks would make this treatment modality difficult for infants, toddlers, and preschoolers as well as patients/clients with motor-planning disorders (childhood apraxia of speech), motor-execution disorders (dysarthria) and/or special needs. These individuals require the assistance of tactile tools, manual manipulation and oral-motor techniques such as The Beckman Oral Motor Protocol (Beckman, 2020) or tactile and proprioceptive input through the motor-kinesthetic approach (Marshalla, 2020).

Many SLPs who have interest and specialized training in pediatric oral motor/feeding also have training in OMDs and vice versa. For example, SLPs who are trained in pediatric feeding and orofacial myology may combine tactile oral sensory motor strategies and pre-feeding therapy to target goals in an OMT

program. Most experienced clinicians who are trained in these therapeutic modalities know how to recognize the early signs and symptoms of OMDs in babies, toddlers, and individuals with complex diagnoses. The similarities and differences between pediatric oral motor/feeding and OMT can be confusing to professionals and the public.

For example, therapy that is recommended for pre- and post-frenectomy is often considered OMT, but when it is with an infant or toddler, the term may be contraindicated based on the target age group for OMT. Merkel-Walsh and Overland (2018) call pre- and post-operative therapy with infants and toddlers “neuromuscular re-education” and describe the importance of a multi-disciplinary team.

Another example is that of open-mouth posture at rest. Infants with open-mouth posture should be treated, but cannot self-monitor. A well-trained pediatric feeding therapist (IBCLC, SLP, OT) can recognize and assist improved resting posture in patients who do not have volitional control. An OT or PT, or other bodyworker such as a chiropractor, can assist with posture and alignment to support the head, neck and jaw to assist with resting posture (Merkel-Walsh & Overland, 2018). Techniques that help superimpose lip closure through pre-feeding therapy may be used. There are some additional strategies that could also be helpful and are long-standing muscle-based and neuromotor treatment modalities, long before myofunctional therapy with infants and toddlers was suggested. For example, The Beckman Oral Motor Protocol was developed in 1975 by Debra Beckman, a speech-language pathologist. Her techniques were developed for those individuals who could not volitionally control the orofacial muscles on command. Her protocol provides “assisted movement to activate muscle contraction and provide movement against resistance to build muscle strength” (Beckman, 2020; Beckman et al., 2004).

Other methods could include Neuro-Developmental Treatment (NDT) or pre-

feeding techniques as aforementioned when discussing pediatric oral motor/ feeding.

This varies in comparison to working with a teenage or adult patient, where the COM® teaches the patient to position the jaw, lips and tongue at rest. OMT has a strong focus on habitualization and therefore actively engages the patient in the self-monitoring process such as practicing the new resting posture during common daily activities (exercise, watching television etc.). In both age groups the therapist will be working with the medical team to determine the underlying causes of the open mouth posture to rule out structural concerns such as adenoidal hypertrophy; however, the way the resting posture is treated varies from passive to active based on the volitional control, cognition, motor-planning abilities and neurological status of the patient.

While SLPs and OTs can work with feeding across the lifespan, only therapists who have been specifically trained to work with the infant population should do so, and therapists from related fields who work with older patients should receive specialized instruction before attempting to work with infants. Confusion occurs because pediatric feeding and OMT often target some similar goals such as improving: bolus mobility; labial seal on a straw or cup; lingual palatal seal; lingual protrusion, retraction, lateralization, and elevation; lip closure; mastication; oral transit time; range of motion of the jaw, lips, cheeks, and tongue; sequencing of the oral phase of swallowing; tongue tip dissociation from the jaw to the incisive papilla.

Scope of Practice

OMT is a treatment modality that should be performed by a licensed professional who has this modality in their SOP. To date, there is no license in the United States of America for an Orofacial Myofunctional Therapist, although the IAOM offers a formal certification process (COM®). The COM® is legally trademarked and recognized by the United States Patent and Trademark Organization (USPTO). Historically, the IAOM has only certified SLPs and RDHs

because they are the only professions that specifically list OMDs in their SOPs (ASHA, 2016b; ADHA, 2018). The COM® process trains RDHs and SLPs side by side through a 28-hour course, written examination, on-site clinical examination and with success, continuing education requirements (IAOM, 2020). The IAOM also has a fellowship program for physicians and dentists.

Often similar goals could be targeted by multiple professionals. Several professionals may encourage and manipulate the placement of a bolus, using massage, myofascial release, pre-feeding activities, oral tools, strengthening exercises, and/or oral sensory-motor cues to facilitate progress. It is up to professionals to rely on their own professional association and

state licensing board to define their roles with pediatric dysphagia and/or OMDs.

Treating OMDs in infants and young children requires a team approach (Billings et al., 2018). Although SLPs and RDHS have scope to deliver OMT, the supportive services from a team of professionals is critical. For example, according to The American Dental Association, babies should have early oral screenings around the age of 1 year. This would help identify and treat an OMD early in life. Children with developmental disabilities who receive early intervention may be identified by occupational or physical therapists due to their knowledge of feeding disorders, small and large muscle groups and sensory-motor integration. Table 5 provides examples of pediatric OMD teams.

