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Quality of life and voice: the vocal self-perception of transgender people

Qualidade de vida e voz: a autopercepção vocal de pessoas transgênero

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ABSTRACT

Purpose: To analyze the impact of voice on the quality of life of transgender (or trans) people and to relate to vocal self-perception, gender identity. **Methods:** 27 individuals aged between 18 and 49 years, users of the Ambulatório Trans de Sergipe: – "Portas abertas - Saúde integral das pessoas trans: cuidar e acolher" - Universidade Federal de Sergipe" were included. After anamnesis, the Quality of Life in Voice (QLV) instruments, the Transgender Voice Questionnaire (TVQ^{MtF}) and the Voice Disorder Screening Index (VDSI) were applied. The highest number of trans men (63.0%) was observed in relation to the group of trans women (37.0%). The average age was 26.7 years (±9.1). 96.3% had a specific voice complaint. **Results:** QLV presented a mean value of 26.1 points for total scores, the VDSI of 3.9 and TVQ^{MtF} of 70.6, with no significant relationship between results and gender identity and age. A significant relationship was observed between QLV and TVQ^{MtF}. **Conclusion:** This study observed a poor quality of life in voice in trans people. Thus, the higher the perception of their vocal disorders, the worse their quality of life, regardless of gender (female or male) and possible vocal disorders.

Keywords: Transgender persons; Quality of life; Voice quality; Speech, Language and Hearing Sciences; Self concept

RESUMO

Objetivo: Analisar o impacto da voz na qualidade de vida de pessoas transgênero (ou trans) e relacionar com a autopercepção vocal e a identidade de gênero. **Métodos:** Foram incluídos 27 indivíduos com idades entre 18 e 49 anos, usuários e usuárias do Ambulatório Trans de Sergipe: – "Portas abertas - Saúde integral das pessoas trans: cuidar e acolher", da Universidade Federal de Sergipe. Após anamnese, foram aplicados os instrumentos de Qualidade de Vida em Voz (QVV), o *Transgender Voice Questionnaire* (TVQ^{MtF}) e o Índice de Triagem para Distúrbio de Voz (ITDV). Foi observado maior número de homens trans (63,0%), em relação ao de mulheres trans (37,0%). A média de idade foi de 26,7 anos (±9,1) e 96,3% dos sujeitos possuíam uma queixa específica de voz. **Resultados:** O QVV apresentou um valor médio de 26,1 pontos para o escore total, o ITDV de 3,9 e o TVQ^{MtF} de 70,6, não havendo relação significativa entre os resultados e a identidade de gênero e a idade. Foi observada relação significativa entre o QVV e o TVQ^{MtF}. **Conclusão:** Observou-se uma baixa qualidade de vida em voz nas pessoas trans. Desta forma, quanto maior a percepção de suas alterações vocais, pior a sua qualidade de vida, independente do gênero com o qual se identificam (feminino ou masculino) e de possíveis distúrbios vocais.

Palavras-chave: Pessoas transgênero; Qualidade de vida; Qualidade da voz; Fonoaudiologia; Autoimagem

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INTRODUCTION

Transsexuality, as it involves the body, identity, and gender, challenges the ideals of heteronormative society and is a complex subject[1], presented as an experience of conflict between beings and gender norms, which define that real men and women have penises and vaginas and must behave actively and passively as such. Thus, only heterosexuality would make sense of these anatomical differences. Therefore, an association is created in which the body refers to sex and gender only exists when associated with this relationship. When gender manifests itself outside this association, it is marginalized and analyzed as a disturbed identity and even subject to diagnosis[2].

After years of struggle by social movements, the World Health Organization (WHO), updating the International Classification of Diseases, ICD-11, which replaced ICD-10, removed the term transsexuality from the chapter on "personality and behavioral disorders", in a subchapter called "gender identity disorders", to integrate a new chapter, entitled "conditions related to sexual health" and classified as "gender incongruity". Thus, transsexuality is no longer related to a choice or to mental illness, starting to be considered a matter of identity[3].

The voice plays a fundamental role in the process of building this new identity, whether in self-acceptance or in social receptivity[4] and self-image, measured by means of instruments that help the subject's perception of his voice, which is part of this process[5]. It is essential, therefore, to include the individual's perspective when evaluating the results of the procedures performed, be it voice therapy, surgery or drug treatment[6].

Trans men are people who claim social and legal recognition as men, with some also calling themselves trans-men, or female-to-male (FtM)[3]. Generally, in vocal changes, they benefit from hormonal treatment, requiring fewer strategies, such as surgery or speech therapy.

