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Oral health, the perspective of the inmate and the context of vulnerability

Saúde bucal, a ótica do encarcerado e o contexto da vulnerabilidade

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Resumo

Introdução: O aumento da população encarcerada é um fenômeno que vem sistematicamente sofrendo incremento no mundo todo, levando a superlotação dos presídios, a qual tem consequência direta nas condições de saúde destes indivíduos. **Objetivo:** Explorar a relação entre saúde bucal, trajetória de vida e percepção de sujeitos em contexto de vulnerabilidade. **Material e método:** Trata-se de um estudo qualitativo desenvolvido junto a encarcerados de uma Penitenciária Estadual. Para obtenção e tratamento dos dados utilizou-se entrevista individual e técnica da Análise de Conteúdo Temática. **Resultado:** Os entrevistados apresentaram uma percepção limitada do processo saúde e doença bucal, fomentada por experiências de familiares e de conhecimento adquirido na rua ou na mídia. A trajetória de vida em cárcere pareceu pouco influenciar neste entendimento. No entanto, a vivência no cárcere influenciou na condição bucal dos encarcerados através da facilitação do acesso ao serviço odontológico e a materiais de higiene bucal e melhoria em seus conhecimentos e hábitos de saúde. As referências de saúde bucal expostas mostraram-se, em geral, consonantes com o chamado senso comum e com estudos desenvolvidos em populações socialmente similares. **Conclusão:** Desta forma, considerando-se as limitações impostas pela forma da coleta dados, sob um contexto de cárcere e vulnerabilidade, sugere-se uma influência não prejudicial da condição estudada sobre a saúde bucal dos encarcerados.

Descritores: Vulnerabilidade social; saúde bucal; estilo de vida.

Abstract

Introduction: The increase in prison populations is a phenomenon which is systematically rising throughout the world, leading to overcrowding of prisons, which has direct consequences on the health conditions of the individuals. **Objective:** To explore the relationship among oral health, the life path and the perception of subjects in a vulnerability context. **Material and method:** This is a qualitative study, developed with inmates in a State Penitentiary. To obtain and process the data, individual interviews and the Thematic Content Analysis technique were used. **Result:** The interviewees showed limited perception of the process of oral health and disease fostered by the experiences of relatives and by knowledge acquired in the street or from the media. The life path in prison seemed to have little influence on this understanding. However, the prison experience influenced the oral condition of the inmates by facilitating access to dental service, oral hygiene materials and the improvement in their health knowledge and habits. The oral health results presented were, generally, in agreement with so-called common sense and with studies developed in socially similar populations. **Conclusion:** Thus, considering the limitations imposed by the way data were collected, in prison and in a vulnerability context; a non-harmful influence on the condition studied regarding the oral health of inmates is suggested.

Descriptors: Social vulnerability; oral health; life style.

INTRODUCTION

The increase in prison populations is a phenomenon which is systematically rising throughout the world, and several explanations can be found to understand this. Increase in crime, greater stringency of the laws, improvement in the quality of police investigations and, primarily, a change in the mentality of judges are predisposing factors for the expansion of this community[1].

In this context of prison overcrowding, lack of physical structure, poor hygiene conditions, violence, discrimination, failure in the

rehabilitation and reintegration of the prison population[1,2] is frequently found. These contribute directly to the worsening or the aggravation of their health conditions.

Historically, the attention to the issue of the health of persons deprived of freedom in Brazil has been done under a reductionist perspective, emphasizing the reduction of damage and the biological paradigm. However, in 2003, the Ministry of Health approved the National Health Plan in the Penitentiary System, through the Interministerial Ordinance No. 1777/GM, with the mission to carry out the full inclusion of inmates into the *Sistema Único de Saúde* (SUS) (Unified Health System). This was to be done by organizing primary health care activities and services, working in multidisciplinary teams and having a referral system to other levels of care, all within the individual prison units[3].

Fostering actions that promote health, focused on individuals in a context of deprivation of liberty is not only a responsibility of the State, but it also represents a mission and a challenge to health professionals aimed at a society with minor discrepancies between the set of social problems and the state's ability to deal with them.

