Voice Therapy & Patient Adherence
What are we really doing?

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What is “Voice Therapy”

• Voice is the audible perception of vocal fold vibration. Vocal characteristics include pitch, loudness and quality. When there are changes in these characteristics, many seek treatment; voice therapy
• According to Wikipedia: Voice therapy or voice training refers to any non-surgical technique used to improve or modify the human voice.

Clients we treat

• Actors
• Singers
• Teachers
• Lawyers
• Sales persons
• Restaurant service personnel
• Office clerks

Historically

• Joe Stemple’s book “Voice Therapy Clinical Studies” provides five different management philosophies:
  – Hygienic voice therapy
  – Symptomatic voice therapy
  – Psychogenic voice therapy
  – Physiologic voice therapy
  – Eclectic voice therapy
Hygienic Voice Therapy

- Treatment with the primary focus of eliminating those things which provide poor vocal hygiene.
  - Shouting, talking loudly over noise, smoking, screaming, chronic throat clearing, and poor hydration.

Symptomatic

- A term introduced by Daniel Boone – this approach is based upon modifying the physiologic processes that are incorrectly or poorly used that cause voice production.
  - Respiration, phonation, articulation (pitch and loudness).

Psychogenic

- Focuses on identification and modification of the emotional and psychosocial factors associated with the onset and maintenance of the voice problem

Physiologic

- Devised to alter directly or modify the physiology of the vocal mechanism.
- Inherent in physiologic voice therapy is a holistic approach to the treatment of voice disorders. The goal is to incorporate the subsystems of voice production.
- Examples:
  - Vocal function exercises
  - Resonant voice therapy
  - Accent method of voice therapy
Eclectic

• As voice professionals we learn about many tools used to assist the client in being successful.
• We must treat each individual – testing each type of treatment philosophy and finding out what works best.
• Combining vocal hygiene, appropriate resonance and adequate coordination between the subsystems of voice to achieve these goals.

Adherence

• Adherence may be defined as the extent to which a patient follows through with agreed upon or prescribed actions, and does what the clinician expects the patient to do (Zweben & Li, 1981).
• Adherence has been acknowledged as a potentially significant variable in voice therapy outcome in overviews of treatment practices (Mueller & Larson, 1992; Pannbacker, 1998) and therapy outcomes research (Murry & Woodson, 1992; Roy, Weinrich, Gray, Tanner, Stemple, & Sapienza, 2003; Verdolini-Marston et al. 1995).

Study – Behrman, et. al.

• Alison Behrman and I worked on a NIH study “Vocal hygiene education, Voice production therapy, and the role of patient adherence: A treatment effectiveness study in women with Phonotrauma”
• The study assessed the effectiveness of vocal hygiene and voice production therapy and the role of adherence in the treatment of voice disorders in adult women with benign, bilateral phonotraumatic vocal fold lesions.

• Both groups achieved a decrease in VHI scores from baseline to completion of the study, although the improvement was significantly greater for the VP group.
• More participants adhered to VP than to VH.
• Only adherent participants achieved significant improvement.
• Only adherent participants in the VP group improved with self-study.
• Greater than two-thirds of the VP group achieved final VHI scores within normal limits, compared to approximately one-third of those in the VH group.
Why successful?

• Pre determined course of treatment
• Contract to participate fully in the demands of the study
• Cost effective – free

Preliminary Findings of a New Study

• 25 Clients, age range 19 – 66
• 20 Female  5 Male
• Dx: vocal fold nodules, vocal fold paresis, Laryngeal pharyngeal reflux (LPR), sulcus vocalis, edema
• Occupations: lawyers, singers, actors, teachers, executives, sales

Protocol

• At the initial evaluation, each client filled out the Voice Handicap Index (VHI).
• Post treatment, 9/25 clients filled out VHI again, 16 are currently in treatment.
• At approximately 3 weeks into treatment, each client completed a self-evaluation of adherence to treatment goals. At this time a 15 question survey was given.

Adherence Questionnaire problems

• The questions were too close ended – most answers were yes/no responses.
• Clients answered the questions about the clinician with the clinician in the room.
• Provided very few answers.
• Perhaps – motivational interviewing would have been more successful.
Results Overview

Referral source and Adherence

ENT results

Impact on ADL

Self perception of laryngeal discomfort

Affective response
Comparison among disorders

Functional Question

• Many of the questions on the VHI refer to behaviors that may have caused the original voice problem: loud speaking in noisy room, excessive talking, avoiding large groups.

Functional Questions

• People have difficulty understanding me in a noisy room.
  – When working with the over doer – we want them to reduce the loudness when speaking
• I use the phone less often than I would like to.
  – We encourage those to use other forms of communication like email or texting.
• I tend to avoid groups of people because of my voice.
  – We encourage them not to try to speak over noise.

Is it possible that the VHI is not the best tool for evaluation of voice patients post treatment?

Are the questions sensitive enough to the changes in vocal behavior that we are encouraging the patients to adopt into lifestyle changes?
What are we doing?

• Providing tools to change the behavior that has caused the voice disorder.
• Provide tools to compensate for a permanent voice disorder.
• Education
• Empathy
• Encouragement

How do we ensure adherence > 75%?

– Constant “checking in” with the patient
– Ask them to perform their daily “routine”
– Create a contract with the client
– No show/cancellation policy – charge to the patient
– Provide feedback of the positive changes
  • Repeat strobes to visualize physical changes, acoustic changes, audio feedback
– Provide feedback of the lack of change

Whether its New York City or the Rest of the country – we have ways of making you talk …………..