Trans women are people who claim social and legal recognition as women, or trans-women, or male-to-female (MtF)[3]. In these cases, obtaining a female voice is a highly desirable goal, but difficult to be achieved, in most cases, depending a lot on the beginning of the transition process, because the closer to the vocal change process, the better the results will be[7]. Strategies such as intonation, articulation, and language can assist in this process of vocal construction, both for trans men and for trans women[8,9].

Historically, due to the population's health needs, Speech, Language and Hearing Sciences have sought to expand its forms of care, modifying the practices that had biomedical bases, in which only the disease and individual rehabilitation were valued, for a practice of approximation between Speech, Language and Hearing Sciences and the ideals of Health Education, considering health as a right of all and giving functionality to the principles of universality and equity of the SUS[10].

Within this conception, the speech therapist must be part of the multidisciplinary team of the transsexualizing process, which focuses on the better quality of life of the trans population, with the voice being an important aspect of the subject's gender perception[11]. Thus, the present study aimed to analyze the impact of voice on the quality of life of trans people and to relate it to vocal self-perception and gender identity.

METHODS

The observational, cross-sectional and analytical study, of convenience sampling, was approved by the Research Ethics Committee of the Federal University of Sergipe (No. 1.313.343). All people who agreed to participate, with prior explanation, signed the Free and Informed Consent Term, according to Resolution 466/2012-CNS/MS.

All users who were waiting for the first service in the waiting room of the *Ambulatório Trans de Sergipe* were invited to participate: "Open doors - Comprehensive health for trans people: caring and welcoming", from January to August 2017. People under the age of 18, those who had started the transexualizing process assisted by a health professional, in that service or in another, or who had undergone related surgical procedures, or speech therapy regarding vocal readjustment were excluded from this study.

Thus, 27 people were included, being 17 trans men (male gender) and 10 trans women (female gender), with a mean age of 26.7 (±9.1) years.

The outpatient clinic where the research was carried out is multidisciplinary and offers assistance in Speech, Language and Hearing Sciences, Psychology, Nutrition, Endocrinology, Psychiatry, Gynecology, and Occupational Therapy.

At first, a brief anamnesis was carried out with information regarding name, age, gender and presence, or not, of vocal complaints. Subsequently, three instruments were applied: Voice Quality of Life (VQL), Transgender Voice Questionnaire (TVQ^{MtF}) and Voice Disorder Screening Index (VDSI).

The VQL was translated and validated into Brazilian Portuguese by Gasparini and Behlau[11] and aims to quantify the impact that a particular vocal change brings to the subject's quality of life[12]. It has ten items, distributed in six physical and four socio-emotional questions. Each item can be classified on a five-point scale, where 1 "is not a problem" and 5 "is a very big problem". The higher the calculated score, the better the subject's quality of life. To calculate the scores, a standard algorithm is used, which can vary from 0 to 100, the latter indicating the best possible quality of life.

The TVQ^{MtF} is a self-perception questionnaire, specific to trans people, designed to measure the perception of this population regarding their voice[13]. This questionnaire, translated and adapted to Brazilian Portuguese, consists of 30 items and has a rating scale that ranges from 1 to 4, with 1 = "never or rarely", 2 = "sometimes", 3 = "often" and 4 = "usually or always". The score ranges from 30 to 120, minimum and maximum, respectively[14]. The higher the score, the worse the perception of the voice itself.

An adapted questionnaire, based on the TVQ^{MtF}, was also used. As it is a specific instrument for trans women, there was an adaptation to cover both genders, trans women and men. The adaptation took place, exclusively, with the change of words, terms, and expressions referring excessively to the female gender, in comparison to the male gender, to also include it.

The VDSI is a self-perception instrument, developed and validated by Ghirardi et al.[15], composed of 12 common vocal symptoms and has a classification scale divided into "never", "rarely", "sometimes" and "always". For the answers "sometimes" or "always", 1 point is added. The cut-off score for the presence of a vocal disorder is 5 points.

Excel and SPSS® 16.0 software were used for data analysis. The normality of the data was studied using the Kolmogorov-Smirnov test, being a parametric sample. To verify the correlation between the results of the total score between the instruments (VDSI, VQL and TVQ^{MtF}) and the correlation of age in the results of the instruments, Pearson's bivariate correlation test (r) was used. To compare the means of the instruments applied (VDSI, VQL and TVQ^{MtF}) between genders, the Student t-test was used for independent samples. A p value of 5% ($p < 0.05$) was established as statistically significant.

