The Use of Singing as a Therapeutic Modality Within the Context of Voice Therapy

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Abstract

The use of singing voice exercises as a therapeutic modality within the traditional voice therapy session as a means to facilitate functional improvement will be the focus of this article. The reader will be presented with a brief review of the literature as it pertains to the American Speech-Language-Hearing Association (ASHA) guidelines and scope of practice. In addition, this article will provide insights for the speech-language pathologist (SLP) with respect to the clinical utility and functionality of singing voice exercises as a means to bridge the gap from vocal injury to restored vocal function. Relevant clinical examples for a variety of patient populations will be highlighted.

The American Speech-Language-Hearing Association's (ASHA's) Scope of Practice states, "The overall objective of speech-language pathology services is to optimize individuals' ability to communicate and swallow, thereby improving quality of life" (ASHA, 2007, "Framework for Research and Clinical Practice"). Within the guidelines of the Scope of Practice for Speech-Language Pathology, clinicians must maintain clinical integrity by administering therapy that corresponds to the speech-language pathologist's (SLP's) present knowledge and skill level. ASHA states that "It is both ethically and legally incumbent upon professionals to determine whether they have the knowledge and skills necessary to perform such services" (ASHA, 2007, "Statement of Purpose"). The Scope of Practice statement further acknowledges that speech-language pathology is a dynamic field with changes and advances in intervention, as well as new treatment methodologies emerging in all areas of clinical practice. A joint statement by ASHA, National Association of Teachers of Singing, and Voice and Speech Trainers Association provides a collaborative effort to acknowledge the skillset required of each of the above disciplines in meeting the needs of speakers and singers (ASHA, 2005). In addition to the ASHA guidelines, it is imperative that clinicians are aware of and in compliance with their state rules and regulations when providing optimal patient-centered care.

Differentiating Singing Voice Therapy From a Singing Voice Lesson

SLPs who treat patients with voice disorders and work with patients to restore vocal function in all aspects of their lives should consider the clinical application and use of singing voice exercises as a possible therapy option, when appropriate. Therapy tools, such as semi-occluded vocal tract exercises with the use of straws, are found in both the voice pedagogy and voice science literature (Titze, 2006). Similarly, lip buzzes, tongue trills, and raspberry voice production techniques are used on glides up and down to stretch and contract the vocal folds in both singing voice training (often as a warm-up) and rehabilitative voice therapy (as part of vocal function exercises and resonant voice therapy). Singing tasks can be used in the course of therapy if the goals are rehabilitative. Differentiating when it is appropriate to use singing voice exercises for therapy purposes (restore function) as opposed to using singing voice exercises to enhance the voice (voice training) is imperative to maintain adherence to both the Code of Ethics (ASHA, 2010) and to remain within the SLP's Scope of Practice (ASHA, 2007). Gilman, Nix, and Hapner (2010) explored the roles of the singing voice specialist, voice therapist, and singing voice teacher, indicating that the primary difference between vocal rehabilitation (to restore vocal function) and vocal habilitation (to enhance vocal function) should be considered as a guideline for differentiating voice therapy (rehabilitation) and singing voice lessons (habilitation). In another study by Fields and Hapner (2006), slightly more than 50% of surveyed SLPs treated singers, including professional and avocational. Of the SLPs who reported treating singers, 89% indicated they had singing-specific training (i.e., additional degree in music, private vocal training, professional performing experience; Fields & Hapner, 2006). Using the continuum model of rehabilitating a voice from injury to function falls within the jurisdiction of the SLP. The implementation of singing exercises (with clear intent and purpose) may facilitate restorative vocal function. The level of pre-injury voice function will vary from patient to patient and, as with any type of voice therapy, the understanding of why and how to use a given technique is essential for expedited vocal recovery.

Appropriate use, implementation, and follow-through of any therapy tool are essential for the clinician and patient. The use of singing voice exercises within the context of voice therapy necessitates a (a) clearly defined intent and purpose, (b) defined treatment goal related to the current vocal limitation, and (c) validated scientific evidence for efficacy of use. The use of singing voice exercises benefits many types of voice patients, both pediatric and adult. When providing a client with singing voice exercises, the goal is to meet the functional needs of the patient, which will vary based on the pre-injury level of training as well as the pre-injury vocal performance demands required for each individual.

