Transsexual Voice Questionnaire for Male-to-female Brazilian Transsexual People

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Summary: Objectives. The aim of the study was to verify the answers to the transsexual voice questionnaire for male-to-female transsexual (TVQ^MtF) people given to individuals who participated in the Gender Identity Program (PROTIG) at the Hospital de Clínicas de Porto Alegre, Brazil, in relation to some of their demographic characteristics, visual-perceptual evaluations of the face, laryngeal prominence, and auditoryperceptual judgments of voice.
Methods. In this cross-sectional study, 47 transsexual women aged between 18 and 50 responded to the (TVQ^MtF). The demographic data and perceptual ratings were selected from the PROTIG database.
Results. Among all participants, 55.32% had completed secondary education, and 72.34% had not undergone a sex reassignment surgery; 4.2% of subjects did not use hormones, 23.40% had undergone speech therapy, the average number of years of experience in the female role was 13.98 years, and the participants had been definitively cross-dressing for 5–34 years. Most of the participants had low scores on the (TVQ^MtF), and significant differences in the total score were observed in accordance with age (higher scores were observed among those <30 years and ≥40 years old) and visual-perceptual evaluations of the face (higher scores were observed in the individual evaluated with masculine face). There were no significant correlations between the total score obtained by the participants and the other demographic variables.
Conclusions. Although most of the participants had low scores on the (TVQ^MtF), some individuals were still experiencing distress due to being perceived as being of the opposite sex or were dissatisfied with their voices.
Key Words: Voice–Transgender–Transgendered persons–Gender identity–Gender dysphoria and transsexual person.

INTRODUCTION

Transsexualism (International Classification of Diseases—10th Revision) or gender dysphoria (GD) (*Diagnostic and Statistical Manual of Mental Disorders*—Fifth Edition) refers to a remarkable incongruity between one's experienced gender and the gender assigned at birth. A significant proportion of transsexual people experience discomfort or inadequacy with their body. For this reason, they usually seek health care for hormone treatment and sex reassignment surgery (SRS).

The prevalence of GD remains uncertain due to idiosyncratic characteristics, such as the geographical location, the years of relevant studies, conceptual diversity, and variations in analytical methods. No epidemiological study has been conducted that has consistently measured the prevalence of GD in European and Asian countries; nevertheless, this prevalence has been estimated to range from 1:100,000 to 1:2900.[1] According to census data provided by the Instituto Brasileiro de Geografia e Estatistica in Rio Grande do Sul, a southern state of Brazil, the prevalence of male-to-female (MtF) GD is estimated to range from 1:35,000 to 1:50,000.

Due to contextual factors, individuals diagnosed with GD are predisposed to develop psychopathologies.[2] Additionally, negative social reactions and transphobia affect self-care and health maintenance in these individuals.

Voice is an important gender marker for individuals diagnosed with GD who are in the process of gender affirmation. For this reason, it is essential to perform extensive voice examinations that include instrumental evaluations and assessments of the transsexual individuals' self-perceptions of their voices and influence on their quality of life.[3]

McNeill et al[4] evaluated the satisfaction of transgender clients after voice intervention using voice recordings and questionnaires, ie, the Voice Handicap Index and the Glasgow Benefit Inventory, as indices of quality of life. The participants' subjective impressions regarding feminine voices (male or female) and happiness concerning their voices (happy or unhappy) were assessed with visual analog scales. Recordings of the voices of 12 MtF transgender individuals were analyzed by 15 speech therapists and 40 lay judges and compared with nontransgender male controls. The authors found that satisfaction with the voice was not directly related to the fundamental frequency (f0) and did not correlate with the perceptions of voice professionals. However, the speech therapists apparently reliably assessed how the voices would be received by the lay public. Based on the results of this

study, it appears that subjective measures of patient satisfaction and visual analog scales are reliable and represent valid tools for assessing therapeutic success.