RESULTS

In the initial interview, 26 (96.3%) people reported having a specific vocal complaint. The Student t-test for independent samples did not show significant differences between women and trans men in the responses of the VDSI ($p = 0.6$), TVQ^{MtF} ($p = 0.4$) and the VQL ($p = 0.7$) (Table 1).

The results regarding the VDSI showed that 12 (44.4%) people presented results suggestive of vocal disorders (final score equal to or greater than 5), with an average of 34.1 (±3.1). The VQL, in the socioemotional domain, presented an average of 60.6 (±25.7) points (90.65 was the best score for this domain) and, in the physical domain, an average of 64.8 (±28.9) points (89.60 was the best score for this domain), indicating greater impairment of socioemotional aspects. In the TVQ^{MtF}, the average obtained was 70.6 (±24.7) (minimum response equal to 30 points and maximum 120 points).

Regarding the results of Pearson's bivariate correlation between the results of the VDSI, VQL (physical, emotional and total) and TVQ^{MtF} tests, there was a significant strong correlation between the TVQ^{MtF} and socio-emotional VQL, between the TVQ^{MtF} and physical VQL and between the TVQ^{MtF} and total score, indicating that the higher the quality of life in voice, the lower the perception of your own voice.

Table 2 illustrates the average total scores in the VDSI, VQL and TVQ^{MtF} tests and the results of Pearson's bivariate correlation between the results of the VDSI, VQL (physical, emotional and total) and TVQ^{MtF} tests.

DISCUSSION

The present study is relevant so that one can know the vocal self-perception of trans people and, thus, identify possible impacts on the quality of life of this population.

The trans population is mostly composed of trans women, in a proportion of two to one, when compared to trans men. However, in the present study, the majority of the sample was composed of trans men, confirming the findings of a study conducted in Iran, which also obtained a majority belonging to this gender[16], which may indicate a trend in the increase in the demand for health care by the trans male population[14].

Besides, another finding in the same study[14], which may indicate a tendency to change the profile of the trans population seeking care, was the average age of the population studied, demonstrating that trans people have sought their rights earlier, for example, the access to health. The average was ten years less than the age found in a study conducted in Spain[17], of 37.3 years. The late demand for health care by this population originates from social stigma and prejudice[18], a trend that may be changing, due to the growing number of political and social movements[19] aimed at empowering trans people[20].

In this framework, understanding the complaints and social behaviors related to the voice of trans people is necessary for the planning of health actions aimed at this population. In the present study, almost all participants reported some vocal complaints in the anamnesis. Complaints presented by trans people may or may not be related to sexual reassignment and, when present, may directly influence the psychosocial aspect of the voice[13,21].

Although VDSI was idealized for use in voice professionals, it was decided to use it in this research, as it is an instrument that investigates the presence of common vocal symptoms in the entire population, namely: hoarseness, voice failure, throat clearing, tiredness when speaking, among others[15]. In this study, 12 (44.4%) people were at risk for vocal disorder, suggested by a score greater than 5 points[15]. VDSI has a high degree of sensitivity for mapping voice disorders. Therefore, it is suggested that, if the subject refers to five or more vocal symptoms, he/she should be referred for otorhinolaryngological and speech-language evaluation[15].

Table 1. Vocal self-perception in trans men and women

	VDSI	Physical VQL	VQL Socioemocional	VQL score	TVQ
Trans Man	3.9 ± 3.2	65.4 ± 29.2	63.2 ± 25.3	64.1 ± 26.1	67.5 ± 24.6
Minimum maximum	0-11	6.2-100	12.5-100	10-100	30-103
Trans Woman	4.3 ± 2.9	63.7 ± 30	56.2 ± 27.0	59.2 ± 27.1	75.9 ± 25.2
Minimum maximum	0-8	0-100	16.7-100	10-100	32-114
Pvalue	p = 0.6	p = 0.9	p = 0.5	p = 0.7	p = 0.4

Student t-test for independente samples
Subtitle: VDSI = Voice Disorder Screening Index; VQL = Voice Quality of Life; TVQ = *Transgender Voice Questionnaire*

Table 2. Correlation outcomes between the results of the Voice Disorder Screening Index, Voice Quality of Life and the Transgender Voice Questionnaire

	VDSI	VQL		
		Physical	Socioemotional	Total Score
VDSI	---	r =-0.1; p = 0.3	r = -0.2; p = 0.2	r =-0.2; p = 0.4
TVQ	r = 0.3; p = 0.2	r = - 0.5; p = 0.01*	r = -0.6; p = 0.01*	r = -0.6; p = 0.01*

Pearson's Correlation Test; *Statistically significant values ($p < 0.05$)
Subtitle: VDSI = Voice Disorder Screening Index; VQL = Voice Quality of Life; TVQ = *Transgender Voice Questionnaire*

The appearance of these vocal changes can be justified when considering the voice as an important factor in the perception of gender[14], causing trans people to try to model their voice or make spontaneous efforts to adapt it to a social category[22,23]. This effort in voice production, as well as negative adaptations, can be responsible for dysphonia[24,25].

