

Oral health quality of the workers of a telemarketing company and their satisfaction with the treatments provided by the corporative dental insurance plan

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Abstract

Aim: To evaluate the oral health quality of the workers of a telemarketing company and their satisfaction with the dental treatments provided by the corporative dental insurance plan. **Methods:** Data collection was by an online intranet questionnaire on dental service providers from Uberlândia/MG and Campinas/SP. It was addressed to 6000 associates, with objective and subjective questions, comprising the level of the telemarketing operators' oral health, dental needs, satisfaction with dental care providers and the importance of having the laboral dental services provided by the company. **Results:** After analysis of the results, we observed that: 57.52% of the workers required improvement in their oral health and 56.03% mentioned prevention as the largest need, 66.70% use the dental providers' services, but only 31.34% were satisfied with them. **Conclusions:** The results underscore that the workers have an intermediate level of dental needs, with prevention as top importance. Additionally, establishment of a basic attention program inside the company would increase the satisfaction and adhesion indexes of providers and the workers' oral health.

Keywords: oral health; telemarketing; operators; occupational health.

Introduction

Occupational Health is a technical area of Public Health that seeks to intervene in the relationship between the production system and health, in order to promote work that dignifies instead of demeaning the man. Its mission is to assist in structuring a society that promotes health through workplaces¹.

It is a known fact that oral modifications compromise the individual's general health, interfering negatively in his/her quality of life²⁻⁸ and affecting the productive activity of the worker²⁻⁷.

The Laboral Dentistry in the context of a company leads to an improvement of oral health to the compatibility of labor activity with oral health⁹, providing health quality and therefore increasing productivity and developing a primary care and preventive oral health¹⁰⁻¹³.

In the last few years, telemarketing activities have been provided in what are commonly called call centers, or telemarketing centers. This economic sector

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employs millions of workers all over the world and has organized structures for dealing with the public¹⁴⁻²². The expansion of the telemarketing sector in the Brazilian economy has been very consistent. Telemarketing involves an intense use of technological tools and also reflects the consequences of the transformation of the capital production ways.

Cordeiro²² investigated and analyzed how the working activity in the call centers is related to the health of the operators. The results are similar to those of other studies¹⁴⁻²¹, as the operators experienced a process of precarious work with impacts on their health and a great increase of occupational diseases.

Medeiros and Bijella²³ studied the development of dental care programs for workers, suggesting criteria for changes in the planning and routine care. To set priorities for attention to oral health, they can be applied to the group for the same reasons evoked when school programs are established, considering that the workers accumulate greater needs, in addition to the rehabilitation aspects. The authors concluded that the provision of dental services to worker groups should be available, preferably in the workplace. It is also important to plan a program focused on the needs of the workers, with a prior dental census to establish the priorities.

The importance of the dentist in the occupational health team was highlighted 1972 by Nogueira²⁴, who described various oral pathologies resulting from occupational diseases triggered by mechanical, physical, biological and chemical agents.

In order to demonstrate the need for maintenance of dental services of a company, Gomes and Magalhães²⁵ analyzed the results of the survey of dental needs conducted in 1977, among the employees of the Brazilian Federal Railway Network. The authors based on evidence obtained by the epidemiological study using medical records for verification of DMFT and other problems in the oral cavity from the dental care planning point of view. They concluded that the oral census is of great value in business Dentistry, as it constitutes the only resource that has professional application for preventative Dentistry. This procedure results in lower absenteeism and increased productivity, favoring the company and the employee^{21, 25-31}.

In 1999, the worker's oral health was recognized as a new specialty for dentists³². The authors recommend that this new field should address the epidemiology and pathology of occupational diseases, seeking to prevent the harmful effects of working conditions and their influence on health.

Many systemic diseases have oral manifestations, and Hollister and Weintraub³³ conducted a study seeking to associate oral health to systemic health, quality of life and economic productivity. The results showed that oral health conditions have a direct influence on systemic health and people's quality of life as well as on economic productivity, noting that the oral pathologies are responsible for the loss of working days.

Ferreira³⁴ highlights the value of oral health in companies, covering health promotion and mentioning which procedures are used in various work environments. Warning also that caries and other oral complications are responsible

for 20% of the service absenteeism, production drop and generation of widespread infections.

