PRINCIPLES IN THE CARE OF TRANSGENDER AND INTERSEX PATIENTS

2023

October 12-14, 2023
GENDER AFFIRMING
VOICE CARE

ROCHESTER, MN 2023, FRIDAY OCT. 13
2:30 – 3:00 PM

Diana Orbelo, PhD CCC-SLP
Associate Professor, Otolaryngology
NCVS and PAVA RV Vocologist
DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIP(S) WITH INELIGIBLE COMPANIES

• Nothing to disclose

REFERENCES TO OFF-LABEL USAGE(S) OF PHARMACEUTICALS OR INSTRUMENTS

• Nothing to disclose

All relevant financial relationships have been mitigated.
OBJECTIVES

What, Who, and Why of Gender Affirming Voice Care

Vocal Anatomy, Physiology, and Acoustics

Gimme some nuts and bolts. How do I change my voice?
What, Who, and Why of Gender Affirming Voice Care

PART 1

- What
- Who seeks
- Who provides
- Why
WHAT IS GENDER AFFIRMING VOICE CARE (GAVC)?

- Standards of Care WPATH 8
  - Voice and Communication
- Gray and Courey (2019)
  - Congruence
- Penzell (2019)
  - Limited literature
- Quinna (2018)
  - Impact of vocal incongruence
- Huff (2020)
  - Habilitation not Rehabilitation

GVAC is a dynamic and multi-faceted practice aimed at supporting transgender and gender non-conforming individuals in expressing their identified gender through voice and communication in a way that is healthy, sustainable, and affirming.

- Each program is personalized, addressing the individual’s goals, challenges, and needs.
IS GAVC “HABILITATION” OR “REHABILITATION?”

• Habilitation:
  • Process of acquiring new skills and abilities.
  • No pathology

• Rehabilitation:
  • Restoring lost or impaired function to an optimal level.
  • Implies pathology

• Implications:
  • Who provides
  • Who covers
TARGETS OF GAVC

• Traditional
  • Voice Feminization
  • Voice Masculinization
  • Androgenous

• Expanding the traditional
  • Comfortable voice to produce that participant likes
WHO SEEKS GAVC?

• Not everyone!
• Individuals who are
  • Transgender
    • Transwoman
    • Transmen
  • Non-Binary
  • Gender-Nonconforming
  • Gender-Questioning – Gender Exploring
  • Genderqueer
• Transgender women
  • 19% had – 62% wanted voice therapy

• Transgender men
  • 21% incomplete voice gender congruence with T
  • 80% report qualitative dissatisfaction with gender related voice issues

James et al., 2015 Transgender Survey; Ziegler et al., 2018; Azul et al., 2018; Pasternak & Francis, 2019
WHY

• Alignment of Gender Identity
  • Congruency

• Psychological and Emotional Well-Being
  • Self-Confidence
  • Reduced Dysphoria

• Social Integration and Acceptance
  • Improved social interaction
  • Community Belonging

• Safety and Privacy
  • Avoidance of Misgendering
  • Avoid harassment, discrimination, and violence
WHY CONT.

- Professional Occupational Reasons
  - Career demands
  - Workplace comfort
- Self-Expression of Authenticity
- Quality of Life
- Hormonal or surgical limitations
VOICE THERAPY

“Impact of living with transfeminine vocal gender dysphoria: Health utility outcomes assessment”

• Nuyen et al., 2021 (n=206 survey respondents with vocal dysphoria)
  • Perceived one year of life with vocal dysphoria as only ¾ of a life year of perfect health
  • Would risk 15-20% chance of death on a standard gambling analysis and **Would have sacrificed 10 years of remaining life as a tradeoff to cure their vocal dysphoria**
  • Significantly better QOL after gender affirming voice treatment compared to before
WHO PAYS FOR GAVC?
CONSIDER

- Over 75% of insurance providers do not cover gender affirming voice care
- 4/150 (2.7%) held favorable policies
- Coverage not correlated with state laws regarding transgender equity
WHO PROVIDES GAVC?

• Speech Language Pathologists
• Voice Coaches
• Singing Teachers
ROLE OF SPEECH LANGUAGE PATHOLOGIST (SLP) (AND OTHERS)

Hancock & Siegfriedt 2020; Angus & Kagan, 2007; Drisko 2004; Lambert & Barley, 2001; Plexico, Manning & DiLollo, 2010; Manning 2010

- Collaborative trusting relationship
- Passionate, committed, encouraging
- Believe in the client’s agency
- Therapeutic alliance
- Be knowledgeable
KNOWLEDGE

• General SLPs
  • 2-hour course in voice
  • Variable exposure to GAVC in training
  • Perceptual training
  • Acoustics
  • Many don’t have lived experience.
SLP OR TRAINER NEEDS

- Extensive ear training
- Personal Vocal Options
- Vocal Anatomy, physiology & pathology
- Basic Counselling skills
- Voice & Breathing
- Bodywork & Motor Learning
- Acting training
- Verbal & Non-Verbal Communication
- Make No Assumptions
- Empathy
- Meta-Therapy

Meta-therapy
PART 2

- Vocal Anatomy & Physiology
- Hormone effects on the voice
  - Endogenous
  - Exogenous
- Voice Expansion Targets and Tools
THE HUMAN VOICE PRODUCTION

