

The meanings attributed to the voice by menopause women

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Keywords

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Abstract

Objective

To analyze the meanings attributed to the voice by menopausal women.

Methods

Data were collected from 148 medical records of women seen in the Climacteric Women Health Program of the Irmandade Santa Casa de Misericórdia Gynecology Outpatient Clinic in Curitiba, Brazil, between February 2000 and October 2001. Of them, 30 women aged between 48 and 59 years who did not consider themselves as voice professionals and had been at least 12 months in amenorrhea were selected. They were interviewed using a thematic guide with semi-structured questions. Interviews were recorded and then transcribed. Their description, analysis, and interpretation were based on social representation of the collective individual's discourse through a hermeneutics-dialectics approach.

Results

The resulting 27 collective discourses showed that women related their voice to biological and psychological characteristics and social aspects of daily life, identifying vocal changes during their life course.

Conclusions

Social representations of communicational and functional nature were observed and highlight voice as an element of personal identity construction conceived in the social sphere. There is a need for further research based on social sciences as well as epidemiological studies and to examine voice therapy in a frailer larynx and also prioritize voice health as part of comprehensive health care delivered to climacteric women.

INTRODUCTION

The female voice during menopause has peculiarities barely known to most health providers, especially those working in public health and/or public services.

There has been a historical concern over the impact of steroids on the larynx and female voice since 1851 but only after 1981 the impact of menopause on singing voice has been investigated.

Boulet and Oddens,³ in a study carried out in Bel-

gium, Holland, and Austria, applied a questionnaire to 72 classical singers aged 40 to 74 years and found out that, especially among women, voice changes occurred by the age of 50. Hoarseness, compressed voice register, reduced flexibility of vocal folds and voice stability were seen among menopausal women and were associated to problems affecting voice emission and control, effects on vocal folds and reaching high registers.

The comparison between vocal folds and Pap smears* by Abitbol and Abitbol¹ conducted in 100 menopause women aged between 48 and 60 years

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*Smear is "a preparation for microscopic examination obtained by spreading a thin organic sample on a slide". New Aurélio Dictionary of Portuguese, XXI century. Extracted from the doctorate thesis submitted to the Faculdade de Saúde Pública da Universidade de São Paulo in 2003. Received on 26/11/2003. Reviewed on 7/6/2004. Approved on 28/07/2004.

revealed remarkably similar cytology and histology features. It was found that 42% of voice professionals had larynx and vocal changes and only 17 had voice-related complaints. Their main findings included unilateral and bilateral muscular atrophy of vocal folds, reduced mucosa thickness and hypertrophy with reduced phonation range and asymmetrical vibratory patterns of vocal folds, loss of normal rose-colored mucosa and occurrence of micro varicose veins, low intraglottic vibration and low-intensity of shouting, projected and singing voice, compressed voice register with loss of several frequencies and monopitch voice. The dynamic assessment of 83 women who did not have any voice-related complaints showed the following: slower responses in higher and lower registers, reduced flexibility of vocal folds, altered vocal ligament contraction, thinned vocal fold mucosa, weakened and reduced vibration range with hardened areas, sub-atrophic mucosa with basophiles and reduced gland cells in ventricular bands, compressed register and loss of high formant frequencies perceptible in daily spoken voice.

Sataloff et al¹⁴ described other features causing vocal impairments such as reduced pulmonary strength, atrophy of laryngeal muscles, laryngeal cartilage sclerosis. They would result in reduced pulmonary capacity and control, reduced vocal output, especially of high sounds, vibratory changes, tremor, and pitch inaccuracy. They also report that these conditions are aggravated when there are concurrent systemic conditions such as diabetes, thyroid disorders, and specific illness such as pulmonary diseases, acoustic and gastroesophageal disorders.¹¹

By the age of 40, the superficial lamina propria of vocal folds tends to become thickened and swollen and, by the age of 50, the intermediate layer elastic fibers become atrophic and its membranous segment shortened. Collagenous fibers in the deep layer become thickened, thus resulting in thickened vocal folds, while the vocalis muscle, since it is a striated muscle, tends to become atrophic.