With the ongoing globalization of the economy there is an increase in global competitiveness and to achieve success and survival, entrepreneurs are increasingly looking for measures to facilitate the productivity³⁵⁻³⁹ and satisfaction of members, the actions of Engineering and Safety medicine Specialized Services contribute to improving the health and cooperated to improve the company's competitiveness in the global market conditions. The dentistry is present in this context of globalization, in addition to curative treatment to cooperative members, adds preventive measures^{17,40} within the company⁴¹⁻⁴², respecting the needs that each site presents.

Health promotion programs at the workplace tend to have greater adherence if compared with those developed elsewhere³⁵⁻³⁹.

Silva & Souto published three studies⁴³⁻⁴⁵ on healthcare service model occupational dentistry, defending the idea that dental programs in the company do facilitate access and preserve the oral health of members. They emphasize the importance of admission and periodic dental examinations as well as participation in educational and preventive campaigns. They also emphasize that the company should implement the dental care for workers, since good health status is important for improving productivity.

The analysis of the responses can trace a curative welfare profile offered by the company to its employees, assessing the real need for them, and the degree of satisfaction with the existing accreditation and developing prevention programs in the company. In this way Labor Dentistry may be introduced in the company and highlight the work of occupational dentist within the promotion scenario and surveillance of the oral health and welfare by accredited dentists, suggesting the needed preventing programs for its members¹⁰⁻¹³.

The purpose of this research was to evaluate the oral health quality of the workers of a telemarketing company and their satisfaction with the dental treatments provided by the corporative dental insurance plan.

Material and methods

Study Area

The company chosen to develop this research presents some parameters by which to assess accreditations, i.e., it has a security team specialized in health and labor medicine and offers cooperative dental care plan. It is a telemarketing located in Uberlândia-MG and Campinas-SP (both in Brazil) and is now one of the most advanced telemarketing companies in Latin America (from 2005 to 2015).

The company offers a variety of services and solutions, with 3 service locations in a 2,5000 m² area, generates 6,000 direct and 1,500 indirect jobs and performs activities 24 hours a day, 7 days a week. Currently the company has two dental services providing curative care to the insured outside the work environment. The cooperative associated members are 2000 workers.

The target research population comprises a majority of young people (aged 18-35 years), with an incomplete college education. This information came from the human resources department of the company.

The company network has a business design, in which the structure is divided into central results, which act as small businesses within a large company.

The company chosen for the development of research is management model called Enterprise Network in 1989, hence the difference in changing the name “jobs” or “employees” to “associates” for the associate begin to feel and be regarded as a partner in business. Although he does not invest capital in the activity, he invests his intelligence and his commitment so that everyone wins. Associates become a cooperate when he joins the dental plan or medical plan from the company network.

Study Design and Data Collection

This is a cross-sectional, descriptive and quantitative study. It consisted of applying an online intranet questionnaire with 10 objective questions (closed) and one subjective question (open). The questions addressed aspects on the level of oral health of associated members, the level of dental needs, the degree of satisfaction with the accredited services and the importance of having the laboral dentistry acting within the company. The inclusion criterion was to fill out the questionnaire.

In companies of Uberlândia/MG and Campinas/SP, the questionnaire along with the Informed Consent Form were made available on the intranet for 6000 associates for 10 days, from the second half of August 2006. The associates had total freedom to refuse to participate or withdraw their consent at any stage of the research, without any penalty or loss. Full confidentiality and privacy of the individual responses was assured. They were informed of the importance of their contribution to the evaluation of the dental care provided to them.

Data Analysis

After data tabulation descriptive statistical analysis using SAS software version 9.1 was performed and the results were expressed as absolute and relative frequencies in tables.

The variables were compared by checking the existence of association. One test was used to check for association between variables: the Chi-square test to verify the independence of the questions was conducted, and calculating the significance of the test, i.e., its p-value. This procedure was used since frequencies lower than 5 occurred, which invalidated one assumption of the squared chi-test. Thus, as the test was performed, it does not affect the results. When the p-value is less than 0.05, the hypothesis that the question has a dependent relationship is accepted and when the p-value is greater than 0.05, it confirms the independence of the evaluated questions.