Therefore, aware that oral health is an integral part of the quality of life and that its consequences reflect profoundly on the daily life of people, this study aims to explore the relationship among oral health, the life path and the perception of the subjects in a vulnerability context.

MATERIAL AND METHOD

The present study, classified as cross-sectional observational with an exploratory character and qualitative approach, was approved by the Ethics in Research Committee of the State University of Ponta Grossa (*Universidade Estadual de Ponta Grossa*) (Opinion COEP-UEPG No. 226.155/2013) following Resolution 466/12 of the National Health Council.

Research Site

The site of the research was a State Penitentiary, operating for 12 years, intended for the completion of sentences (semi-open and closed systems) of males. It is classified as one of the institutions with the mission of promoting the social reintegration of inmates through respect for the inmates, humanization of activities, establishment of prison work sites, and health, legal, psychosocial and educational assistence.

Population, Sample and Data Collection

The population of this study comprised the totality of inmates imprisoned for the longest time in a closed system and who agreed to participate in the study. The number of subjects was defined considering the greater time spent in prison but with the possibility of recruiting other respondents. However, during the study, the number proved sufficient since the empirical material obtained permitted the drawing of a comprehensive outline of the issue being investigated.

Individually and in a space previously set up by the local chief of security, monitored by cameras and penitentiary agents, demographic and basic socioeconomic data of the individuals were first collected. Then, their perceived idea of oral health and care, permeated by their life path, was sought. To do this, a script designed to guide the dialog was used, in order to understand the interviewees, point of view of the topic, thus permitting free discussion and at the same time delineating the conversation.

This step was conducted by a trained researcher who explained the objective of the study, the function of the group, volunteering, confidentiality and the non-identification of participants. Consent to record the sessions was sought. Each interview lasted approximately 45 minutes, and saturation criteria[4] were considered for closure.

The volunteers were informed about educational and preventive aspects of oral health through dialog with the researchers and the acquisition of an informative printed manual.

Information Processing

The recorded interviews were transcribed and the questions were analyzed qualitatively using the Thematic Content Analysis[5] technique. This technique consists of discovering the core meanings which promote the social capture of the interviewees regarding the object of the study, as well as the psychosocial contextualization surrounding the object.

The pre-analysis of the transcribed material was done first, organizing and defining it into five broad categories. A first reading of the material was done at this step, to get a full understanding of the meaning. Further exploration of this material was done with an exhaustive reading of the statements, in order to sub-categorize them. First, words or expressions called the Core Meanings, which responded to the guiding questions, were extracted. These were recorded together with the fragments of the text that contextualize the issue. Finally, the statements were grouped into thematic categories (Table 1).

RESULT AND DISCUSSION

Considering the inclusion and exclusion criteria for recruiting subjects, six inmates composed the final sample. The mean age of the participants was 43 years, they all had incomplete elementary education and the duration of imprisonment ranged from 23 to 27 years. As the penitentiary in question is relatively new, it contained individuals who were transferred from other institutions, also closed prison systems.

Determining Factors of Oral Health

When questioned about factors necessary for achieving and maintaining oral health, the interviewees considered the acquisition and use of dental supplies, having proper habits of oral hygiene, access to information and, especially, regular visits to the dentist to be important.

> [...] *the toothbrush and toothpaste will help with the brushing but, if the person doesn't have information, the dentist has to explain because many times we have no idea* [...] *he'll try to find out what is ruining the teeth, so the most important thing is the dentist.*

Table 1. Distribution of data collected during the interviews into categories, thematic subcategories and registration units

Category	Subcategory	Registration Unit
Determinant factors in oral health	Dental Input	Paste and toothbrush acquisition Paste and toothbrush Use
	Dental Surgeon	Access
	Information	Access
Predisposing factors of oral diseases	Oral hygiene habit	Brushing
	Cultural aspect	Thermal shock
	Food	Rest of food between the teeth
	Illicit drugs	Ace
Self-perception of oral health	Legal drugs	Cigarette
	Favorable oral health	Good teeth Appearance
Impact of oral health on quality of life	Social relations	Lost of front tooth
	systemic condition	Stomach cancer
Influence of the prison situation in oral health	Positive range	Access to the dentist Oral hygiene Habit
	Negative range	Dental Input

