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Precarisation of dentistry in private healthcare: bioethical analysis

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Abstract *The present study highlighted the labour process of the dental surgeon (DS) in the private healthcare sector from the healthcare professional's perspective based on intervention bioethics. An observational, cross-sectional survey study was performed within the Federal District (Distrito Federal) region. Data were collected from 108 questionnaires completed by DSs affiliated with two types of private health insurers, self-insurance and group insurance, to assess job perception and the degree of job satisfaction in the dentistry market. The main source of dissatisfaction for healthcare professionals was related to the pay for dental procedures by insurers. For self-insurer 1, 38.1% healthcare professionals replied that the pay was satisfactory, whereas in self-insurance 2 and in the group insurance, 100% of healthcare professionals were dissatisfied. Another finding was that the group insurer considerably restricted elective treatments. In conclusion, loss of professional autonomy, depreciation of insurance claims and precarisation of dentistry occurs in the private healthcare sector, thus demonstrating the ethical conflicts in this relationship.*

Key words *Private healthcare, Health plans, Private dentistry, Bioethics, Precarisation of dentistry*

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Introduction

Dentistry, as a profession, has gained prominence over time due to the increased demand for dental services resulting from the advent of caries as well as technical developments and from its consolidation as a specialised activity with a scientific field of knowledge and practices[1]. The profession reaffirmed its role in Western society beginning in the nineteenth century and has generated economic gains for its practitioners, initially without the regulatory mechanism of the market[1].

Dental care in Brazil has followed the model of the medical services sector since the 20th century, under the conditions of the capitalist social order, regarding both individual care and social insurance from the creation and development of social security[2,3].

Thus, dentistry has established itself in the process of production of goods and services and reaffirmed its role as core of the material base of the productive process, thereby revitalising other labour forces[4,5] in the logic of liberalism and privatism associated with professional autonomy. However, this model was abused in dentistry, with limited prospects of ensuring professional fulfilment economically[6], due to wage labour and restriction in autonomy[5,6], which is similar to what has occurred in medicine[2].

This reality was clearly noticeable from the 1980s due to the expansion of healthcare jobs associated with the crisis of the independent contractor model[7-10], which relatively depreciated institutional insertion and professional proletarianization, with signs of unemployment and underemployment[11]. Contracts and affiliations became a strategy against the crisis of decreased income, although the insurers expressed control of treatment provided and payment in the context of the relationship between the healthcare professional and the patient[7,8,10,12-15].

Thus, the socioeconomic construction of the labour process of dental surgeons (DSs) contributed to their exposure to new forms of production, management and control of their productive force in the 21st century[2,6]. In this period, Brazilian dentistry gained relevance worldwide with 193 schools of dentistry in Brazil and 229 thousand DSs enrolled in the Brazilian Association of Dental Surgeons in 2010, which is undergoing continuous changes[16,17].

In the public sphere, the DS was included in the Family Health Strategy (Estratégia de Saúde da Família) in 2000[18] and in the National Oral Health Policy (Política Nacional de Saúde Bucal) in 2004[19]. In the private sphere, specialised technologies have been incorporated, albeit with a decrease in the number of independent contractors and an increase in the number of health insurers[20].

Understanding the private healthcare model is extremely important for studies on the healthcare sector because data from the National Household Sample Survey (Pesquisa Nacional por Amostra de Domicílios – PNAD), conducted by the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística – IBGE) in 2013, highlighted that dental care in Brazil was predominantly provided in dental practices or in private clinics, which accounted for 74.3% of patients. However, dental visits at basic health units accounted for 19.6%[21]. For private dental care, we analysed data from the survey conducted by the Brazilian Federal Council of Dentistry (Conselho Federal de Odontologia (2003), wherein 47.6% of DSs enrolled in the council were contracted under or affiliated with dental plans[22].

However, the increase in the number of DSs affiliated with health plans has contributed to the precarisation of dentistry, transforming dental surgeons from self-employed to workers, as a consequence of market deregulation and lack of state control related to the excessive number of schools of dentistry and to the large supply of healthcare professionals.

We should consider that dental practice is still based on the technical expertise of the DS on its products, which are procedures associated with oral health, although a structural analysis showed loss of autonomy and therefore of economic control of the goods provided[6,7,9,10]. Controlling the value of commercial trade, a characteristic of self-employed work, became the purview of private health insurers who hold most of the profits while causing the precarisation of the work of healthcare providers[8,23].