The results of the association among variables were performed at a 5% significance level ($p < 0.05$).

Ethical Considerations

This research was approved by the Ethics Committee of the Piracicaba Dental School - UNICAMP, under Protocol number 090/2006.

Results

The company has 6000 members, and 2000 of them use the corporative dental insurance plan (associates). From this total, 871 answered the intranet questionnaires addressing aspects under the level of “Oral health quality of the associated members” (Table 1), the degree of “Level of satisfaction with services provided by the corporative dental insurance plan providers to the associated members” (Table 2).

The open question, where associated members justified WHY they are favorable ($n=836$, 95.98%) is in Table 2. The analysis of the responses was done by reading and rating 5 phrases of the issue (Figure 1).

The results from the association between variables were calculated (Tables 3, 4 and 5).

Discussion

Usually the large companies are those that enable greater benefits to its employees, among which dental services. In Brazil, this benefit is not mandatory, leaving it to the company to decide its implementation or not. The studied company offered Dental Accredited covenants, but it is necessary to improve the covenant; also the associate members have to learn more and appreciate more their general and oral health (Tables 1 and 2).

Evaluating the Table 3 its was found that 27.6% ($n=240$) consider that their oral health needs to improve and the main dental need is prevention; 29.4% ($n=256$) of those who consider that need to improve their oral health have participated in educational lectures and 39.2% ($n=341$) make use of the dental covenant; 96.0% would like that their workplace/company developed a primary care program and prevention oral health to the associates.

The lack of total satisfaction with the dental service covenant along with the perception of oral health quality associated revealed intermediate level. Generally, dissatisfaction is due to the fact the dentists work in private practice offices and not within the company, which generates for the associated members need to be away from their working activities. Hampers also that it has a control of accredited patients because at the telemarketing company under research, due to bureaucracy of accredited services, are not made pre-employment⁴⁶ or periodic dental examinations^{32,47,48}, which contributes to no control of first need cases, and not establish a profile of needs to associated members. Without the encouragement and periodic attention within the company it is difficult to create hygiene habits and prevention³⁵⁻³⁹ by the associated members. The value of the job contrasts with the negative repercussions on health.

The recommended profile for dentistry should be

Table 1: Distribution of absolute and relative frequency of variables according the “Oral health quality of the associated members”, 2006. (n= 871)

Variables		n (%)
How do you consider your oral health?	Satisfactory	310 (35.59)
	Need to improve	501 (57.52)
	Unsatisfactory	60 (6.89)
When you are looking for dental treatment which is your greatest need?	Cleaning, scraping, bicarbonate jet and fluoride	488 (56.03)
	Treatment of caries, canal and crowns	267 (30.65)
	Gingival treatment and extractions	17 (1.95)
	Orthodontic treatment and oral rehabilitation (fixed prostheses, mobile prostheses, total prostheses)	99 (11.37)
How often do you brush your teeth daily?	Only after wake up	133 (15.27)
	After meals	727 (83.47)
	Only at bedtime	11 (1.26)
Have you had any guidance on oral hygiene? *	Yes. As for brushing mode	711
	Yes. As for flossing	506
	Yes. Use of rinses and anti plaque agents	218
	No. I never had any guidance	47
Have you participated in any lecture about the importance of oral health?	Yes	491 (56.37)
	No	380 (43.63)
What subjects you would be interested to be addressed in your company by preventive lectures about oral health? *	Prevention: dental caries and gum disease	504
	Oral cancer	546
	Oral health of women at all stages of their life	427
	Occupational diseases causing oral manifestations	414
	Stress as a cause of oral health problems	554
	Systemic diseases and their oral manifestations	359
	Others	50

* more than one alternative answered

Table 2: Distribution of absolute and relative frequency of variables according the “Level of satisfaction with services provided by the corporative dental insurance plan providers to the associated members”, 2006. (n= 871)

Variables		n (%)
Do you make use of the dental covenant?	Yes	581 (66.70)
	No	290 (33.30)
Which of the following are your dental services provided by the covenants.	“The more often I go to the dentist, the more need for treatment. Each treatment done, generates a more complex treatment.” **	257 (29.51)
	“The more often I go to the dentist, the less treatment is needed .” ***	550(63.15)
	No answer	64 (7.34)
Level of satisfaction with the dental service provider.	Satisfactory	273 (31.34)
	Need to improve	380 (43.63)
	Unsatisfactory	138 (15.84)
	No answer	80 (9.19)
Would you like that your company developed a primary care program and prevention oral health?	Yes	836 (95.98)
	No	35 (4.02)
	WHY?	