I always brush, but I don't go to the dentist a lot like I should [...] *you need to go for cleaning, prevention and treatment in order to have a healthy mouth.*

[...] *but I believe the most important thing is brushing. It's no use going to the dentist but not brushing the teeth well. But I think it includes everything: brushing the teeth, having the proper toothbrush and seeing the dentist regularly.*

The constitutional principles of the *Sistema Único de Saúde* (SUS) (Unified Health System) guarantee universal care, comprehensive attention and access to services and goods to the citizens, according to their needs. However, major inequalities are still seen in the provision of resources and services, as well as a strong influence of the social position of individuals to the access, use and quality of health services[6]. The inmates in this study have access to dental treatment and the basic supplies of oral hygiene, according to the regulations of the National Health Plan in the Penitentiary System.

The value attributed by the interviewees to the image of the dentist perpetuates the biomedical model of health care. This result confirms the findings of other studies of populations in socially vulnerable situations[7,8].

As for the influence of the habits and behaviors of oral health, also pointed out in the statements, the literature shows that they are shaped by personal experiences which act to determine behaviors and perceptions and are influenced by socioeconomic development, income and access to sources of information about health[9]. According to the interviewees, their conceptions about the determination of oral health were learned 'from life', referring to experiences of family members and knowledge acquired in the street or from the media.

I know this [how to take care of my teeth] *from home, because my mother suffered a lot from pain and had everything yanked out ... I know she didn't go to the dentist and didn't brush.*

Everybody knows what you have to do to prevent ... we learn from hearing the guys in the street, from talking with people who lost them all [teeth], *from television ... it's like that!*

Predisposing Factors for Oral Disease

On being asked about the etiology of oral diseases, even in a general way, the interviewees initially pointed to the presence of residual food, as seen in the discussions.

[...] *there are times that you eat meat and it stays there. The same with flossing, there are times it doesn't come out and it bothers you ... many times the person brushes, but a little piece remains there. I believe that it can hurt, it accumulates dirt and sometimes the brush doesn't help. Then, when you see, it's decaying.*

You have to eat and brush immediately, if you leave some food residue it will cause you some problem. It starts with bad breath and goes on to ruin the teeth.

It is universally accepted and established that dental caries have a much broader etiololgical concept than the one described above. It is a complex, infectious and non-transmittable disease, of which the final breakdown occurs through the physiological imbalance between dental tissue and the oral biofilm, demineralizing the dental structures. Besides, extrinsic factors related diet habits and oral hygiene and the sociocultural structure of each individual also contextualize this dynamic process[10] interfering with their behavior and, consequently, influencing the presence and control of dental caries. In Brazil, in addition to the regional inequalities and inequities, disease and access to public dental service are also

distributed unevenly among individuals of different backgrounds, skin color, living conditions and buying power[11]. It is understood, therefore, that the narrow etiological relationship revealed by the interviewees is conditioned upon their social context.

Another factor pointed out by the interviewees as capable of contributing to the appearance of symptoms or oral diseases was the use of licit and illicit drugs, with strong reference to the consumption of crack and tobacco. It is worth noting that these habits, considered illicit and harmful to health, are culturally entrenched in prison environments.

Drugs harm. Especially crack users. I've seen plenty of young guys who use the crack rock and put it in their mouths, once they realize, it's already ruined their teeth.

Ah, it [the drug] *weakens dental health, it rots, it causes lots of damage. I know, because I myself was a user and I know that I suffered a lot with it and how much it was harmful to my teeth.*

Drug use, in addition to being characterized as a social issue, also affects the systemic condition of the user, including effects in the oral cavity. The main findings in patients who use drugs are: xerostomia, decreased buffer capacity of saliva, angular cheilitis, bruxism, tooth loss, periodontal disease, halitosis and stomatitis[12]. Leukoplakia and carcinoma may also occur.

