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The voice of the elderly in accepting alternative perspectives on oral health

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Background: As we age, the dynamic balance between gains and losses has been acknowledged by current portrayals of health. Oral health research has yet to fully incorporate such dynamism in understanding the impact of oral disorders on the life of elders. ***Objective***: to explore the existence of alternative views on oral health through values, beliefs and behaviors of older adults. ***Methods***: Focus group discussions occurred among 42 men and women between the ages of 64 and 93 years old. Participants were from community and seniors centres and retirement homes. Each discussion lasted for about 90 minutes and was tape-recorded for *verbatim* transcription. Data were analyzed systematically and comparatively using a thematic approach to explore the depth of opinions and understandings of oral health and disability. ***Results and Conclusions***: Participants shared the acceptance of some oral impairment and disability as an alternative view of a 'healthy' mouth as they balanced gains and losses, adjusted expectations, and sought social support. Participants discussed that an edentulous mouth might not always be disruptive to daily functioning for all. As a result, a full set of new dentures may not always be the ultimate goal.

Key words: Aging, behaviors, beliefs,focus group, older adults, oral health, perceptions, stress and coping, values,

Introduction

Physical and cognitive functioning may decline with age, such that performing regular daily activities becomes restricted and limited for some people (Brouwer, *et al*, 2005). Under this assumption, *getting older* would imply debilitation and illness, as discussed by Newton (2004), and would give to older adults a roleless status in contrast to their earlier functional role in the work place. Role Theory and Parsons' Sick Role, for example, share the view of older adults becoming relatively disconnected from a globally industrialized and youthful society (Chappel *et al*, 2000). Role loss deprives people from social identities as they have no clear direction on how to 'behave' in old age. This stage of life can be disorienting, oppressive, and anxiety provoking, particularly when illnesses occur (Chappel *et al*, 2000). Role Theory offers little room for autonomy, self-determinism, encouragement, and for the influence of the social environment as older adults continue to function socially. In dentistry, the impact of oral conditions is understood by means of days lost from work, and by favoring edentulousness as an end point assessment of oral health. Although functional loss might be a reality for some older adults, others enjoy good health and counteract the pessimistic premises of Role Theory. Continuity Theory, for example, favors the choices people make in life as they age in an effort to maintain ties with the past while preserving the *self* within a changing social and familiar environment (Chappel *et al*, 2000). Similarly, Life Course Perspective links biography and history to consider the individual as an existential being and unravels the effects of age, history, and social structure on everyday life. In the midst of conceptually understanding the aging process, Locus of Control might bridge Role Theory and Continuity Theory/Live Course Perspective. Developed by Julian B. Rotter, Locus of Control refers to an individual's control over the causes of the good or bad results in life (Rotter, 1990). As people age, the belief that they can control life outcomes by behaving in a certain way (internal locus of control) embraces some aspects of Continuity Theory, whereas their limiting view as being victims of external forces and fated to suffer and perish (external locus of control) fits with the scopes of Role Theory. Either way, Continuity Theory and Life Course Perspective incorporate the World Health Organization concept of active aging as a process to promote health, participation and security (WHO, 2006). Active aging recognizes the relevance of personal and behavioral values in people's lives and emphasizes the positive roles of education and social activities in old age. Under the active aging perspective, health is constantly re-established, losses are natural, and stressors are experienced in a dynamic balance. This dynamism reinforces a more positive biopsychosocial perspective on aging in which coping and adaptation are constantly employed to minimize or prevent impairment and disability. As Brouwer, *et al* (2005) demonstrated, people in advanced age more easily accept some restrictions and difficulties in daily functioning. Consequently, despite the presence of illness, older adults adjust to a 'less than perfect state of health' to continuously enjoy life. It remains unknown, however, whether older adults would

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behave similarly when experiencing oral disability which might or might not restrict participation or limit activity (MacEntee, *et al* 1997). This paper aims to explore some of the oral health values, beliefs and behaviors of older adults when experiencing health and illness.

Methods

Focus group was chosen as the method for data collection due to its value in generating interactive knowledge through active interaction in which participants can voice different views and experiences, and reflect further upon their own standpoint. Group members can question each other, seek clarification, prompt further refinement of the information, and explore contrary opinions to enhance discussions according to Casey and Kreuger (2000). Focus groups have been successfully used to discus oral health values and beliefs among older adults (Kwan and Holmes, 1999; Brondani *et al*, 2008; Brondani, *et al* 2007).

