

Short Communication

Hospital Dentistry: a proposal of new discipline

Alessandra Nogueira Porto¹
Alex Semenoff Segundo²
Álvaro Henrique Borges²
Tereza A. Delle Vedove Semenoff³
Fábio Pedro de Miranda²

Corresponding author:

Alessandra Nogueira Porto
Rua Manoel Ferreira Mendonça, n.º 149 – Bandeirantes
CEP 78010-050 – Cuiabá – MT – Brasil
E-mail: aleporto@terra.com.br

¹ University of Taubaté – Taubaté – SP – Brazil.

² University of Cuiabá – Cuiabá – MT – Brazil.

³ “Júlio de Mesquita Filho” State University – Campus Araçatuba – SP – Brazil.

Received for publication: April 5, 2010. Accepted for publication: April 1st, 2011.

Keywords:

Community Dentistry;
hospital; oral health.

Abstract

Introduction: The implementation of educational and preventive oral health procedures in a hospital is fundamental for undergraduates, both for the opportunity of interaction with other health professionals and for the individual and collective growth. This promotes the student's human and professional formation because it enables the patient's oral health care within a complete treatment. **Objective:** The aim of this study was to describe the educational practices (teaching, research, extension and service) in the Hospital Dentistry Course of the School of Dentistry, University of Cuiabá. This first experience led to curriculum change and the creation of a new discipline: Hospital Dentistry. **Development:** The procedures of tertiary oral health experienced by Dentistry teachers and undergraduates provided the material of this study. The methodological procedures of this new discipline insertion comprised technical-administrative and academic actions aiming to establish a new curriculum in Dentistry Course. For this purpose, actions of exchange and dialogue between the School of Dentistry and the University Hospital managers were executed. The strategy resulted in the insertion of Dentistry undergraduates within this new area of educational practice, involving qualified individuals to organize the discipline. Also, the recognition of other health area professionals was achieved, who realized the importance of dental knowledge in tertiary treatment as a necessary component to avoid complications to the patients, once dental problems affect the patient's quality of life and imminent risk of death.

Introduction

Currently, health services have aimed to perform an integral, humanized, hospitable treatment. In Dentistry, this reality is not different; the model of dental treatment has been undergoing significant changes and the patient is not more seen as “a tooth”, becoming to be seen as an entire person. The implementation of the Brazilian Curriculum Guidelines (BCG) for Dentistry graduation courses [8] have contributed for that changes to occur also in undergraduation.

The discipline of Hospital Dentistry (HD) of the University of Cuiaba was initiated by the professors of the discipline of Buccomaxillofacial Surgery and Traumatology, in 2000, because they believed that the hospital practice would bring experiences in the comprehension of the person's individuality and integrality, motivating the creation of the discipline [1].

The discipline's work started to gain greater visibility and social effectivity with the Law Project number #2776/2008 proceedings in the Brazilian Chamber of Deputies stating the obligatory presence of the dentist in intensive care units (ICU's), public and private hospitals, and in clinics where there would be in-patients. For over a decade, studies on the presence and influence of bacteria of oral microbiota within the several tissues have demonstrated a strong association between oral cavity pathogens and other organs' infections [3, 6].

Some authors reported that oral diseases may play an important role in the etiopathogeny of several systemic diseases, such as: heart diseases, cerebrovascular accidents, bacterial endocarditis, diabetes melitus, and respiratory infections [5, 6, 7]. For example, it has been estimated that a patient presenting generalized chronic periodontitis exhibited about 72 cm² of area exposed to infection, which transforms the oral cavity in a site for systemic infection entrance, leading to serious complications due to odontogenic sites [3]. It is interesting that the medical boards themselves understand the dental treatment necessity aiming to avoid serious complications for the in-patients, once this problem interferes in patients' life quality and imminent risk of death.

Due to the need of the dentist insertion in the hospital environment, this study aimed to report the initial experiences of a new discipline within the curriculum of the School of Dentistry of Cuiaba (short UNIC).