This logic showed that the market is a mechanism that maintains the conditions of inequality and precarity of the profession[24], thereby highlighting the difference between the socially defined roles of the DS: healthcare professionals placed in a social relationship in which they sell their work as goods differ from those who sell goods, which, in turn, are products of their labour for a policyholder[5].

Accordingly, the objective of the study was to evaluate, based on intervention bioethics (IB), the perception of autonomy and vulnerability of DSs regarding their labour process in the private

healthcare sector as well as the precarisation of labour and their relationship with private dental health insurers. This topic is important for understanding the reality of Brazilian dentistry from a bioethical standpoint because private care quantitatively exceeds public care[21], despite the lack of studies on this private sector[7,9,12,22,25].

Private healthcare legitimation and current status

The socio-political and economic dynamics of the healthcare sector have helped the private healthcare system meet a large demand for decades without legalisation until it was enacted into Law number 9.656/98[26]. The National Regulatory Agency for Private Health Insurance and Plans (Agência Nacional de Saúde Suplementar – ANS), which is linked to the Ministry of Health (Ministério da Saúde – MS), was subsequently established through Law number 9.961/00[27] for the regulation, standardisation, control and surveillance of private healthcare activities in Brazil.

The State, in the twentieth century, favoured the private system through incentives to companies to provide assistance to employees in addition to purchasing healthcare services for employees under Social Security, which promoted a publically funded healthcare market and a corporate healthcare practice that led to the current dependence of the public healthcare sector on private services[2,3,28].

The private healthcare system based its marketing strategy on neoliberal premises, with some health insurers seeking maximum profitability, and the healthcare professionals lost their autonomy as their productive forces became outsourced[25]. The determinants of the demand for plans were economic (consumer income and service rate) and sociodemographic (population growth and awareness of services) variables[29].

Currently, the private dental care sector is expanding and already generating high profits for health insurers as well as a continuously increasing number of healthcare service contracts with the population. The number of policyholders increased from approximately 3 million in 2001 to 7 million 2006 and to 10 million in 2008, thus representing an increase of over 200% from 2001 to 2008[10,29,30].

Two types of private health insurers were analysed in the present study: self-insurers and group insurers. According to the ANS, self-insurers coordinate healthcare services and are responsible for private healthcare plans exclusively intended for providing healthcare coverage to active employees of one or more companies, associates of a specific professional order or association, retirees, pensioners or former employees and their respective family unit[30].

Conversely, group insurers sell or operate capitation plans under which contract dentists are pre-paid a set amount for each enrolled patient. They may be part of a specific medical hospital or dental group, and they have a high rate of return, aiming towards profitability in selling healthcare services[30].

Intervention bioethics from the Latin American perspective

Beginning in the 1990s, new critical theoretical perspectives emerged in the context of bioethics, which opened worldwide discussions about persistent issues in peripheral countries, such as social exclusion and concentration of power, misery, marginalisation, vulnerability, economic globalisation, inaccessibility of vulnerable groups to technological developments and inequality of access to healthcare, among others[31].

Principlist bioethics has been highly important in the worldwide biomedical context, introducing non-maleficence, beneficence, respect for autonomy and justice as *prima facie* duties of all ethical discussions. However, the Latin-American reality required new arguments for the discussion social ethical dilemmas, which have been mostly associated with social inequality[32].

Thus, IB moved away from the principlist concepts and gained strength to discuss persistent ethical problems[32] related to socioeconomic inequality in Brazil, such as the lack of access to healthcare, highlighting the responsibility of the State in defending the most vulnerable populations. In the private sphere, IB indicated the need for fostering empowerment, sustaining liberation, and ensuring the emancipation of social subjects towards achieving their full inclusion in the relational dynamics of society[33] and the contextualisation of ethical conflicts.

IB plays a key role in the discussion of healthcare market relationships. Asymmetries in corporate contexts that cause precarisation and harm healthcare professionals, adversely affecting the population, show the need for intervention measures in the re-discussion of the private healthcare model and in policy proposals for increased State involvement in the control of schools of dentistry, in the defence of DSs and in the surveillance of private health insurers. All of

these initiatives seek to solve healthcare-related problems, covering as many people as possible for as long as possible[33-37].

Methods

After the study was approved by the Research Ethics Committee (Comitê de Ética em Pesquisa) of the Faculty of Health Sciences, University of Brasília (Universidade de Brasília – UnB; opinion number 132/09), an observational, cross-sectional survey study on the dental profession as a segment of the private healthcare system in the Federal District (Distrito Federal – DF) was performed.