In this study, a purposeful sampling of 42 older adults, 12 men and 30 women, led to a series of six focus group discussions. Participants were selected through advertisements posted in residential buildings, community centres, and retirement homes. Participants included were comfortable speaking in English, more than 64 years old, and willing to share their stories within a group of older adults. As suggested by Kwan and Holmes (1999), one group was composed only of men and another only of women to optimize issues specific to gender. The other four groups had men and women together.

Each group had a maximum of nine participants and the sessions lasted for an average of 90 minutes each. Participants did not attend more than one group and gave their written consent to have the discussions tape-recorded, transcribed, and analyzed (a complete discussion about group dynamics is offered by Brondani *et al*, 2008). Participants completed a short questionnaire in which they provided general demographic details and answered questions about their overall perceptions of their general and oral health and the clinical status of their mouths (Table 1).No clinical exams were performed. The mix of gender, marital status, educational background and age helped to enhance discussions and identify particularities in values and experiences (Brondani *et al*, 2008).

Group discussions were prompted by a written situational vignette given to each participant in case oral health and disability could constitute a sensitive or difficult topic for an open forum (Brondani *et al*, 2008). The vignette portrayed two Spanish older adults, Rosita and Victor, arguing about appearance and use of dentures from two different perspectives and social circumstances. The scenario encouraged discussions on coping and adaptation strategies with dentures and oral problems, definition and perception of oral health and disablement, and cultural behaviors and beliefs attached to the mouth through guiding questions including:

Why do you think Rosita always wears her dentures even with some discomfort?
Why do you think Victor does not always wear his dentures?
Why do you think Rosita wants Victor to wear his dentures?
What do you think Rosita's concerns are?
Do you think this situation would vary among different ethnic groups? Why?
Do you think situations like this would affect other people? Why and how?

During the discussions, participants were invited to express their oral health-related beliefs and attitudes but, unlike previous studies, they were given the opportunity to focus on oral *health* rather than disease and dysfunction alone (Brondani, *et al* 2007).

The group discussions were transcribed *verbatim* and analyzed thematically and systematically using coding to identify themes relating to how participants perceived oral health and disability (Brondani, Bryant and MacEntee, 2007). The information collected was compared through pattern-analysis in terms of saturation[1] (*e.g.*, when no new data emerged relevant to the focus of the discussion). However, such comparison was meant to 'include' information from different groups rather than solely contrast, for example, conflicting ideas or differences in opinions. Different group data were treated equally as participants expressed alternative views of oral health. Quotations from participants identified by age and oral and general health status are used to illustrate their perspectives on the issues discussed. This paper draws from the literature on oral health values and beliefs, behaviors, coping and adaptation strategies to discuss its findings.

Results and discussion

The participants were mostly Caucasians, well educated, and were an average 75 years old (from 64 to 93 years old). Less than 25% of them perceived their oral health as being unhealthy or somewhat unhealthy, whereas the majority (n = 38) perceived themselves to be healthy or somewhat healthy in terms of general health. However, they still discoursed on a variety of pitfalls with their natural and false teeth while voicing their values and beliefs on alternative views of oral health. Most of them (85 %) reported having natural teeth with or without removable or fixed prosthesis. Self-reported status may not, however, reflect the actual oral status of the participants and needs to be interpreted cautiously. Table 1 summarizes participants' demographic and sociological attributes adapted from Brondani, *et al* (2007).

1 This manuscript understands saturation as difficult to attain, inappropriate for a study about experiences, and with a lack of guidelines for estimating 'data adequacy'. In fact, a complete and saturated understanding of a complex experience such as oral health may never occur and its particularities never fully elicited.

Table 1. Self-reported characteristics of the 42 focus group participants

Demographics and sociological characteristics	*Number of participants (percentage %)*
Age in years	
64-74	23 (*54*)
75-84	12 (*29*)
>85	07 (*17*)
Marital status	
Single	18 (*43*)
Married/Common-law	06 (*14*)
Divorced/widowed	18 (*43*)
Education level	
University	11 (*26*)
College/High school	26 (*62*)
Elementary school	05 (*12*)
Self-assessed oral health status	
Natural teeth only	06 (*14*)
Natural teeth & dentures	30 (*72*)
Complete dentures	06 (*14*)
Self-perceived oral health status	
Healthy	32 (*76*)
Unhealthy	10 (*24*)
Self-perceived general health status	
Healthy	38 (*91*)
Unhealthy	04 (*09*)

Information presented in this table was adapted from Brondani, *et al* (2007)

How did the data reveal alternative views of oral health?