Systemic and local structure integrity as a result of a healthy life imply in a slowdown of the deterioration process. It is likely thus that human voice denounces unhealthiness during chronological youth or, after menopause, covers up structural conditions for a relatively indeterminate period. Though adequate, organics arguments are not largely convincing, and the inherent human nature of voice during menopause requires to be investigated bearing in mind psychological and social processes. However, these processes have not been yet fully described by experts, which make one's relation with their own voice

and with other people's voices still an unknown issue, even to voice professionals.

Public health prevention campaigns and education programs for reducing laryngeal diseases and voice disorders hold little appeal even among professionals who rely on their voices to work. In addition, the proposed actions are not based on the implications to the general population and most often are of technical sort and aimed at meeting the demands of the concerning professionals.

Few studies were carried out by speech therapists in Brazil investigating the association of voice and sex hormones. In a world where verbal communication is essential, there is a pressing need for further investigation on this issue. The emerging new means of communication has given rise to new occupations where verbalism has gained ground. As Souza and Ferreira¹³ stated: "(...) voice has never been as required as in this century (...)". Based on public health concepts of plurality and diversity, considered here from a collective view, this statement would substantiate the effort of getting to know the demands of specific population groups, their thoughts and their cultural and everyday knowledge.

Therefore, the purpose of the present study was to investigate the meanings attributed to voice by menopausal women, who are not voice professionals, in an attempt to contribute to creating a consensual universe with a population supposedly unfamiliar to this issue.

METHODS

Study design

First, it was collected speech data from medical records for the entire population comprising of 148 women who attended the Climacteric Women Health Program of a Gynecology Outpatient Clinic in the city of Curitiba, state of Paraná, Brazil, between February 2000 and October 2001.

Of all, 58 women who met the inclusion criteria were selected. Inclusion criteria included voluntary participation, not being considered a voice professional, aging between 48 and 59 years, and having had at least 12 months of amenorrhea characterizing a new phase in life – the menopause. It was thus convenience sampling with specific selection from a wider and exclusive population group and *ex-post-facto* – i.e., subsequently to menopause onset to ensure hormonal deprivation and its subsequent potential changes. As subjects were invited to participate

in the study, they were interviewed using a semi-structured thematic questionnaire consisting of four open questions. Thirty women were interviewed. The criteria of the Ethical Commitment Form were met for each interview and a free informed consent form was signed only at the end of the interview, after which subjects knew clearly the study's scope and could choose independently whether to make discursive information available or not.

Theoretical assumptions

The theoretical groundwork focused on semiotics concepts of Social Psychology, a divide from where postulations of social representation derive. Its elemental concept concerns to reality apprehension, which does not occur directly but mediated by the ability of evoking images and symbols, attributing meanings and creating and inventing, not just reproducing what is established, and showing structures with two indissoluble sides: the figurative aspect and the symbolic one.¹⁰ Due to this dynamic nature, which is reflected in identity construction, the representations bear unique marks of social groups, and conflicts and contradictions that are not always consistently articulated.

The description and analysis method used for social representations was the collective discourse, which seeks "to capture the discourse as a sign of knowledge of one's own discourses".⁸ Thus, the basic concepts of the method proposed were observed and applied as follows: topic, key expressions, central ideas and anchorage using two analysis tools according to Lefèvre et al.⁸

"Topic" means all that relates to the issue being discussed, i.e., voice and menopause in this study. "Key expressions" are either continuous or discontinuous parts, pieces or segments of the interviewee's discourse, selected by the researcher based on what is either essential or secondary. "Central idea" is the linguistic expression that reveals and describes in the most concise and accurate way the meaning or the meaning and topic of key expressions of each discourse analyzed and of each homogenous set of key expressions. "Anchorage" means the expression of a given theory, ideology or religious belief that the discourse's creator asserts and is inlaid in the discourse as any other assertion. It is therefore the sphere of representation of social beliefs, which put discourses into motion unintentionally while outlining the communication process. It is a generalization to frame a given event.