Tobacco was referred to by the inmates as responsible for discoloring the teeth and promoting caries and tooth loss.

[...] *the ones that smoke are worse, the teeth get darker, I don't know if it's caries or tartar that accumulates on the teeth ... Ah, it's enough for the teeth to fall out, y'know?*

[...] *because in a person who smokes, the teeth turn yellow. There are people who smoke two, three packs of cigarettes a day, even more. Ah, it makes a mess over time ... the teeth will fall out because they will get cavities and then you will see that the only solution is to pull the tooth because of the pain.*

The literature shows that the yellowing and the blackening of the dental substrate of individuals who smoke occurs due to the impregnation by contaminants coming from the cigarette smoke[13]. In addition, it states that the smoking habit contributes to the increased incidence and severity of periodontal disease[14] and that there is a close relationship with cancer of the mouth and oropharynx[15].

Self-perception of Oral Health

Self-evaluation of health is the interpretation that people make of the state of their health and experiences in the context of their daily lives. This judgment is based, in general, on the information and knowledge available about health and disease, mediated by prior experience and by the social, cultural and historical context[16].

The interviewees of this study positively related oral health to favorable appearance and the absence of evident clinical signs of caries and periodontal disease; and, negatively to bad breath and missing teeth.

For me, I always thought that the appearance of the mouth is everything, even before coming here! [...] *not having teeth with caries or rot or something like that.* [...] *the teeth are all healthy, you won't have bad breath.*

I have good teeth ... always did, being here didn't change this. I just need to clean them and take the tartar out, actually, that's what's been missing for having a nice smile.

No, I don't have [good oral health]. *I have caries, missing teeth. Here it is still not good, but when I get out, I'm going to get it treated and have a nicer mouth, you'll see!*

Despite caries occurring before the visible signs of damage or painful symptoms, they are commonly not perceived before a cavity or pain appears. As with the findings of Cavalcanti et al.[17], the inmates clearly expressed this perception of oral problems associated with characteristics expressed by the individual and claimed that their conception of oral health didn't change after the prison experience.

It is known that the subject's point of view changes throughout life as a function of the physical and psychological state and contextual conditions, a fact not confirmed by this study. Thus, capturing the subjectivity of well-being and of illness in order to try to quantify the subjective is always limited, because it also involves values and feeling not always expressed[16].

Impact of Oral Health on Quality of Life

The association of unsatisfactory oral self-perception with variables which impact on the quality of life, especially in the dimensions of pain, appearance, chewing problems and limitation of social relations has been demonstrated[18]. Individuals may also qualify their oral conditions by means of values and beliefs conditioned by an incapacitating social reality and the state attributed to general health[8].

The inmates' point of view reflects the impact of oral health on their interpersonal relationships when the loss of a dental element occurs[7], especially in the anterior region.

Ah, it was bad when I lost the front teeth [...] *because when I was going to the party I was embarrassed …*

I wasn't discriminated against, but you'll be more embarrassed, won't get a woman [...] *I didn't even try, for fear of getting a 'no', or having to hear: I am not going with this toothless man!*

As to the influence of poor oral health on their systemic conditions, the interviewees suggested, mistakenly, the possibility of developing stomach cancer.

I don't know, I think that it can cause stomach cancer if the bacteria go into it [body] *and begin to damage it.*

[...] *I think that what you eat, then, can go from the teeth to the stomach and end up causing other diseases.*

Despite there being no relation between oral diseases and stomach cancer, this view is not totally disjoint because there are systemic diseases that have oral manifestations. The oral maifestations are very common and may be the first signs and symptoms of diseases or systemic alterations arising from certain therapies[19]. These oral lesions may indicate the onset or the progression of some illness and, therefore, may function as an early warning system for some diseases[20].

Influence of the Prison Situation on the Oral Condition

The access that the population has to health services is one of the conditions for the development and maintenance of quality of life. For the interviewees, imprisonment would have given them the opportunity for access to dental service.