Table 5. Potential Members of Pediatric OMD Teams

OMD Infant and Toddler Team Pre-feeding, Oral Motor and Feeding Therapies, Bodywork and Medical Team	OMD Pediatric Team Orofacial Myofunctional and Feeding Therapies, Bodywork and Medical Team
<ul style="list-style-type: none"> • Allergist • Body worker – osteopath, chiropractor, licensed massage therapist, physical therapist, occupational therapist • CranioSacral therapist • Dentist • Early Interventionists • Feeding specialist (OT/SLP) • Lactation consultant (IBCLC) • Nutritionist • Occupational therapist • Oromaxillofacial surgeon • Osteopathic medical physician • Otolaryngologist • Pediatrician • Physical therapist • Registered Dental Hygienist • Respiratory Therapist • Speech-Language Pathologist 	<ul style="list-style-type: none"> • Allergist • Body worker – osteopath, chiropractor, licensed massage therapist, physical therapist, occupational therapist • Certified Orofacial Myologist™ • CranioSacral therapist • Dentist • Educational Professionals • Feeding specialist (OT/SLP) • Nutritionist • Occupational Therapist • Oromaxillofacial surgeon • Osteopathic medical physician • Orthodontist • Otolaryngologist • Pediatric dentist • Pediatrician • Psychologist/Neuropsychologist • Registered Dental Hygienist • Respiratory Therapist • Speech-Language Pathologist

With the team model in mind, it is important to consider ethical issues for best practices in interprofessional collaboration. Examples include:

- RDHs practicing OMT may target jaw strength for mastication purposes but will refer patients with signs and symptoms of dysphagia to the SLP/OT.
- OTs may be working on feeding goals with a patient but will not work on the placement of the articulators for speech. They will refer to an SLP if they notice speech clarity problems.
- SLPs may strive for ideal posture and positioning during OMT sessions but will refer to OT/PT when signs and symptoms of muscle dysfunction are noted beyond the orofacial complex.
- PTs treating torticollis will refer a baby for a feeding evaluation to an IBCLC, OT or SLP, as well as for a medical evaluation, if they suspect that tethered oral tissue is possible and may be impacting an infant's feeding.
- An orthodontist who has a plan of care for palatal expansion in a young child will refer the patient for OMT if atypical speech or swallowing is observed.
- An oral surgeon, who plans to perform a frenectomy on a 3-year-old patient with a diagnosis of autism, will refer the patient for pre-operative therapy/ies in order to ensure that post-operative stretches and intraoral massage will be tolerated post-operatively.
- An SLP or OT without pediatric feeding or myofunctional training who is working in the educational setting will refer a preschooler for a medical consult if they suspect issues with the orofacial complex.

It is also important to note that taking a class on a topic to learn information does not necessarily mean it is ethical to practice that method. Interprofessional training helps us understand how varied professionals can assist us with patient care, but we may not be able to practice what is learned in a course if

we do not have the license to do so. For example, many IBCLCs and RDHs have taken courses on the management of tethered oral tissues. Pediatric feeding, speech, and OMT are often covered in this coursework; however, these professionals should not implement certain aspects of care when it is not within their SOP. For example, the IBCLC will learn to adapt strategies to support breastfeeding and the infant-mother dyad, whereas the SLP learns articulation strategies. Goals of pediatric feeding and OMT are illustrated in Appendix A.

CONCLUSION

Semantics are important. Semantics and choice of words help the professional seek the proper training and will help the public understand what services they need to seek from the right professional. Pediatric oral motor/feeding therapy and orofacial myofunctional therapy may overlap; however, each requires a very specific skill set in training and each have different aspects that make them unique. Both pediatric oral motor/feeding and OMT involve an interdisciplinary team that ranges from physicians to bodyworkers and crosses the lifespan starting with IBCLC's all the way up to COMs® with specialized training in tongue thrust, airway dysfunction, and orthodontia in adults. Infants, babies, toddlers and children with special needs require special considerations due to their fragility and complex medical profiles in addition to their decreased ability to imitate or initiate self-monitoring.

SLPs are unique in that they have both oral motor/pediatric feeding and OMT within their scope of practice while other fields may have one or the other. Proper training in both skill sets are needed to diagnose and treat, and while overlap may occur, it is important not to transfer the methods used for older patients to babies and toddlers. It is up to each professional who treat these patients to ensure safety and consider ethics (ASHA, 2016a) in order to implement a proper plan of care. This could mean providing appropriate referrals to the professional with the experience and proper professional scope when needed.

In summary, OMDs in infants and young children (0-4) and children with special needs should not be ignored; however, in an effort to “do no harm” we must refer these patients to the most highly trained, licensed professionals that can best serve this population with evidence-based treatment strategies within their scopes of practice. Patients who are 4 and over and/or can follow directions,

understand therapeutic goals and self-monitor are more appropriate candidates for OMT. These patients should also be referred to the most highly trained professionals within licensure scope. Oral motor/feeding and OMT treatment methodologies help improve the signs and symptoms of OMDs across varying ages and population.

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The author of this article is the Board Chair of the Oral Motor Institute and is a consultant, product developer and lecturer for TalkTools®.

Additional references and resources on this topic can be found at
<http://oralmotorinstitute.org/resources/Orofacial-Myofunctional-Disorders-RefList.pdf>

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APPENDIX A

Unique and overlapping symptoms and goals specific to orofacial myofunctional therapy (OMT) and pediatric feeding therapy. (Reprinted with permission by Billings, D'Onofrio, Gatto, and Merkel-Walsh, 2017)