Using the tool of Discourse Analysis 1, after record-

ing the interviews, the 30 answers for each of the four questions were transcribed in the blanks for "key expressions". Then, through reading and listening of the recorded material, segmental and suprasegmental, grammatical, phonetic, morphologic and syntactic linguistic references were searched to establish evidenced "central idea(s)" and "anchorages," which were recorded in the corresponding blanks and categorized according to the same linguistic and grammatical criteria and meaning similarities. Using the tool of Discourse Analysis 2, "key expressions" were categorized and grouped according to central ideas and anchorages. Agreement of collective discourses was then conducted through standard structuring of narratives.

For in-depth meaning analysis, it was adopted a hermeneutics-dialectics approach.⁴ The theory of communicative action⁵ addresses a concept of communication concerning meanings created in everyday human relationships and in the experience resulting from the intuitive integration between the aesthetic reason and the communicative reason in the dialectics' harmonization of values, i.e., the aesthetic rationality will combine the contemplation and discursive judgment to life experience and everyday knowledge. Linguistic competence is thus always an immanent human possibility that is able to promote consensus and perform argumentative discourses in which the voice is an individual and social representative. According to Minayo⁹ the dialectic judgment "stresses the difference, the contrast, the dissension and the break of meaning," while hermeneutics "outlines the mediation, the agreement and the unity of meaning". Based on that, and adopting the free interpretation provided by the ground theory, citations, parameters and basic elements of social representations, concepts of communication and hermeneutics-dialectics, the agreed discourses were analyzed through basic relational semantics for each empiric category created.

RESULTS

The four questions applied (Table) resulted in 27 collective discourses, as showed in full in the Chart.

To exemplify the question results, it is showed only one discourse that brings in its essence the significant relations addressed in the study.

In Question 1, "How do you find menopause?," Discourse 1.F was selected, "Menopause also brings about psychosocial outcomes".

"I don't know whether body symptoms cause nervousness or they are a result of that, but I feel I'm now more short-tempered, edgy, sad, anxious, unhappy,

Tabela - Collective discourses related to perception issues of menopausal women.

Question 1 – How do you find menopause?

- Discourse 1.A "Menopause is not hard to handle"
Discourse 1.B "Menopause is hard to handle"
Discourse 1.C "Menopause is better than reproductive life"
Discourse 1.D "Treated menopause is nothing"
Discourse 1.E "Menopause has signs and symptoms"
Discourse 1.F "Menopause also brings about psychosocial outcomes"
Discourse anchorage 1.A "Menopause is not what people say"
Discourse anchorage 1.B "All women have the same symptoms as mine"

Question 2 – People's voice reveals something about themselves, don't you think? Comment on that.

- Discourse 2.A "Agrees with the assertion"
Discourse 2.B "Disagrees with the assertion"
Discourse 2.C "Lacks knowledge on the issue"
Discourse 2.D "Lay experience on the issue"
Discourse 2.E "Professional experience on the issue"
Discourse anchorage 2.A "Only those who have formal knowledge (specific education or good schooling) are able to fully express an opinion"
Discourse anchorage 2.B "People act like me"

Question 3 – And your voice? Comment on that.

- Discourse 3.A "Positive aspects of your own voice"
Discourse 3.B "Negative aspects of your own voice"
Discourse 3.C "Voice condition and observation"
Discourse 3.D "Voice functions"
Discourse 3.E "Mentioned factors interfering with quality of voice"
Discourse 3.F "Mentioned factors interfering with daily life"
Discourse anchorage 3.A "Most people say menopause changes one's life"

Question 4 – Comment on your voice during menopause.

- Discourse 4.A "There were voice changes"
Discourse 4.B "There were no voice changes"
Discourse 4.C "Thoughts on one's own voice"
Discourse 4.D "Thoughts on other people's voice"
Discourse anchorage 4.A "To get rain while you are in your period makes you hoarse"

upset, disturbed, I don't feel peaceful anymore and I think this is all due to menopause because I didn't feel like this before. I think menopause makes women upset, edgy, uncomfortable, and anxious. The big hot flashes make me sleepless and they also bother people that share our lives and our husbands need to understand the whole situation, including our sexual condition, to help us. My life with my husband hasn't changed because he understands it and it is a bit hard for him because of his heart condition. I no longer have sexual desire, I feel pleasure but I don't have the same desire as in the beginning of our marriage, I even lost the feeling joy completely. It could have been the combined medication that was curbing my desire but hormone didn't help either. I didn't expect it would be that way because I don't usually make mistakes, so I want to find a way of making it better. That's why I decided to seek for treatment and to get to middle age happier. But there are hurdles, especially delays in making appointments for visits, testing and follow-up visits, making treatment difficult and delaying problem solution".