Clinical Applications

Young Singer

One example of a type of patient who may benefit from singing voice exercises within the context of direct voice therapy is a young child who would like to participate in their school choir. Many clinicians are likely to have encountered an elementary or middle school student who reports singing in their school choir as well as with the radio and around the house daily. These students may present with an overuse injury due to phonotrauma, such as vocal fold nodules. Young students' backgrounds frequently include little to no formal vocal training. Many of these students report singing along to recordings of performers to whom they enjoy listening. This may lead to imitation of these vocal artists, who have much more mature voices than these young students. If the student idolizes a pathologic voice, the voice clinician may introduce the student to appropriate vocal role models who have healthy voices and adequate technique. Depending on the personality and maturity level of the student, they may or may not perceive a problem with their own voice, as well as "buy into" the idea of voice therapy. A patient's perception of therapy significantly affects their adherence and ultimate success (van Leer & Connor, 2010).

For a young student who participates in phonotraumatic behaviors and does not admit any perception of a problem, voice therapy can be a challenge. However, singing voice exercises can be enjoyable and functional therapy tools for these students. Exercises including semi-occluded vocal tract exercises with resistance (i.e., blowing bubbles into a cup of water through a straw) on scales and melodies can be motivating while accomplishing the goals of (a) maximal glottal efficiency, (b) stretching and contracting the thyroarytenoid with minimal impact, and (c) maximizing the resonances of the vocal tract. In another example, to facilitate increased airflow during phonation, a young child could sing "Twinkle, Twinkle Little Star" into a straw, either into a shallow amount of water, or while lightly blowing a tissue placed in front of the straw. This technique allows the child to have visual, tactile, and physiologic cues for optimal voice production in an age-appropriate exercise. Exercises may be tailored to the appropriate level of difficulty.

Amateur Choral Singer

Over 22 million American adults participate in a choral ensemble at least once a week, providing the largest outlet for non-professional singers (Chorus America, 2009). Adult amateur choral singers frequently present to voice clinics with voice complaints. Although symptoms and pathology may vary, complaints may include poor vocal quality, vocal fatigue, decreased vocal range, and/or decreased control of dynamics or pitch. These clients may or may not perceive a problem with their speaking voices in addition to their singing voices. Adults may be lifelong choral singers with variable amounts of formal vocal training. They also differ in the amount of singing they do per week. Many of these performers may only sing one time weekly and engage in 3-4 hours of intensive voice use during that time. Because many of these singers may have never utilized vocal warm-ups or cool-downs (other than general group warm-ups that are performed within the context of a choir), a part of rehabilitative voice therapy may include incorporation of a personalized vocal warm-up/cool-down routine into their direct voice therapy plan. Encouraging them to sing on a daily basis is important to build vocal stamina. The laryngeal reconditioning exercises included in the vocal warm-up to be performed on a daily basis may be tailored to their specific complaints. For example, a patient who complains of decreased control of vocal intensity may benefit from messa di voce exercises. A breathy, disengaged voice quality within a particular range may benefit from frontal focus exercises including /ng/ and nasal /i/ on chromatic or stepwise scales through the area of difficulty.

Professional Voice User

For the professional voice user, singing voice exercises include warm-ups to target consistent tonal quality through registers, dynamic control exercises, frequency range exercises, and sniff exercises targeting appropriate vocal onset. Other singing voice techniques include flexibility and agility exercises and may be necessary in the voice therapy process pending the pre-injury status of the singer and the clinical skill set of the SLP providing therapy services. A unique skill set is required for the SLP who works to restore function to the elite vocalist, as exercises used to rehabilitate function may differ greatly from patient to patient. The premorbid vocal function of vocal athletes will vary depending on genre performed, skill level of the individual performer, and distinctive demands of a given vocalist. Exercises may be drawn from the traditional vocal pedagogy literature and those exercises which include investigation and proof of efficacy for a given problem should be primary choices for the SLP. Specific exercises may include variations on semi-occluded vocal tract exercises (for optimal vocal tract response), mesa-di-voce (development of independence of breath pressure, breath flow, and glottal closure), scales, and arpeggios. Professional voice users generally possess good insight into their voice and technique, which allows them to provide helpful feedback and actively contribute to their treatment plans, ultimately benefiting their progress in therapy. A recommended transition time back to the singing voice teacher should occur when pre-injury vocal function is restored and vocal habilitation can commence.

Conclusion

Singing voice exercises can be important components of a direct voice therapy plan for many patients. Clinicians who have the appropriate knowledge and skills to treat singing voice patients may include singing voice exercises in a direct voice therapy plan for patients who have singing-related voice complaints that negatively impact their quality of life. Singing-based exercises may also be a useful tool in voice therapy for pediatric and adult patients that lack appropriate coordination of respiration, phonation, and resonance providing a motivating functional therapy approach. However, clinicians must ensure that the exercises target rehabilitating the voice to a functional level as opposed to facilitating enhanced voice production. The focus of any singing voice exercise that a clinician provides should target the functional aspects of the patent's voice, whether for optimal professional level operatic performance or amateur choral performance.

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