The analysis from the transcripts revealed that participants criticized, for example, the pressures of today's society in idealizing aesthetics and 'white teeth' as synonymous with oral health. The different groups valued aesthetic facial features, however, as long as they *'blended with your complexion'*. A 79 year-old female participant, with a brand new set of complete dentures, told her group that

"[w]hen I was having a new set (of dentures) made, my dentist told me that his patients, no matter the age, come with a similar request: can I have my teeth whiter as I saw on so and so or in a magazine? Either for natural or a new set of dentures, the advertisements are out there, the whitening products are out there […] and people tend to have a clear idea of 'white' being the color of healthy teeth. But I don't like that, no. My teeth (she opens a smile and points out to the denture's teeth while looking at others in the group)*, are a bit darker, as I asked to my dentist, and I like them."*

Contradicting the popular belief that women complain more about appearance than men, as discussed by Brondani, *et al* (2007), one group's participant, with nods from other group members, stressed that

"[t]he myth of women [being] more concerned about appearance is a myth. All depends on what is happening in your life. Men, they would care more about their appearance if they look for a date, but all depends what is going on. Some care more, some care less, either men or women" (female, 72 year-old, natural teeth and fixed prosthesis).

The acceptance of missing and colour-changing teeth, and of other alternative views of oral health, may occur because participants lower their overall expectations while aging in an attempt to *'keep going'*, as expressed by an 85 year-old woman with natural teeth and a removable partial denture, and who moved around with a walker

"65 and up, it's your choice and you can have an excellent life that wouldn't be the same when you were 20s or 40s. Your expectations were different. I think the younger people have more expectations than we do. I did. It is just a part of the process of growing older."

Other participants were very aware that the aging process comes to everybody, and a 73 year-old male exclaimed quite euphorically that *"lucky are we [who] can still age, and yes, we do change paths and directions on the way to simply feel better, to live."* Participants also re-evaluated their expectations since *"changes in your opinion as you grow older are quite normal. You change the way of thinking about things and doing things. We are used to it, it is quite normal to change expectations"* (female, 72 year-old, natural teeth and complete denture, and who was recently moved to the retirement home). Accepting non-dysfunctional but yet possibly deteriorative health also emerged because *'there are lots of things that you cannot do'*, and yet participants were not overly concerned about such limitations. This perspective reinforces the importance of incorporating lay people's health values and attitudes when promoting health programs and assessing oral health, as discussed by Kwan and Holmes (1999). In fact, most of the participants interpreted functioning and disability as dynamically

interacting rather than linearly progressing to invalidity as still portrayed by influential models of oral health (Brondani, *et al* 2007).

Participants in this study also compared themselves with others as

"There is always somebody worse off than you, and you get on that support, in a positive way. Not that we want the worst for that person, or being pity with others as a matter of comparison [but] to get energy and strength from them, mutual support" (female, 71 year-old, natural teeth and removable partial denture and with a recent history of breast cancer).

Comparisons with others might help people to balance abilities and limitations as they seek social support. Participants emphasized that comparisons can occur when they search for relevant information, gain knowledge and constantly evaluate their own capacities. Comparisons occurred intrapersonally, when they compared their current expectations with those held in the past, and interpersonally, when they compared themselves with others (Gibbons, 1999). When directed to dentistry, interpersonal comparisons have been associated with a better perception of oral health as found by Avlund *et al* (2003). As people compare themselves to somebody in a better or worse healthy situation and re-evaluate their current status (Groot, 2000), they dynamically fluctuate between different levels of health and disability to positively adjust to detrimental health changes. Sprangers and Schwartz (1999) reported that this dynamism also sets off previously envisioned health states as people shift their reference points during the aging process, accepting alternative health outcomes. As a result, there is a constant re-establishment of health in which losses are natural and stressors are experienced in a dynamic balance. The Social Comparison Theory states that comparison has an important role in evaluating and constructing an individual's reality (Gibbons, 1999). Comparisons are also interconnected with social support. Social support has been associated with the acceptance of alternative views of health since being embedded in a social network promotes a sense of wellness among older adults (Krause, 2004). In this study, the emphasis on social support may reflect participants' engagement in community activities: four of the focus groups took place in community and seniors' centres, which tend to favor active aging as they optimize social activities and participation (WHO, 2006).