The objective of the study was to identify the relationships established between the profession in the private healthcare market, the possible effects on society and the relationship with IB. The study was circumscribed to the DF region and included 108 active dental surgeons who were randomly selected using records of three private dental health insurers registered in the ANS to reach the minimum sample number initially calculated by the statistical software used. Of the selected health insurers, two were self-insurers, and the other was a group insurer.

The group insurer modality was selected to analyse the market relationship in the private healthcare system and its effects on the labour process of the DS and on society. The self-insurer modality was selected to control for the study variables because they initially had no health business relationship.

All data were collected by administering a questionnaire with an interview script. The questionnaire consisted of close-ended questions with predefined alternatives and was divided into sections with questions addressing the perception of the DS regarding his or her labour process and the relationship between the healthcare professional and the selected health insurers.

The sample size was defined considering the desired level of accuracy for estimates of the indicators of interest, which referred to the pay for DS work, healthcare professional x insurer relationship, insurer's restrictions on the treatment plan of the DS, and health insurer rules x DS opinion. The software Epi-info version 3.3.2 was used to obtain the smallest sample size possible, selecting 42 DSs for the group insurer modality and 66 DSs for the self-insurer modality (estimated prevalence of the study variables: 50%, maximum tolerated error: 10% and degree of confidence: 95%), totalling 108 DSs.

The inclusion criteria were the selection of three private dental health insurers that operated in the DF; 108 DSs working in the private section, registered in the Regional Council of Dentistry of the Federal District (Conselho Regional de Odontologia do Distrito Federal – CRO-DF) and affiliated with one of the three health insurers selected, were randomly drawn.

In addition, a single interviewer collected the data without varied interpretations. The interviews were conducted after the respondents signed the informed consent form (Termo de Consentimento Livre e Esclarecido – TCLE), and the researcher administered the oral questionnaire, observing reactions, anxieties and doubts of the interviewees and, in some cases, adding qualitative remarks of the interviewees in specific questions.

Statistical analysis

Statistical analysis was performed using the open-source statistical software Epi-info, version 3.5.1. The differences in opinions of the DSs on group insurers and self-insurers were tested for significance using the Chi-squared test and, when indicated, Fisher's exact test.

Results and discussion

Dentistry transforms the mouth, which is part of the body, and affects the physical environment because it responds to the needs of its social structures to recover and maintain health[4,5]. The importance of the dental surgery profession for society is also noteworthy from the perspective of the healthcare professional in his or her micro-work space, albeit part of the system.

In our study, were aimed to evaluate the perception of the DS regarding modalities of private dental health insurance, which accounts for most of the healthcare provided in this segment[21].

Most healthcare professionals interviewed answered that private dental care, provided within the direct reimbursement modality, was almost non-existent and that dental care under health plans prevailed. Some dental surgeons also worked in the public healthcare system to supplement their monthly income.

This result showed that the once exclusively private dental practice, wherein the DS had autonomy and owned his or her labour power, is currently more restricted. This structural change promoted a new profile of the liberal professional

with a tendency towards wage labour and with the concentration of means of production in private healthcare companies[2,5,6].

As early as the 1970s, studies on the participation of health workers in the Brazilian job market highlighted that the increasing phenomenon of contracted physicians opposed the autonomy of the profession, which is characterised by client control, pricing freedom and ownership of work tools[2].

Paixão[6] categorised the labour market insertion of the DS into the self-employed, employee and worker statuses. For the author, the only regime that would preserve professional autonomy was the self-employed status, albeit tending to disappear. Conversely, the worker status, combining job and/or work contracts was closer to employment, which, according to the author, was a tendency in the labour process of the DS associated with the proletarisation of the profession[6].

For Portillo[5], self-employment was defined as the absence of intermediaries, technical and therapeutic autonomy, freedom of choice, economic freedom in setting fees and ownership of work tools. The author noted that the ideology of liberal professions allowed employment under disadvantageous situations tending towards proletarisation in which capital appropriated work and professional autonomy and transformed artisanal practices into businesses[5]. From the twenty-first century, the increasing loss of DS autonomy was also reported by other studies[10,38-40].

Our study evaluated the degree of satisfaction of DSs regarding their pay by insurers (Table 1), and the surprising result was that all professionals of self-insurer 2 and of the group insurer were dissatisfied with the reimbursement fees for the services provided.

They related the low pay to the profit margins of health insurers, bureaucracy and offset effects. Most DSs affiliated with self-insurer 1 reported that the table was unsatisfactory but did not associate the low values with the insurer's profit margins or marketing strategy.