In Question 2, "People's voice reveals something about themselves, don't you think? Comment on that," parts of Discourse 2.D were selected: "Lay experience on the issue".

"I think there are people who prevail over others when they come along with more powerful people,

they want to make us feel lower than them, and this can be felt in their tone of voice. I feel devastated when it happens. Through the tone of voice I know also whether someone is aggressive, disturbed. When they are disturbed, they change their tone of voice; if they are nervous, they snap back to you, and if they are calm, they get back to you in a different way, it really changes. It seems that while you are talking to them, you more or less understand, feel, and see how they are: mean, more or less or better, with better ideas. If they are mean, they attack you with words, if they don't get along with you, you'd better go away and keep a distance. Sometimes I chat with my neighbor and I feel in her voice that she's nervous. I know when my daughter-in-law is nervous when she yells a lot at her son and when I'm at their place, it's awful, it makes me really nervous and uncomfortable. If I'm nervous my voice comes out in a different way, I can hardly let out my voice and if I'm very nervous, I cannot speak, I can just cry. I believe that when someone talks one can know if they like us, but one doesn't feel comfortable with someone who seems to be angry (...). There are people who make other people unrest when they speak (...). One feels that, when someone speaks a lot or in a certain way, it bothers. My daughter speaks very intensely, it's her way, but I signal her to lessen it. Nobody feels comfortable when someone speaks like that; people get annoyed, they don't feel comfortable because they don't like hostility. (...) And then other people have an agreeable voice. Some speak softly and

pass on a lot of energy. Many people say they know my voice because it's peaceful and romantic. And I think I'm like that because I like to treat people with respect, my friends, my son, my ex-husband, that's the way I am. My close circle of people knows by my voice if I have any small trouble, even when I try not to show it. I also know when they are nervous or having trouble. I think I show that in my voice. I notice that in other people's voice, by the way they express themselves. With my girl friends, I can feel by their voices when they are sad, they are completely different (...). So I can see the difference: a joyful voice is clearer, more active and a sad voice is deep, lacks enthusiasm, and is broken. When people are happy, they smile, talk a lot, speak aloud, intensely, and forward. I think that when people are fine they talk more happily, they feel happier and show their happiness in their face and voice. When they are down, sad, they seem to be afraid of talking, they hid themselves, withdraw, don't talk much. (...) Sad people are not free, they are tighter, turned inside, and their talk is more insecure and tense (...). When people are joyful is different, they talk more joyfully, more freely. On the phone, some friends know when something is wrong with me or when I'm happy because my voice is different. My daughter-in-law knows when I'm sad and says that my voice is dismayed, that is a sad little voice. (...) So I think that only talking one can better understand and see how someone actually is and that the voice is determining what others get to know. The voice expresses what someone is feeling, the voice is in command: one can know someone by the way they speak".

In Question 3, "And your voice? Comment on that," parts of Discourse 3.A are showed: "Positive features of one's own voice".

"I have a soft tone of voice. (...) My voice is so strong that when I sang in the church choir, the priest had to hold his glasses (for not breaking its lenses) and my friend who had been sleeping woke up. I like chatting to people because when I'm feeling fine, I can say nice things. So I love my voice but I don't know what people think of it, if it pleases them but I think it does because it is soft. Sometimes, however, they complain that my voice is strong. I like this way, I find it beautiful, well, it is not hoarse and I believe that it is good because I can speak well. (...) In short, it is a bit hard to define my voice because depending on the way I speak, it can become annoying to me, as when you are shouting. There are many ways of speaking and I've learned that if it is soft, affectionate, both other people and I benefit much more from that".

In Question 4: "Comment on your voice during

menopause," parts of Discourse 4.C are showed: "Thoughts on my own voice".