> *On the street* [before being arrested] *I never really went to the dentist. Here, I got treatment from the dentist. Because in the other units* [prisons] *where I've been these 21 years, they don't treat caries, they simply yank them.*

> *The dentist always sees us here, for cleaning and removing tartar ... this is very good* [...] *but he does more when it's hurting or uncomfortable* [the tooth].

The National Health Plan in the Penitentiary System[3], cited above, considers that persons marginalized due to incarceration need a specific health policy, in order to regulate access to actions and services aimed at reducing the injuries and damage caused by the conditions of confinement[21]. There is also the principle that prisoners should not leave prison in worse condition than when they entered[22], reinforced by Recomendation No. 7 of the Committee of Ministers of the Council of Europe (1998) and by the European Committee for the Prevention of Torture and Punishment or Cruel, Inhuman or Degrading Treatment (CPT). This seems to be the case of the interviewees, finding positive changes in their oral health habits and their knowledge:

> *To tell the truth, I got this habit* [oral hygiene] *here, because when I was in the street* [free] *I wasn't used to cleaning my teeth or going to the dentist.*

> [...] *because here is a place where you have time for everything. I learned that the health of the mouth, in addition to maintaining the appearance, is also our health and this habit* [brushing the teeth] *I got here.*

> *Before coming to prison I wasn't like this, I was more careless. Today, as I think about it, here I matured my health.*

The habits of hygiene and the presence of caries may vary considerably among prison populations from different countries, and even within one country[17]. Such differences may be related to the quality of the products and dental services provided to different population groups inside and outside of the prisons.

On being questioned about the oral hygiene material that they get from the prison, the interviewees took the regular receipt of materials as something positive; however, they had complaints about the quality:

> *Everyone does get a pair of toothpaste and a toothbrush ... that helps. But, it's not as appropriate as we were used to, good toothpaste and a good toothbrush ... because when the toothbrush is one of those good ones, I think it cleans better.*

According to Ordinance No. 63 from April, 2009, of the National Penitentiary Department[23], the bids for the acquisition of personal hygiene materials in penitentiaries are for the lowest prices per item. Poor sanitary conditions and ineffective hygiene may be present in some penitentiaries where food, clothing and hygiene products are provided in unsatisfactory condition[1]. The dissatisfaction shown by the subjects with the quality of the dental material may be a reflection of a similar situation faced by this institution.

However, in the area of dentistry, it is known that the physical characteristics of the toothbrushes themselves play a secondary role as compared to the proper mechanics of brushing[24], and that in Brazil there is a mandatory insertion of fluoride in all toothpastes.

LIMITATIONS OF THE STUDY

The conditions under which the inmate and the interviewer conducted the interview, following the security standards established in the prisons, restricted the establishment of a proper proximal relationship. In this context, there was some difficulty with the flow of the dialog and the exploration in greater depth of some of the issues under investigation. However, it was possible to obtain adequate material about the phenomenon studied, which can support the planning of educational strategies to promote health in these vulnerable groups.

FINAL CONSIDERATIONS

Vulnerability may be understood in several ways, according to the angle from which it is seen. It may be understood as vulnerable persons, for example, persons who lack choice or action. Or, one may also consider the relationship among individuals and their susceptibility: but, in relation to what or to whom?

Analyzing the object of the present study from the socioeducational perspective of the inmates, their references to oral health are shown, in general, to be consistent with the so-called common sense and with studies developed in socially similar populations. The interviewees showed limited understanding of the determination of health and oral disease, and reported that the life path in prison seemed to affect this understanding very little.

Considering the characteristics of the social group in queston, the interviewees showed ease of access to the dental service and oral hygiene materials, and improvement in their health knowledge and habits after being placed in the prison environment. Thus, considering the limitations imposed by the manner of gathering data, in the context of prison and vulnerability, a non-injurious influence of the condition studied regarding the oral health of inmates is suggested.

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CONFLICTS OF INTERESTS

The authors declare no conflicts of interest.

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