Given the marked dissatisfaction of the healthcare professionals, we thus investigated the values of reimbursement for dental treatment of self-insurer 2 and of the group insurer for 2010 and compared them with the Reference Values for Dental Procedures of the National Commission of Contracts and Affiliations (Valores Referenciais para Procedimentos Odontológicos da Comissão Nacional de Convênios e Credenciamentos) in 2009, the DF reference table standardised by the Dental Professionals Association (Sindicato dos Odontologistas), the Brazilian Dental Association (Associação Brasileira de Odontologia – ABO) and the Regional Council of Dentistry (Conselho Regional de Odontologia – CRO).

We noted that the value of dental extraction stipulated by the insurer was four times lower than the reference value for both health insurers studied. Thus, we confirmed the marketing strategy of the group insurer and a tendency of some self-insurers towards adjusting the reimbursement values to market rules to the detriment of the healthcare professional. Therefore, the principle of autonomy, as a tool of bioethical analysis, cannot be limited to patients and instead should extend to healthcare professionals.

Accordingly, Cortina[41] referred to the concept of autonomy related to the self-conscious, self-determined subject, who dominates the external and internal environment and is autonomous. In some dental plans, the autonomy of policyholders is restricted to procedures authorised by the insurer, which may not meet their actual healthcare needs. In addition, healthcare professionals also lose autonomy because their work is often limited to less expensive treatments and, therefore, are more profitable for the insurer.

Many healthcare professionals highlighted that the reference values stipulated by the dental professionals' associations for the financial reimbursement of DSs were completely disrespected by private healthcare companies and that the values had to be adjusted to meet the needs of both health insurers and healthcare professionals.

These results support the notion that the crisis of the private sector and the large number of DSs allowed private dental healthcare companies to sell healthcare, setting reimbursement values unsuitable for the reality of the dental surgeon[42].

This context of precarisation of dentistry has also been highlighted by D'Avila et al.[12] who assessed the degree of satisfaction of DSs affiliated with dental plans in the state of Paraíba. The authors highlighted that the vast majority of healthcare professionals (76.8%) were dissatisfied with the fees table[12], as previously emphasised by other authors[10,12,38,40].

Another finding analysed was the existence of difficulties in the relationship between the healthcare professional and the selected insurer. Of the DSs of self-insurer 2 interviewed (Table 2), 37.5% reported having problems primarily related to non-covered charges (disallowed amounts), whereas most healthcare professionals of self-insurer 1 reported that the relationship with self-insurer 1 was satisfactory.

Table 1. Distribution of the absolute and relative frequencies of pay for dental surgery work by insurers, according to the respondents.

DS pay by the insurer	Group insurer		Self-insurer 1		Self-insurer 2	
	N	%	N	%	N	%
Satisfactory	0	0	16	38,1	0	0
Unsatisfactory or indifferent	42	100	36	61,9	24	100
Total	42	100	42	100	24	100

Source: the authors, 2010.
Group insurer and Self-insurer 1: Fisher's exact test= 6.24, p = 0.004.
Group insurer and Self-insurer 2: Chi-squared test = 0.
Self-insurer 1 and Self-insurer 2: Chi-squared test = 10.08, p = 0.001.

Table 2. Absolute and relative distribution of difficulties in the relationship between the study health insurers and healthcare providers, according to the respondents.

Difficulties in the relationship between the DS and the insurer	Group insurer		Self-insurer 1		Self-insurer 2	
	N	%	N	%	N	%
Yes	24	57.1	6	14.3	9	37.5
No	18	42.9	36	85.7	15	62.5
Total	42	100	42	100	24	100

Source: the authors, 2010.
Group insurer and Self-insurer 1: Chi-squared test = 19.99, p = 0.0001. Group insurer and Self-insurer 2: Chi-squared test = 1.64, p = 0.2. Self-insurer 1 and Self-insurer 2: Chi-squared test =3.46, p = 0.06

However, more than half of the respondents reported having problems with the group insurer related to non-covered charges, unauthorised procedures, bureaucracy and lack of information on the patient. The respondents stated that several procedures were denied by the insurer with no explanation, and they "believed that this was a marketing tactic aimed at profiting from the work of the healthcare professional, due to the vulnerability of the healthcare professionals".

The DSs reported that some patients visited the dental practice without understanding the information on the purchased dental plan. The policyholders purchased a dental plan believing they had full coverage for the individual treatment plant necessary, but the plan sold by the insurer often failed to meet the treatment expectations of the patient.