"The female voice is high and fine. The thinned voice of menopause or of cigarette smoking sounds like men's, especially over the phone. It bothers me because of this misunderstanding and for not being able to sing at home or in church any longer (...) – and by suggesting weird, ugly people. Voice changes can be caused by big hot flashes that exacerbate the nervousness, and by anxiety and loneliness of those living alone. You are visibly getting older and your voice changes, something goes on because when you are tense or often using your voice, there comes that bothering clearing of the throat but it is quite different from a vocal cord nodule; the aged tone of voice makes strangers call you lady – though the way one's talk as well as the subjects are that of young people's talk – and your acquaintances feel that something is different in your voice. I also think that you get to an age when you know how to better value things, life, and this feeling is passed on in your voice. Menopause has enhanced my sensitivity: pain, dizziness, faintness, physical and voice tiredness, weepiness, depression, and weight gain that seems to be lost only with exercises, regardless of the amount of food eaten (...). Some information I got on menopause symptoms, including about my voice, has turned to be real and others have not. There is hormone therapy, even as a sticker to prevent liver damage to those taking other medicines, but they can also cause changes such as hair growth, and permanent men's voice. Maybe there is a medication that makes you feel better, including your voice, even though I'm not sick, because to work as I do no sick person would be able to do it. And if there's treatment for thickened voice, you'd better treat it because it bothers, because even when you speak low, as everyone else in the family, sometimes you have to stretch it, especially when you are depressed. Lack of singing practice (rehearsals, exercises, care) or throat problems can harm your voice. (...) Changes were also seen from children's to adults' (voice). Other people say they always talk softly and lowly, that they like their voice or still have a strong voice which enables them to shout aloud with a clear voice better than younger people".

DISCUSSION

The present study concentrated on examining the social representations of voice and menopause, assuming that women, other than voice professionals, can identify and attribute meanings and significances to the voice beyond vocal physiology, reaching psychosocial concepts. The study discourses were produced by a group of women attending a climacteric

program who brought in specific exclusive determinants and some shared representations.

In regard to climacteric, it is said that all interfaces of human experience are conditionally affected, and from a biological and natural development landmark, women's health changes significantly and unfavorably.³ Yet, most investigators stress the body perspective, sometimes considering it a neuroendocrine disease.

Halbe⁶ thus criticizes the importance given in the medical model to biological symptoms, outlining the strength of psychosocial aspects. Relevance is given to critical features of climacteric: hot flashes, significant body changes, sexuality and eroticism, and husbands' view regarding their wives problems, aggravated by symptom severity, intrapsychic characterization, quality of personal and familiar life, and social and cultural factors. The strength of these factors become evident in the way some women cope with daily issues and more significant changes, or oppositely, in how they let themselves be drawn in and get into lifelong conflicts.

Halbe⁷ believes that middle-age crisis arises from the realization of aging and life ending and that menopause is only a motto for questioning, an actual landmark for introspection. Reality, therefore, sets up limits, and significant psychological changes practically forcibly occur, changing identity and leading to new adjustments.

Health and sickness are intrinsically and undeniably related to the significance of life and death.⁹ Severino¹² demonstrates that "the human body, actually and by the way it is perceived by women, follows the scale of values gestated by the dominant system," and that, without refuting that women's oppression are led by men, both men and women suffer the effects of the coercive forces of social models and the burden of their violence in dispossessing them of their desires.

Many anthropological studies carried out in several non-Western countries describe the lack of symptoms and unlikelihood of crisis during menopause basically as a result of different social conditions, which benefits all people involved (woman, their husband, family, inclusion social group).

In support of a stronger totalizing standpoint, alternative medicine practitioners have stressed the importance of the patient and the belief that sickness mostly arises from internal imbalance.

Differently from the Eastern approach, the Western tradition have practically overlooked cultural determinants and disregarded the fact that the human body

relationship can only be effective when spatially situated in a social relationship.¹²

Among relationships built up through strong social power, encompassed by communicational conditions and circumstances and understood according to the communicative action of Habermas,⁵ the human voice is pointed out not only resulting from the dynamics of the structures of the vocal tract but is actually incorporated in the interaction between the individual and the outside world. Its implication goes beyond the traditional communication between emitter-receptor, encompassing the relationship developed "usually effective through regular language in a world explored by language and pre-interpreted, in lives who share a common background, in normative contexts, traditions, practices (...), worlds of life that are permeable to each other, intertwined and interconnected".