When changes in the mouth were stressful, the participants understood them as not always impairing or disabling, even though they are still *'having dental problems but don't feel impaired with oral health'* as pointed out by a 69 year-old female with a recent history of a toothache. The different groups also stressed that shrinkage of gums and inadequately fitting dentures can be a burden for some but not for others, as also reported by Gregory, *et al* (2005). If older adults share the belief that changes are not always negative, the use of a clinical perfect health status as an anchor point misrepresents the true health gains when evaluating health care interventions. In fact, there is little evidence to indicate exactly what a meaningful clinical change entails after an intervention or treatment.

When asked about the need to wear dentures, the participants shared different beliefs. For some, dentures were important aesthetically and socially, even when not totally comfortable, as they tried to make sense of the vignette presented:

"The fact that she wears (referring to Rosita, from the vignette) *and they hurt her means that she is very concerned with her social acceptance. I don't know if I agree entirely, because it seems to me that if she wants to be socially accepted and she wears her teeth normally, it would be more important to her to go out and eat, than the pain she is having"* (male, 69 year-old, natural teeth and removable partial denture).

For others, the acceptance of dentures would be a matter of gain and loss as *'false teeth can prevent you from tasting food, and as a consequence, people soften their food which is great as you have less pressure problems on your gums'* (female, 80 year-old, natural teeth and complete upper denture). The difficulty in adapting to a denture, however, may be linked to the fact that it may be an artificial replacement of the body. In this regard, a 69 year-old male with natural teeth and a removable partial denture explained that *'it is never natural, it can be close to, but it is not natural. It is artificial and it feels artificial at all times. It may facilitate your ability to do something, but it is not the same. It is a foreigner.'* The feeling of a 'dental appliance not belonging to their body' may also explain why some people never come to terms with their dentures.

When associated with proper eating, the use of a prosthesis may not always enhance mastication, contradicting the study conducted by Daly *et al* (2003). In this realm, participants shared stories they heard from their husbands, friends and grandparents

"I had a grandfather who lived the entire last 30 years of his life without dentures, without any teeth, and he could eat anything, maybe with the exception of biting an apple. But he never seemed to be worried about it" (male, 72 year-old, natural teeth and removable partial denture).

Explanations such as the above may be biased since they reflect subjective experiences of somebody else, either grandparents or friends. Moreover, those who believed in the lack of association between dentures and mastication were not denture wearers themselves, whereas most of those who did associate false teeth and proper eating were. Either way, there was an overall agreement that, depending on the preparation and selection, essential foods can still be consumed to provide a certain nutritional value since some are easy to eat and chew while others you *'purée, smash, or boil.'* Although changes in the way food is prepared or selected may diminish the pleasure and joy of eating (Daly *et al*, 2003), participants balanced those changes to *'still enjoy, even when it is difficult. If you haven't got good teeth, you would not go out for steak, but you would go for something less hard, something that you can handle without so many problems chewing, and still enjoy it comfortably'* (female, 77 year-old with complete dentures). Changes in food preparation, as routinely employed by the participants, reflects simply an inexpensive adaptation strategy to edentulousness since extensive and costly prosthetic rehabilitation does not necessarily lead to dietary improve-

ments according to Moynihan *et al* (2008). The discussions about dentures emphasized the role of coping and adaptation strategies in understanding the reasons why individuals with a high prevalence of dental impacts (*e.g.,* tooth loss) perceive their oral health as very good. Some participants understood coping as the struggle to manage stressful conditions in order to overcome problems and difficulties (Lazarus and Folkman, 1984), whereas adaptation was discussed as the intention to make a '*fit*' when facing challenges as per the study conducted by Allison, Locker and Feine (1997). Other participants differentiated between coping and adaptation in terms of positive and negative characteristics

"Coping has a more negative connotation [whereas] adaptation has quite a positive [when] adapting to the change. Coping would be just putting up with a situation, not taking any positive steps to adjust. Adaptation has more meaning to change, while coping is not as active in its meaning. It is more of being a victim, if you cope, and less of a victim [if] you adapt" (male, 64 year-old, natural teeth and fixed prosthesis, who was taking medication for blood pressure and cholesterol).