Our results corroborated the study by D'Ávila et al.[12], which was conducted in Paraíba. These authors reported a high percentage of DSs (63.7%) who were dissatisfied with their relationships with group insurers. These findings highlighted inequalities among health plans in meeting the needs of policyholders, which is contrary to the bioethical principle of beneficence.

Beneficence is a principle of bioethics related to the moral obligation of acting on behalf of the other. Thus, the healthcare professional should choose the best treatment for the patient, both from a technical and medical care standpoint and from an ethical perspective[43].

However, the results showed that dental plans limit the treatments healthcare professionals provide to patients because health insurers, taking advantage of the disinformation of policyholders, profit from the health-disease process when selling dental plans, thus disregarding the health needs of individuals.

Malta et al.[44] reported that healthcare service users cannot be compared to consumers buying goods because they do not have freedom of choice when deciding what to purchase, and they ignore the information on healthcare services. Therefore, the arguments of freedom of choice and competition are invalid in the healthcare market[44].

Regarding the existence of insurer restrictions to treatments proposed by the healthcare professional to the patient (Table 3), more than half of DSs associated with the group insurer reported restrictions to treatments proposed to patients

Table 3. Absolute and relative distribution of the insurer's restrictions to the choice of treatment plan by the dental surgeon, according to respondents.

Insurer restrictions to treatment plans defined by the dental surgeon	Group insurer		Self-insurer 1		Self-insurer 2	
	N	%	N	%	N	%
Yes	24	57.1	5	11.9	7	29.2
No	18	42.9	37	88.1	17	70.8
Total	42	100	42	100	24	100

Source: the authors, 2010.
Group insurer and Self-insurer 1: Chi-squared test = 17,1 p = 0.00003. Group insurer and Self-insurer 2: Chi-squared test = 3, p = 0.05. Self-insurer 1 and Self-insurer 2: Chi-squared test = 2.01; Fisher's exact test: p = 0.1.

regarding the most expensive procedures for the insurer and procedure repetitions, even when the patient needed a repeat procedure.

An example given by a respondent was that "a patient with high caries activity who needed to return to the dental practice within a shorter time than stipulated by the insurer was not treated because the return was restricted by the standardised time". This showed the lack of access to healthcare and of equity in the provision of services, which may reduce beneficence and even cause maleficence to the patient.

In this case, we observed that the healthcare professional's lack of autonomy has ethical implications and influences both the market and the relationship between the healthcare professional and the insurer with consequences for policyholders-citizens[12].

Conversely, most DSs associated with self-insurers 1 and 2 stated that the insurers imposed no restrictions on the treatments selected for patients, although 29.2% DSs affiliated with self-insurer 2 reported restrictions on the most expensive procedures and procedure repetitions.

Malta and Jorge[45], in a study on a self-insurer, reported that this insurer offered a broader coverage of treatments, without focusing on profitability, and provided healthcare to its employees and dependents.

However, Ribeiro et al.[46] conducted a study on a set of various types of health insurers, including group insurers, self-insurers, cooperative insurers and other insurers and showed that the insurance companies reacted to the impact of increased healthcare costs by increasing the premiums, controlling the values of procedures and systematically establishing non-covered charges.

Regarding DS agreement with the rules of the selected insurer (Table 4), just over half of the healthcare providers of self-insurer 1 agreed with the rules. However, the vast majority of DSs affiliated with the group insurer disagreed with the rules. Most disagreements were related to the reference value of dental procedures set by the insurer, which were well below the reference values advocated by dental professionals' associations.

Another source of disagreement in the relationship between the healthcare professional and the insurer was the insurer's bureaucracy in denying procedures and the lack of allowed procedures necessary for each patient. Most respondents stated continuing affiliation with the insurer towards increasing the flow of patients and that the excessive number of active healthcare professionals in the market prevented any exclusively self-employed work, which was also reported by Vieira and Costa[8], who related the private healthcare growth to the customer acquisition tactic of some DSs, towards remaining in the market.

This result showed that DSs are losing their identity as self-employed liberal professionals due to changes in the marketplace tending towards employment.

IB considers the importance of a structural analysis of healthcare issues and shifts its focus to middle- and low-income countries to the search for ethical references related to equity, protection and justice. From an IB perspective, health must be defended as a right of the citizens and as a duty of the State, whereas the private sector should reduce the risks of health problems, contributing to the human dignity and social inclusion of the vulnerable people[35-37].