Speech analyses of transgender people's voices performed by health professionals are not necessarily related to individuals' satisfaction with their own voices. Therefore, the transsexual voice questionnaire for male-to-female transsexuals (TVQ^MtF) was developed with the aim of providing a reliable measurement of self-reported vocal function and the influence of the voice on MtF transgender individuals' daily lives.[3] However, psychometric evaluation of the TVQ^MtF has been limited to examinations of reliability (internal consistency and test-retest reliability). The authors suggest that a larger sample size would have been required for evaluations of other psychometric properties including construct validity.[5]

Dacakis et al[3] analyzed the responses of 29 Australians and 6 Canadian participants who completed the TVQ^MtF. The analysis of these authors provided important insights concerning MtF transgender individuals. Perceptions of the difficulties related to their voices and the influences of their voices on the lives of individuals with GD varied in the sample. A higher incidence of problems was related to the psychosocial influences of the voice, such as "my voice makes me feel less feminine than I would like." Vocal disorders were uncommon, and vocal difficulties related to social activity participation were less problematic. The researchers also demonstrated that living as a female for a long period of time reduced vocal complaints.

Santos et al[6] developed the Portuguese version of the TVQ^MtF and verified its applicability in 13 Brazilian individuals diagnosed with GD. The authors found no significant correlations of the total scores obtained by the participants with age, time of presenting as a woman, education level, or the time of hormone use. These authors reinforced that the translated version of the TVQ^MtF is a good tool for clinical and research use because strong psychometric properties were found.

The purpose of this study was to examine the answers to the TVQ^MtF given by individuals diagnosed with GD who participated in the Gender Identity Program (PROTIG) of the Hospital de Clínicas de Porto Alegre (HCPA), Brazil, in relation to some of their sociodemographic characteristics, visual-perceptual evaluations of faces, laryngeal prominence, and auditory-perceptual judgments of voices.

METHOD

Sample

A multidisciplinary team at the HCPA consisting of various medical specialties (gynecology, urology, endocrinology, mastology, and psychiatry), speech therapists, a bioethics committee, and social work and psychology practitioners have worked with people with GD since 1998. The program offered by this team consists of psychosocial support, medical care, and family counseling, and performs SRS when indicated. Approximately 70 individuals are assisted monthly at PROTIG, which corresponds to more than 400 patients who have attended or are in attendance, and more than 150 have undergone SRS. Demographic data on the subjects were taken from the PROTIG database, which is a collection of case histories and admission interviews for the program. The TVQ^MtF was administered individually from March to June 2015 to 53 transgender individuals from PROTIG who agreed to participate and provided written free and informed consent (approved by the Research Ethics Committee, No. 14–0475). The inclusion criteria were the following: all participants presented with a diagnosis of GD, all participants were MtF transgender, and all participants lived full time as women. The exclusion criteria were as follows: a history of previous phonosurgery, reported alcoholism, a history of illicit drug abuse and dependence, professional use of the voice, and cognitive disorders or other psychiatric and neurological diseases that could compromise the completion of the TVQ^MtF.

Considering the initial sample, two individuals were excluded because they had undergone phonosurgery (reduced thyroid prominences). Another individual was excluded due to difficulty in understanding the TVQ^MtF and a history of illicit drug abuse and dependence, and three were excluded because they used their voices professionally. Thus, the sample consisted of 47 transgender women aged between 18 and 50 years (mean = 32.7, median = 29, and standard deviation = 8.89).

Measures

The data collected from medical records included the following: age, place of birth (country or capital, Rio Grande do Sul or other states), education, history of SRS, time on hormone therapy, time in speech therapy, smoking history, time living as a woman. The age at the initiation of definitive cross-dressing was also obtained.

During the process of clinical evaluation in the PROTIG, the individual was asked to complete a structured interview. The health professional responsible for implementing this interview evaluated the patients for physical and phonetic features with visual-perceptual and auditory-perceptual judgments based on the clinical experience of the examiner. The following factors were examined: laryngeal prominence (prominent or not prominent), voice (feminine, masculine, or neutral), and face (feminine, masculine, or neutral). Complete data sets were not collected for all subjects. The subject data sets collected are listed in Table 1. The data available in medical records were computed and related to the total score on the TVQ^MtF.

Transsexual voice questionnaire for male-to-female transsexual individuals

The Portuguese version of the TVQ^MtF used in this study is available at the following website: http://www.shelaghdavies.com/questionnaire/questionnaire.html. The TVQ^MtF consists of 30 closed questions that include items related to the social effects of the voice. Each question was answered based on the subject's personal experience of living as a woman, and the answers were classified as follows: 1 (never/rarely), 2 (sometimes), 3 (often), and 4 (usually/always). Possible participant scores ranged from a minimum score of 30 points to a maximum score of 120 points. The evaluator did not interfere with or compromise the answers of the participants.