# *Childhood Dysphonia: A Social Approach*

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**1. Introduction**

The voice plays an important role in human social interaction and is considered the most important tool of oral communication. The voice transmits a speaker's social and personal identity, such as gender, age, nationality, as well as characteristics of personality and indicators of emotional status. Each person has his or her own voice, according to physical characteristics and life-history. The voice changes frequently during the dynamic process of communication and according to one's capacity for perception of the appropriate voice to use in different situations, which depends on physical, cognitive, and social abilities. Alternatively there are some changes in voice that can be associated with human growth and the process of development. Children's vocal characteristics depend on their degree of maturation, and therefore there is an expected voice for each developmental stage.

**2. Diagnostics, classification, and incidence**

Perception of a vocal problem at any stage of the developmental process is related to the speaker's and listener's experience, and the problem should be properly diagnosed. Diagnosis of the basis for a vocal problem is essentially multiprofessional, starting with evaluations by a medical otolaryngologist followed by a speech/language pathologist (SLP). Other professionals' evaluations may be added, depending on the patient's complaints and conditions. The diagnostic process requires, first, detailed data from the patient's clinical history including: vocal complaints, beginning and duration of vocal symptoms, use of the voice in social and professional (adults only) settings and at leisure, general health, and possible presence of systemic diseases. After each specific professional evaluation of vocal behavior, a diagnosis of dysphonia may be achieved, in reference to a vocal communication disorder that compromises natural vocal production and consequently the transmission of verbal messages.

According to its etiology, dysphonia can be classified as functional, when there is a problem originating in use of the voice; organofunctional, related to lesions arising from inadequate behavioral use of the voice; and organic, independent of use of the voice. Sometimes this classification is not very clear. Data in published reports indicate that the incidence of dysphonia in childhood is around 6% , and hoarseness is the most common symptom. Chronic dysphonia negatively affects the lives of children within their families. Therefore valid and age-appropriate

instruments to measure the impact of this vocal disorder are being developed. To avoid this negative impact on the life of a child, as soon as dysphonia is diagnosed, early intervention by a speech/language pathologist is recommended.

## 3. Treatment

### 3.1. The challenge

The presence of functional or organofunctional dysphonia in children represents a big challenge for the speech/language pathologist. In some cases, sessions of vocal therapy may not achieve the expected improvement in vocal behavior. A significant number of patients may obtain reduction in signs and symptoms of a vocal problem, but after a break in therapy due to a vacation or long weekend, these symptoms may reappear. If the medical diagnosis and the vocal therapy were appropriate, why do these symptoms come back in such short order?

### 3.2. Social considerations

To find an answer to this question, some considerations should be made. Initially, the new vocal behavior may not have been completely incorporated. This might be partially true, but a complete answer may be related to the social history of this dysphonic child. In the daily vocal clinic, many speech/language pathologists are confronted with various social situations that can jeopardize results of successful vocal therapy for adult patients but especially for children, as follows:

**Inappropriate vocal patterns**

Although the voice depends on individual anatomical and physiologic characteristics, use of the voice is socio-culturally learned. The basis for this learning process is related to identification with and imitation of individuals at home, in TV programs and movies, and at school, where teachers have a high incidence of vocal disorders due to vocal abuse. The voice adopted as a pattern is neither always appropriate for the child's vocal apparatus nor for many of the chosen models. Alternatively, dynamics within a family and the way the patient uses the voice to solve problems, to achieve his needs, and keep the equilibrium, also can affect the outcome of clinical treatment.

**Inappropriate demands on the voice**

As a consequence of lack of knowledge in notions of vocal health, inappropriate use of the voice, especially regarding loudness, can be found in some schools, singing classes, screaming competitions, and sports activities.

**Inappropriate use of the voice in socio-emotional conflicts**

Especially among family members, many conflicts are handled through abuse of the voice. Sometimes in these situations, children cry and scream at the same time, a harmful behavior for the vocal tract.

**Bilingualism and learning of different languages**

The abovementioned situations can apply in any language. Meanwhile, use of an appropriate voice in a different language that has not been trained in the vocal therapy sessions can bring problems even to adult patients with vocal disorders. Some facts can explain these difficulties: the different phonologic context of the language that may or may not facilitate learning the balance of resonance, patterns of intonation different in each language, and lack of experience or shyness in speaking a second language.

**Predisposition**

According to published scientific reports, specific behavioral characteristics may predispose some children to intense and potentially phonotraumatic use of the voice. Also, the role of genetic predisposition in developing vocal disorders must not be dismissed and may be considered an important area to research. Environmental conditions such as competitive noise, air pollution, air conditioning, and weather may contribute to worsening of all these situations.

**3.3. The social approach to intervention**

Having these above considerations in mind, some helpful strategies should be incorporated in usual treatment of the dysphonic child.

**Family group therapy**

In initial interviews, although parents can give accurate details of the child's vocal history, they cannot always realize their own vocal behavior that might be appropriate during these interviews, but not necessarily so in daily routines. In order to eliminate these problems, as parents or siblings may be chosen as vocal models and as they do have their roles in the dynamics of communication in the family, observation of vocal patients at home can be helpful. But participation of the speech/language pathologist in the child's daily activity is neither always possible nor recommended, in order to avoid interference. Therefore, invitation to those members of the family living in the house to join some therapy sessions and participate in various activities can provide interesting data.

Initially, the role of the speech/language pathologist is to identify whether there is an inappropriate vocal behavior within the family. If there is, awareness by the family and the child of their use of the voice and related implications are important. This development of awareness can be facilitated through observation of the communicative strategies of various characters from movies and TV programs. The next step is to provide alternative vocal behavior in order to avoid vocal abuse by the patient and the family. Practicing these recommendations in various situations can be most productive and motivating if the child or the family realizes that their communicative intention was achieved without the usual vocal effort or abuse.

**Visits to the school**

Visits to the child's school and contact with other professionals related to the patient's daily activities are encouraged, because besides providing information about the small patient, these people can also receive appropriate orientation regarding an effortless use of the voice.

**Bilingualism**

In the presence of bilingualism, introduction of the second language in some therapy sessions may be useful in order to facilitate application of the new vocal behavior in a different linguistic context.

**Auditory training**

One important consideration when dealing with vocal hygiene and modified vocal behavior is to be sure that the patient has an auditory perception of these changes. For some patients, even for those without a hearing loss, perception of required modifications of vocal parameters can be difficult. In these cases auditory training

is necessary, as it is with some adults and those who use their voice professionally who have vocal disorders.

**Counseling sessions**

In some situations, specific orientation for the family and the school regarding use of the voice may be recommended, where the child's participation might not be required. In the presence of an organic dysphonia, the speech/language pathologist can also provide alternative strategies for communication for the child and the family, in order to reduce the negative impact of this vocal problem or to assist in the healing process for the vocal folds after surgery has taken place.

**Conclusion**

Treatment of childhood dysphonia requires an individualized plan for each patient. An eclectic approach including social aspects can be helpful in achieving more successful outcomes. It requires careful observation of the child's development and of his or her universe of dynamic communication, in addition to the usual procedures and techniques of vocal therapy. Early intervention should be recommended to avoid having the child incorporate an inappropriate vocal behavior with negative impact on communicative effectiveness.

**Recomended readings**

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