Some group's members stressed that there was no need to cope once you managed to *'fix the problem.'* Adaptation was also strongly associated with getting older because *'there is nothing that you can not get used to [and] something physical that we cannot do, there is always something else that we can do'* (female, 86 year-old, natural teeth and removable partial denture). Overall, people cope with changes and adapt to a new health status to *'feel good'*. For most of the participants, adaptation was more personal than social, as long as *'you are an adaptable person'*. Adaptation to some difficulties was also found by Gregory, *et al* (2005). Struggles to adapt with pain were discussed by the participants, but not necessarily implying impairment:

"I don't think that generally impairs you. If I have to, I can still go out and buy groceries even if I have a sore tooth. It doesn't impair me of doing other things, if I feel like doing. It doesn't really impair you to go out and still walk along."(female, 66 year-old, natural teeth and fixed prosthesis, who felt healthy),

Overall, the participants conceived functioning and disability as an interaction between health, social environment, coping, and adaptation. Similarly, MacEntee, *et al* (1997) found that older adults experience oral health and illness within a variety of personal and social factors as they cope with and adapt to impairments and limitations. This conception was indeed emphasized by an 87 year-old male who volunteers in a community centre, and for whom *'coping and adapting, and getting involved into activities, all become more significant as you get older, and it gives you joy.'* Nonetheless, the participants still struggled with their mouths because if *'you have a sore tooth, it might affect a lot of things'* as stressed by an 89 year-old female with a long history of back pain. In this context, divergence between clinicians and patients may exist when the need for healthcare and treatment is discussed since patients usually understand an oral problem to be concerned with treatment exclusively, whereas professionals interpret it as any oral limitation or handicap regardless of the participant's concern. In fact, participants from this study believed that oral disorders can be managed such that a negative impact may be minimized or prevented as they re-evaluated their oral health status in a dynamic continuum.

Moreover, changes in perception that usually accompany aging could have a negative effect on clinical decision making. For example, dental professionals could interpret such changes, particularly a patient's lowered expectations, as a reason for not striving to achieve the best possible outcome. The principles of dental practice emphasize the professional role in 'putting patients' interests first' and in 'respecting patients' choices' in all ages (General Dental Council, 2005). Consequently, older adults should always be given a choice of treatment options, and take advantage of modern dental technologies if that is their preference. Dental professionals should not favor a less time-consuming and ambitious course of treatment simply because they think 'it will be good enough for this older person'. Although older adults do cope and adapt, such strategies should not be seen through the lens of ageism to negatively influence clinical treatment options and decision making.

In spite of the findings from this study and others (Wong and McMillan, 2005), the tendency to focus on oral dysfunction and impairment alone when portraying oral health leaves little room for adaptation to impart a positive view of the mouth, as discussed by Brondani, *et al* (2007). As voiced by participants, oral health has a dynamic continuum relationship among various domains, including functional and health perception, coping and adaptation, and health values and beliefs. Such dynamism reinforces a more positive biopsychosocial perspective on aging and refutes the pessimistic premises of Role Theory. More importantly, it favors sociological theories that emphasize the choices people make in life within a changing social and familiar environment, and the individual's control over life outcomes as aging is a process to promote health, participation and security (WHO, 2006).

Lastly, contrary to the study conducted by Denton and colleagues in 2004, ideas and understandings about the vignette's characters and its context were not influenced by gender or other demographic characteristics of the groups. As an example, the first group, comprised of only women, expressed their ideas about facial aesthetics being a potential concern independently of gender. Likewise, the other groups, particularly the one comprised of only older men, agreed with this widespread concern for appearance regardless of gender. As a matter of fact, similar opinions about the vignette's content were expressed by participants from different age ranges, education, marital status, and self-perceived oral and general health status (Brondani *et al*, 2008).

Conclusions

This paper explored alternative views of oral health shared by a small sample of 42 older adults gathered in focus groups. Participants expressed their health values and beliefs, along with coping and adaptive strategies to oral health and disability. Dental research has yet to fully acknowledge such views when making sense of the impact of oral disease in the life of elders. As older adults continue to participate in society, they experience

disability normally whether or not missing teeth or an edentulous mouth constitute a dysfunction or a simple diversity. As individuals constantly change and fluctuate in their desires, the illusion of ideal oral health as a full set of dentures for all edentulous mouths has to be reconsidered. Nonetheless, information from older adults representing different ethnicities and educational backgrounds is necessary to ensure that the understandings of oral health and disability portrayed here are shared, or else questioned for changes.

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