** increases the need. *** reduces the need

preventive, bringing the concept of oral health not only to the teeth, but to the person’s quality of life²⁻⁸. Thus, attention to oral health should be directed to all ages and specific populations. With regard to workers, most of them have a workload that hampers demand for traditional health services, and there is a resistance of businessmen to facilitate departures and absences even for health reasons. Therefore, it justifies

the preference for deployment of services and dental benefits at the company premises⁴⁰⁻⁴².

According studies^{10-13,49}, there are good reasons to health promotion activities at the workplace and points out the factors: when awake, the individual spends most time at the workplace; persistent imbalances in worker health damage the operational efficiency of both the individual and the

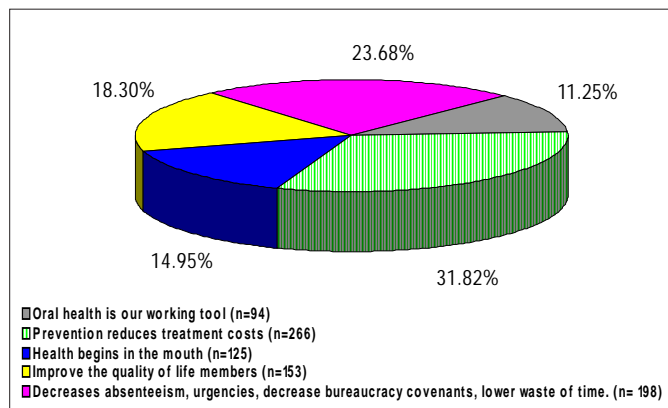


Fig.1: Favourable creating a primary care program and prevention oral health care within the company (n = 836).

company, and may produce illness or accidents, without disregarding the practice of unhealthy lifestyles; the company's policy and its regulations and rules can affect health; it is easier to establish more defined groups priorities; short, medium and long term benefits may arise from these programs, like drop in

absenteeism; reduction of spending on welfare care and improvement of the well being and employee satisfaction.

According to the Tables 1-5 and Figure 1 from this research, it was possible to outline the profile of the studied company. The sample comprises young adults, with an average high-level awareness, where the main dental needs are prevention and primary care services. This means that only the prevention service has solved much of their needs. Second is the need for "basic" treatments such as dentistry, endodontics and fixed prostheses, it shows that with an initial dental care along with periodic controls, the costs for the company and associated members should be more accessible and as a result increase adherence to accredited services.

The fact that associated members need only choose preventive services by 96% in order to develop a permanent primary care program within the company, shows the level of awareness and commitment that is associated with oral health. Thus, company and associated members only have to gain with improved quality of life.

It became clear during the research that the greatest concern

Table 3: Distribution of "How do you consider your oral health?" by some others variables