- **POWER**
  - Lungs

- **SOURCE**
  - Vocal folds

- **FILTER**
  - Vocal tract
VOCAL ANATOMY AND PHYSIOLOGY

• Healthy vocal folds

- Glottis
- True Vocal Fold
- Anterior Commissure
- Ventricle
- False Vocal Fold
INTRINSIC LARYNGEAL MUSCLES
**HORMONE EFFECTS ON THE VOICE**

**Estrogen – No perceptual effects on voice**

- Endogenous (puberty for AMAB Individuals without blockers)
  - Thickening of vocal fold tissue
  - Laryngeal cartilage growth
  - Lengthening of vocal folds
  - Vocal tract growth
  - Results in relatively lower pitch and resonance of larger structure

- Exogenous (after puberty and full grown for AFAB Individuals)
  - Thickening of vocal fold tissue
  - May lower pitch or not, no laryngeal structure or vocal tract growth
  - Vocal folds can become “entrapped” requiring more airflow for vibration

**Testosterone**

- Endogenous (puberty for AMAB Individuals without blockers)
  - Thickening of vocal fold tissue
  - Laryngeal cartilage growth
  - Lengthening of vocal folds
  - Vocal tract growth
  - Results in relatively lower pitch and resonance of larger structure

- Exogenous (after puberty and full grown for AFAB Individuals)
  - Thickening of vocal fold tissue
  - May lower pitch or not, no laryngeal structure or vocal tract growth
  - Vocal folds can become “entrapped” requiring more airflow for vibration
SOURCE - LARYNX

side

top
Larger size (studied in AMAB) VF length = 17 – 25 mm

Smaller size (studied in AFAB) VF length = 12.5 – 17.5 mm

17.91 mm

Photo source: https://www.usmint.gov/learn/kids/library/circulating-coins/dime
Morphological differences emerge in adolescence (D. Markova et al., 2016)

Prepuberty there are no significant size differences and no significant differences in LTAS, Fo, HNR, CPP however gender is still reliably perceived by listeners (Guzman et al., 2014)
FORMANTS

Modified from Adrienne Hancock, [http://acoustics.org/pressroom/httpdocs/161st/Hancock.html](http://acoustics.org/pressroom/httpdocs/161st/Hancock.html) - used with permission
BODY VS SOCIAL SEX DIFFERENCES

- Formants
- Sibilants
VOCAL HEALTH
Rule out vocal pathology

- Dysphonia
- Phonotrauma
- Muscle Imbalance
- Neurogenic Voice disorders
- Benign Lesions (polyps, nodules)
- Cancer
- Etc.
Gimme some nuts and bolts. How do I change my voice?
WPATH-7 “VOICE AND COMMUNICATION THERAPY”

- Pitch
- Intonation
- Resonance
- Speech rate
- Phrasing patterns
- Non-verbal communication patterns
- Gestures
- Posture/movement, facial expressions
FINDING AUTHENTICITY

• **Auditory Image**
  - Frankly, my dear, I don’t give a damn. (Gone with the wind 1939)
  - Toto, I’ve a feeling we’re not in Kansas anymore. (The wizard of Oz 1939)
  - No. I am your Father (Star Wars 1980)
  - My name is Inigo Montoya. You killed my father. Prepare to die (The princess bride 1987)
  - What, like, it’s hard? (Legally Blonde 2001)
  - Wakanda Forever (Black Panther 2018)

  • What quote comes to your mind?

  • What is Feminine? Masculine? Nonbinary?
  • May take time to find one’s authentic voice.
  • The first voice one tries likely won’t be the voice they
BREATHING

• Breathing
• Diaphragmatic, lower rib, proprioceptive awareness etc.
• Paced breathing to drive parasympathetic tone
INTONATION

• Prosody: the melody of speech
  • Affective prosody
    • The woman went to the movies
  • Linguistic prosody
    • The content of the book. She was content.
  • Attitudinal prosody
    • That is a lovely red dress.
RESONANCE VOCAL TRACT LENGTH
/i/ low, mid, high larynx
Can also spread lips
SUMMARY GENDER DIFFERENCES

More typical cis AMAB
• Lower Pitch
• More Monotone
• Loudness for Emphasis
• Longer Resonant Space
• Faster Speaking Rate
• Dec. Articulatory Precision

More typical in cis AFAB
• Higher Pitch
• More Inflection
• Intonation for Emphasis
• Shorter Resonant Space
• Slower Speaking Rate
• Inc. Articulatory Precision
NON-VERBAL COMMUNICATION

• It is immediate – before someone speaks
  • Gesture and mannerisms
  • Facial expressions and eye contact
  • Proximity
  • Touch
  • Credible vs Approachable
  • Primarily content and process
RAINBOW PASSAGE – AUDIO PLAYED WITH RECORDER PERMISSION

RB1

RB2


8. Davies, S. (2017). The evidence behind the practice: a review of WPATH suggested guidelines in transgender voice and communication. Perspectives of the ASHA Special Interest Groups, 2, 64. 10.1044/persp2.SIG10.64.


QUESTIONS & DISCUSSION
THANK YOU! ORBELO.DIANA@MAYO.EDU

Rochester, Minnesota  Phoenix, Arizona  Jacksonville, Florida