According to Habermas,⁵ linguistically competent individuals reach consensus through discourse as people are required to act communicatively. So many factors and reasons are likely to impact on the larynx and the voice in these situations that the assumption that only the effects of steroid deficiency can be relevant in producing the described changes seems precipitate.

The collective discourses of the study population showed that, when addressing menopause, more specifically having trouble or not to cope with this phase in life (Question 1), subjects' representations had meanings which revealed extremely subjective, even intimate, circumstances of individual stand before life and social situations that have provoked thoughts about themselves and critical considerations on public health care.

The discourses about the voice (Question 2) evolved as a mixture of technical knowledge and common sense and, above all, they came up within a comprehensive conjectural regard suggesting full meanings, both social and collective. Concerning the communicative function, the vocal expression encompasses resources to understand the others, establishing the nature of relationships and establishing the supposed roles of social actors according to the criteria of social inclusion or exclusion. Mediated by the aesthetic function, the human voice would convey messages that could benefit oneself and the others and would produce aesthesia and fullness of feelings, while its subjective function would translate culturally-based states, sensations and feelings.

The meanings conferred to the voice (Question 3) show an accurate observation of and concern with the communicative factor as well as concern with self-

examination and transcendence of emotional aspects featured in the voice.

The bond between the voice and menopause (Question 4) produced representations showing that the study object is used in communication to establish elements for interaction and self-examination of daily life. Self-examination in turn led to questioning information – that not necessarily come true – on menopause, disease and the likelihood of, despite being aged, having better use of the voice than younger people. Women in the study were able to recognize subtle changes and gave significance to those vocal changes and other menopause changes so that they would transcend their body's conditions, indicative of phases, situations, and critical psychological states.

Voice changes during climacteric concur as conflict or contradiction factors in the formation of a new personal identity, which is conceived on social pertinence, especially in occupations where voice has an essential function.

Vocal features are constantly permeated by individual and social values that come into being the ethos of a people or a community. Thus, the voice studied from a culture and language outlook, as communicative action, can be able to reveal specific expressions of a group with shared characteristics, further than the analysis of aesthetics and occupation.

Though decomposing criteria are individually determined, the approach is socially determined and the communicative function of the voice that intertwines and penetrates the collectiveness mesh, is the amalgam that supports and merges an established linguistic code and counteracts to or act in consensus with information conveyed through segmental components. The vocal expression will therefore reflect changes in the new identity. In this manner, signals encompass social and cultural bonds and not knowing or not observing that could result in an unsuccessful interaction in that communicative context.

It is believed that the study discourses illustrated the most relevant considerations, and gave an opportunity to women to voice their thoughts while evi-

encing the changes these women go through during menopause when their voice become a resource or source of change.

The present study has likely provided speech therapists an approach that privileges voice in the communication and everyday general language. At the same time, it is likely to have warned gynecologists of the relevance of voice in women's daily life, stressing the complexity of vocal health. It is important that physicians investigate any signs of voice disorders, even as an indicator of general well-being, and refer these women to further investigation and advice regarding their vocal health to assure their quality of life after menopause.

The analysis according to the parameters developed in the study showed the need for further investigation which would be theoretically and methodologically based on social sciences aiming at knowing and acting upon basic phenomena of human communicative relationship. Given its broad scope, a multidisciplinary approach is needed for a more comprehensive and integrated understanding of menopausal women's voice. In addition, population-based epidemiological, prospective and longitudinal studies should be carried out to better understand this issue and elucidate etiology assumptions, including past and current causal factors, using computer-assisted vocal measures which will enable a cross-sectional examination of structural and functional conditions and to establish individual and collective criteria.

These findings require further consideration and development of an accurate and specific vocal therapeutic process, adequate for a more susceptible larynx. They promote the implementation of actions that, together with preventive specialized interventions, could provide women, at different levels, social opportunities of exchanging ideas and sharing experiences about their daily life aiming at grasping the many aspects impacting on and interfering with vocal quality. This would advance women's thoughts and emancipation, helping them to perform their role(s) in the post-modern society and integrated with current actions, which require being constantly defined and redesigned.

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