Our study highlighted ethical implications of market relationships of the private healthcare system. IB fits this analysis in the search for ethical solutions committed to justice for both for healthcare providers and policyholders. Together, they form the exclusive collective of this system that, whilst seeking to provide and gain oral health, helps capitalist companies of the private healthcare sector.

Table 4. Absolute and relative distribution of the opinions of dental surgeons on the study health insurer rules, according to the respondents.

Opinions of DSs on the insurer rules	Group insurer		Self-insurer 1		Self-insurer 2	
	N	%	N	%	N	%
Agree	4	9,5	22	52,4	8	33,3
Disagree	37	88,1	14	33,3	11	45,9
Indifferent	1	2,4	6	14,3	5	20,8
Total	42	100	42	100	24	100

Source: the authors, 2010.
Group insurer and Self-insurer 1: Chi-squared test = 24, p = 0.00009. Self-insurer 1 and Self-insurer 2: Chi-squared test = 11.7, p = 0.0006. Self-insurer 1 and Self-insurer 2: Chi-squared test = 0.55, p = 0.45.

The Brazilian public healthcare system, represented by the Unified Health System (Sistema Único de Saúde – SUS), still excludes a large portion of the population, which strengthens the private healthcare system given the gaps of this sector. This situation creates inequalities in healthcare, which is compromised by the focus on profitability of specific health insurers that worsens pre-existing inequalities. Consequently, part of the population with no access to healthcare is excluded because they are not treated in the public healthcare system enshrined in the *Magna Carta* and are not adequately treated in the private healthcare system.

To implement equity from the IB standpoint, health issues should be constantly discussed, monitored and evaluated regarding the perverse logic of underpayment and limits to the autonomy of healthcare professionals and, therefore, DSs' dissatisfaction with their work. However, dissatisfaction is only part of an entire chain of precarisation, which began with the lack of regulation across the board.

These issues are also related to justice in the need for impartially solving conflicts and to IB as a political tool in resolving the persistent situation. From a narrower perspective, these issues are related to the vulnerability of the healthcare professionals and of the population, who are the target of marketing tactics of some health insurers, and, from a wider perspective, the lack of access to the SUS of the population, who become dependent on and vulnerable to health plans and medical insurances.

Conclusions

The analysis of the results from this study indicate an improved understanding of the operation of the private healthcare sector from the perspective of healthcare professionals regarding the precarisation, vulnerability and autonomy of their labour process, as well as of the role of the State's responsibilities in the IB perspective. The results of this study made it possible to analyse the structure of the private healthcare system and to reach the following conclusions:

- The private healthcare sector is already established in the context and, leveraged by the favourable conjuncture of the neoliberal market, uses marketing tactics to sell health;

- These tactics, taking advantage of the large supply of healthcare professionals available in the market, often discredit the work of DSs by setting reference values for dental procedures well below the reference values stipulated by dental professionals' associations, thereby causing the precarisation of dental surgery; and

- In contrast to group insurers, self-insurers do not use marketing tactics when selling dental plans, but they apparently remain competitive by setting reimbursement values often below the values advocated by dental professionals' associations thanks to the large supply of healthcare professionals.

Collaborations

DA Moraes designed the study, collected and analysed the data and wrote the manuscript. F Maluf outlined and revised the manuscript. PL Tauil prepared the methods, and JAC Portillo supervised the research and wrote the manuscript.