Regarding the TVQ^{MtF}, despite being an instrument created specifically for trans women[14], it was possible to notice that there was no significant difference for the average scores between trans men and women, demonstrating to be a valid instrument for use in both genders, needing only a few adaptations in language.

Vocal assessment is essential in transgender people, mainly employing self-perception instruments, since the voice is related to gender and is directly linked to the quality of life[13]. The average scores obtained in the application of the TVQ^{MtF}, in this study were visibly higher (that is, the vocal self-perception of trans people indicated greater losses for the individual) than those found in another study with Brazilian trans people[18], which concluded that individuals experienced stress due to identifying with the opposite sex, or because they are dissatisfied with their voices. Regarding trans women, it was observed that the longer the presentation time as women, the lower the scores obtained. The authors suggested that the longer the trans experience, the greater the singular construction on the woman she wants to be[13].

The quality of life refers to a set of physical, mental and social factors that interfere with a subject's experience. Thus, it is understood that a vocal change can affect the quality of life, depending on the particularities of each subject[26]. The results presented in the VQL, in this research, demonstrated that the voices of the trans population studied have a high negative impact on quality of life, with an average value of 26.1 points for the total score, which is much lower than the cutoff value described in the literature, which pointed out that a total score less than or equal to 60 implies a high impact of the voice on quality of life[27].

The negative impact on the quality of life of the studied population was more evident when the individualized average of the socioemotional and physical domains was observed, which was 9.6 (±4.2) and 16.5 (±5.9), respectively. The stipulated cut-off score is 91.2 points[28]. Values below it would indicate that the perceived vocal changes impact the quality of life, that is, the present study identified a strong impact on the lives of trans people, due to their voice.

The data observed in this research, regarding the quality of life in voice of the trans population, reinforce the idea of the fundamental importance that the vocal aspects occupy in the transsexualizing process of building a new identity, whether in self-acceptance or the acceptance of the social environment, since the voice must be considered an essential element in the identification of the gender.

When analyzing the results of the VQL assessment with TVQ^{MtF}, a strong, negative and significant correlation was found between them. The results showed that the higher the TVQ^{MtF} score, the lower the VQL score, that is, the greater the perception of problems measurable by TVQ^{MtF}, the worse the voice quality of life. Namely, the greater the perception and sensitivity to vocal problems and their interference in daily activities, the greater the impact on the quality of life of trans people.

The self-perception obtained through the VDSI, however, found no relationship with the VQL. This data may suggest some specific and divergent issues between VDSI and TVQ^{MtF}, since VDSI, idealized as a screening tool for vocal disorders, investigates vocal symptoms, especially considering laryngeal lesions, while TVQ^{MtF} integrates multidimensional assessment issues of voice and communication, considering identity questions of the trans population.

It is considered, therefore, that the TVQ^{MtF} is a questionnaire of vocal self-perception, specific for trans people and, therefore, the findings of this study bring relevant reflections, such as the need to use specific instruments of vocal self-perception, for this population, which consider its singularities related to characteristics and demands regarding gender identity and conduct.

Despite some achievements in the last decade, the trans population still lives with a reality characterized by extreme marginalization and social exclusion, which highlights the need for public policies to invest, consistently and continuously, in tackling stigma and conditions of social exclusion that mark the daily lives of this population. It also reinforces the importance of considering, in the process of building programs and actions, both the capacity of these individuals to act, as well as the contexts of vulnerability and structural problems of the public health network[29].

Considering that the voice is an important aspect in the subject's gender perception and is directly related to people's quality of life, it should be noted that studies like this, which assess the vocal self-perception of trans people - which are still scarce in Brazilian literature - can serve as an important parameter in the evaluation of public policies and in the elaboration of specific protocols aimed at this population.

CONCLUSION

There was a low quality of life in voice in trans people. Thus, the greater the perception of their vocal changes, the worse their quality of life, regardless of the gender to which they identify (female or male) and possible vocal disorders.

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