VARIABLES		How do you consider your oral health?				p-value
		Satisfactory	Need to improve	Unsatisfactory	Total	
When you are looking for dental treatment which is your greatest need?	Prevention	27.4%	27.6%	1.0%	56.0%	0.0000
	Restorative Dentistry	4.9%	22.2%	3.6%	30.7%	
	Surgery	0.6%	1.0%	0.3%	1.9%	
	Rehabilitation	2.6%	6.8%	2.0%	11.4%	
	Total	35.5%	57.6%	6.9%	100.0%	
Have you participated in any lecture about the importance of oral health?	Yes	24.0%	29.4%	3.0%	56.4%	0.0000
	No	11.6%	28.1%	3.9%	43.6%	
	Total	35.6%	57.5%	6.9%	100.0%	
Do you make use of the dental covenant?	Yes	24.0%	39.2%	3.6%	66.8%	0.037
	No	11.6%	18.3%	3.3%	33.2%	
	Total	35.6%	57.5%	6.9%	100.0%	
Level of satisfaction with the dental service provider.	Satisfactory	18.3%	14.8%	1.4%	34.5%	0.0000
	Need to improve	13.2%	32.0%	2.9%	48.1%	
	Unsatisfactory	3.8%	11.5%	2.1%	17.4%	
	Total	35.3%	58.3%	6.4%	100.0%	
Would you like that your company developed a primary care program and prevention oral health?	Yes	34.1%	55.7%	6.2%	96.0%	0.039
	No	1.5%	1.8%	0.7%	4.0%	
	Total	35.6%	57.5%	6.9%	100.0%	
Would you like that your company developed a primary care program and prevention oral health? WHY?	Yes. Oral health is our working tool	4.6%	5.9%	0.3%	10.8%	0.597
	Yes, prevention reduces treatment costs	11.1%	17.2%	2.2%	30.5%	
	Yes, health begins in the mouth	4.9%	8.6%	0.9%	14.4%	
	Yes, improve the quality of life members	6.5%	9.8%	1.3%	17.6%	
	Yes, decreases absenteeism, urgencies, decrease bureaucracy dental insurance plan, lower waste of time	6.9%	14.1%	1.7%	22.7%	
	No, we have agreement	0.9%	1.3%	0.2%	2.4%	
	No, we do not have dental needs	0.1%	0.5%	0.0%	0.6%	
	No prevention needs within the company	0.5%	0.3%	0.2%	1.0%	
	Total	35.5%	57.7%	6.8%	100.0%	

Table 4: Distribution of “Degree of satisfaction with the provider of dental service” by some other variables.

VARIABLES		Degree of satisfaction with the provider of dental service				p-valor
		Satisfactory	Need to improve	Unsatisfactory	Total	
Would you like that your company developed a primary care program and prevention oral health?	Yes	32.9%	46.3%	16.7%	95.9%	0.7950
	No	1.6%	1.8%	0.7%	4.1%	
	Total	34.5%	48.1%	17.4%	100.0%	
When you are looking for dental treatment which is your greatest need?	Prevention	23.0%	23.9%	8.2%	55.1%	0.0000
	Restorative Dentistry	7.8%	17.6%	6.2%	31.6%	
	Surgery	0.4%	0.8%	0.6%	1.8%	
	Rehabilitation	3.3%	5.8%	2.4%	11.5%	
	Total	34.5%	48.1%	17.4%	100.0%	

Table 5: Distribution of “Do you make use of the dental covenant?” by some others variables.

VARIABLES		Do you make use of the dental covenant?			p-valor
		Yes	No	Total	
Degree of satisfaction with the provider of dental service	Satisfactory	26.3%	8.2%	34.5%	0.0090
	Need to improve	36.2%	11.9%	48.1%	
	Unsatisfactory	11.0%	6.4%	17.4%	
	Total	73.5%	26.5%	100.0%	
Would you like that your company developed a primary care program and prevention oral health?	Yes	63.8%	32.2%	96.0%	0.5890
	No	2.9%	1.1%	4.0%	
	Total	66.7%	33.3%	100.0%	

of associated members of the telemarketing company is the stress causing disorders in oral health, due to the pressure¹⁴⁻²² for increased production.

According to some studies^{10-13,26,29,30,49,50} Dentistry should be part of occupational health concerns, it is necessary to integrate it to other areas, providing better health to those who move the company with their workforce.

For the associated members of Telemarketing Company is important the role of the dentist within the company because:

- “This professional would know how to develop strategies that would prevent oral diseases and costly future treatments.”

- “The professional within the company could act as an expert, like welfare in an emergency, as an important part in maintaining the incentive to oral care, avoiding absenteeism due to bureaucracies accredited by the company.”

- “The dentist’s work within the company would care for the associated quality of life bringing satisfaction to both company and to the cooperative.”

- “The dentist should make the health team work because: health begins at the mouth.”

- “The smile is our working tool.”

In conclusion, the analysis of the oral health quality of the telemarketing company associates and their level of satisfaction with the treatments provided by coporative dental insurance plan revealed that they have a intermediate degree of dental care needs, being the prevention of utmost importance and the creation of a basic attention program inside of the company would increase the satisfaction and adhesion rates of accredited and the associate’s oral health.

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