References

1. Carvalho CL. A transformação no mercado de serviços odontológicos e as disputas pelo monopólio da prática odontológica no século XIX. *História, Ciências, Saúde -Manguinhos*. 2006; 13(1):55-76.
2. Donnangelo MCF. *Medicina e Sociedade: o médico e seu mercado de trabalho*. São Paulo: Pioneira; 1975.
3. Menicucci TMG. *Público e privado na política de assistência à saúde no Brasil*. Rio de Janeiro: Fiocruz; 2007.
4. Donnangelo MCF, Pereira L. *Saúde e sociedade*. São Paulo: Livraria Duas Cidades; 1979.
5. Portillo JAC. A saúde bucal e o mercado de trabalho odontológico. *Rev Saúde em Debate* 1986; 18:52-64.
6. Paixão HH. *A odontologia sob o capital: o mercado de trabalho e a formação universitário-profissional do Cirurgião-Dentista* [dissertação]. Belo Horizonte: Universidade Federal de Minas Gerais; 1979.
7. Garcia PPN, Cobra S, Spoto C. Condições de Trabalho e Satisfação de Cirurgiões-Dentistas Credenciados por Convênios Odontológicos. *Rev Odontol UNESP* 2004; 33(3):115-122.
8. Vieira C, Costa NR. Estratégia profissional e mimetismo empresarial: os planos de saúde odontológicos no Brasil. *Cien Saude Colet* 2008; 13(5):1579-1588.
9. Bleicher L. *Autonomia ou assalariamento precário? O trabalho dos cirurgiões-dentistas na cidade de Salvador* [tese]. Salvador: Universidade Federal da Bahia; 2011.
10. Garbin D, Mattevi GS, Carcereri DL, Caetano JC. Odontologia e Saúde Suplementar : marco regulatório , políticas de promoção da saúde e qualidade da atenção. *Cien Saude Colet* 2013;18(2):441-452.
11. Nogueira, RP. A força de trabalho em saúde no contexto da reforma sanitária. *Cad Saude Publica* 1987; 3(3):332-342.
12. D´Ávila S, Oliveira PAP, Lucas RSCC, Souza EA. Assistência Odontológica x Plano de Saúde: um Estudo em Campina Grande, Paraíba, Brasil. *Pesq Bras Odontoped Clin Integr* 2007; 7(3):259-263.
13. Vieira SLG, Miranda GE, Bouchardet FCH, Santos LE. A auditoria odontológica nos serviços de saúde suplementar. *Salusvita* 2014; 33(3):331-343.
14. Duarte MCR. A assistência suplementar no Brasil: história e características da cooperativa de trabalho Unimed. In: Negri B, di Giovanni G, organizadores. *Brasil, Radiografia da saúde.* Campinas: Unicamp; 2001. p. 363-393.
15. Merhy EE, Franco T. *Reestruturação produtiva e transição tecnológica na saúde:* debate necessário para a compreensão do processo de "financeirização" do mercado na saúde. [acessado 2017 Jan 17]. Disponível em: http://www.uff.br/saudecoletiva/professores/merhy/capitulos-04.pdf
16. Conselho Federal de Odontologia (CFO). *Dados estatísticos: cirurgiões-dentistas.* Rio de Janeiro: CFO; 2010. [acessado 2010 Jun 10]. Disponível em: <http://cfo.org.br/servicos-e-consultas/Dados estatisticos/?elemento=profissionais&categoria=CD&cro=Todos&municipio=>..
17. Manfredini MA, Moysés SJ, Noro LRA, Narvai PC. Assistência Odontológica Pública e Suplementar no Município de São Paulo na Primeira Década do Século XXI. *Saúde Soc* 2012; 21(2):323-335.

18. Brasil. Portaria nº 1.444, 28 de dezembro de 2000. Estabelece incentivo financeiro para reorganização da saúde bucal prestada nos municípios por meio do Programa Saúde da Família. *Diário Oficial da União* 2000; 29 dez.
19. Brasil. Ministério da Saúde (MS). *Diretrizes da Política Nacional de Saúde Bucal*. Brasília: MS; 2004.
20. Morita MC, Haddad AE, Araújo ME. *Perfil atual e tendências do cirurgião-dentista brasileiro.* Maringá: Dental Press; 2010.
21. Instituto Brasileiro de Geografia e Estatística (IBGE). *Pesquisa Nacional de Amostra de Domicílios: Acesso e utilização dos serviços de saúde 2013*. Rio de Janeiro: IBGE; 2015.
22. Conselho Federal de Odontologia (CFO). *Perfil do cirurgião-dentista no Brasil.* Rio de Janeiro: CFO; 2003. [acessado 2016 jul 17]. Disponível em: http://cfo.org.br/wp-content/uploads/2009/09/perfil_CD.pdf.
23. Merhy EE, Júnior HM. *Regulação pública da assistência na saúde suplementar a quem interessa?* Jornal do Conselho Regional de Medicina de Minas Gerais 2001; dez. [acessado 2017 Jan 17]. Disponível em: http://www.uff.br/saudecoletiva/professores/merhy/artigos-03.pdf
24. Bourdieu P, organizador. *Contrafogos: Táticas para enfrentar a invasão neoliberal*. Rio de Janeiro: Zahar; 1998.
25. Instituto Brasileiro de Geografia e Estatística (IBGE). *Acesso e utilização dos serviços, condições de saúde e fatores de risco e proteção à saúde.* Rio de Janeiro: IBGE; 2008.
26. Brasil. Lei nº 9.656, de 03 de junho de 1998. Dispõe sobre os planos e seguros privados de assistência à saúde. *Diário Oficial da União* 1998; 03 jun.
27. Brasil. Lei nº 9.961, de 28 de janeiro de 2000. Cria a Agência Nacional de Saúde Suplementar - ANS e dá outras providências. *Diário Oficial da União* 2000; 28 jan.
28. Pietrobon L, Silva CM, Batista LRV, Caetano JC. Planos de assistência à saúde: interfaces entre o público e o privado no setor odontológico. *Cien Saude Colet* 2008; 13(5):1589-1599.
29. Agência Nacional de Saúde Suplementar (ANS). *Caderno de Informação da Saúde Suplementar*: *beneficiários, operadoras e planos*. Rio de Janeiro: ANS; 2011.
30. Agência Nacional de Saúde Suplementar (ANS). *Caderno de Informação da Saúde Suplementar: beneficiários, operadoras e planos*. Rio de Janeiro: ANS; 2006.
31. Garrafa V, Porto D. Bioética, Poder e Injustiça: por uma ética de intervenção. *O Mundo da Saúde* 2002; 26(1):6-15.
32. Pessini L, Barchifontaine CP. Bioética: do principialismo à busca de uma perspectiva latino-americana. In: Pessini L, Barchifontaine CP. *Iniciação à Bioética.* Brasília: Conselho Federal de Medicina; 1998. p. 81-98.
33. Siqueira JE, Porto D, Fortes PAC. Linhas temáticas da Bioética no Brasil. Brasil. In.: Anjos MF, Siqueira JE, organizadores. *Bioética no Brasil: tendências e perspectivas.* Aparecida, São Paulo: Ideias e Letras, Soc Bras Bioética; 2007. p.161-184.
34. Oliveira AAS, Villapouca KC, Barroso W. Perspectivas epistemológicas da bioética brasileira a partir da teoria de Thomas Khun. *Rev Bras Bioética* 2005; 1(4):363-385.
35. Garrafa V, Porto D. Intervention bioethics: a proposal for peripheral countries in a context of power and injustice. *Bioethics* 2003; 17(5-6):399-416.
36. Garrafa V, Porto D. Bioética de intervención. In: Tealdi JC, director. *Diccionario latino americano de bioética*. Bogotá: Unesco; 2008. p. 161.
37. Garrafa V. Da bioética de princípios a uma bioética interventiva. *Rev bioét.* 2005; 13(1):125-134.
38. Pietrobon L. *Planos de saúde: uma análise das relações entre as operadoras, prestadores de serviço e beneficiários sob a visão do cirurgião-dentista* [tese]. Florianópolis: Universidade Federal de Santa Catarina; 2010.
39. Freitas CHSM. *Dilemas do exercício profissional no trabalho liberal da odontologia: a autonomia em questão* [tese]. Rio de Janeiro: Universidade do Estado do Rio de Janeiro; 2004.
40. Matos IB. *Expectativas do exercício profissional de graduados em odontologia* [tese]. Rio de Janeiro: Escola Nacional de Saúde Pública; 2005.
41. Cortina A. Ética de la empresa: sin ética no hay negocio. In: Cortina A. *Ética aplicada y democracia radical.* Madrid: Ed. Tecnos; 1993. p. 263-284.
42. Agência Nacional de Saúde Suplementar (ANS). *Planos odontológicos: evolução, desafios e perspectivas para a regulação da saúde suplementar*. Rio de Janeiro: ANS; 2009.
43. Beauchamp T, Childress J. *Principles of biomedical ethics.* 7ª ed. New York: Oxford University Press; 2013.
44. Malta DC, Cecílio LCO, Merhy EE. *O mercado de Assistência Suplementar no Brasil e o papel da regulação pública na garantia da atenção à saúde de seus beneficiários.* [acessado 2017 Jan 19]. Disponível em: http://www.uff.br/saudecoletiva/professores/merhy/indexados-02.pdf
45. Malta DC, Jorge AO. Modelos assistenciais na saúde suplementar: o caso de uma operadora de autogestão. *Cien Saude Colet* 2008; 13(5):1535-1542.
46. Ribeiro JM, Lobato LDVC, Vaitsman J, Farias LO, Vasconcellos M, Hollanda E, Teixeira CP. Procedimentos e percepções de profissionais e grupos atuantes em mercados de planos de saúde no Brasil. *Cien Saude Colet* 2008; 13(5):1477-1487.

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