Development

The material providing subsidies to this case report comprised the tertiary health care practices experienced by the professors and undergraduates of the School of Dentistry of the University of Cuiaba in the hospital. Within this context, we aimed the inclusion of the professors and undergraduates to promote a new guideline for Dentistry teaching, with the goal of both increasing the undergraduates' knowledge and integrating the multidisciplinary teams (doctors, nurses, physiotherapists, and dentists) to provide a whole treatment to the patient.

The methodological procedures of this new Discipline were composed of technical-administrative and academic actions aiming to the organization of a new Dentistry Course curriculum. The professors' profile should include both the teaching experience and some expertise in hospital treatment.

After the professors' selection, the teaching plane proposal was elaborated, which should be in agreement with the institutional pedagogic project and with the new Brazilian Curriculum Guidelines for Dentistry courses. The discipline's main focus was not to perform technical procedures; its emphasis was on how to evaluate a hospital file, to discuss with other health professionals, to improve the writing for the execution of the daily hospital clinical evolution, to adapt to the hospital administrative routine, to assess complementary tests, to understand the drug interactions, to understand the hospital functioning, and mainly to adapt within a multidisciplinary team.

Pedagogic strategies

The first difficulty was regarding to how 50 undergraduates would attend in a hospital without interfering with its routine. For this purpose, we divided the students into two groups (A and B): while group A is visiting the in-patients, surgical center and ICU, group B is at theoretical field to solve the problems proposed in the last class. We opted not to execute occasional evaluation moments – tests, systematization by contents, or lectures -, but we searched for an evaluation model that improves the teacher-student dialogue and creates the students' capacity of solving hospital environmental problems. Additionally, we valorized the four pillars we judged important in a transversal evaluation process within a semester inside a hospital – behavior, knowledge, attitude and assiduity.

Patients' treatment

An ambulatorial structure was constructed for the treatment of the hospital's patients. This Dentistry Ambulatory inside the University General Hospital comprises 5 dental offices equipped with vacuum suction unit, X-ray device, ultrasound device, and vital signs monitor. Dental instruments belonged to the undergraduates. The auxiliary team was composed by a dental therapist, responsible for the material of consumption provided by the hospital; a dental assistant, responsible for the disinfection procedures; a technical nurse assistant, responsible for the administrative service; and the professors of the several Dentistry areas.

The patients' flow was divided into two stages: the first occurs when the medical team (Medical resident, other health course undergraduate, or the responsible doctor) request the Dentistry undergraduate's evaluation of dental treatment; the second comprises the observation of the evaluations performed by the Dentistry undergraduates in ICU, clinics and wards. It is important to highlight that all communication within the hospital was executed through either the patient's daily clinical evolution or through other areas' request, always included in the patient's file.

Discussion

The great relationship between oral and systemic diseases enhances the perspective of the discipline of Hospital Dentistry within a multidisciplinary team [4, 2].

Due to the necessity of occupying this space [10], we searched for the creation of a discipline aiming to capacitate the future professional, still an undergraduate, to lead with the hospital reality. This new discipline was not created to follow a trend; its goal was to insert a health-promoter, critical, reflexive professional capable of acting in the area of Dentistry knowledge.

This study's results demonstrated some difficulties to be solve. The maintenance of the undergraduates' focus on the hospital's guidelines and on the adequate relationship with the multidisciplinary team is mandatory at this discipline consolidation stage and it has been under evaluation. Despite of the great challenges, the professors opted not to score the undergraduate's development through writing tests. The undergraduates were scored both by the observation of their capacity of solving the problems found and by the reading of scientific reports, within the reality of each situation found [5]. The

resolutions are based on a theoretical referential, through the elaboration of a strategic planning, either in the ambulatory or in the wards/ICU's.

After the first classes, we realized that both the undergraduates and the professors had a large number of doubts; at that moment, learning to learn became an important Freirian axis [5]. There was the need of readapting the proposal, to close the discipline's main axis even more: the insertion of a dentist instead of a "doctor specialized in Dentistry" into the hospital.

The acceptance of the multidisciplinary team was fundamental for the undergraduates' insertion into the hospital. All procedures performed by the students were praised by the medical institutional board, which was completely connected to the hospital-school graduation, a very friendly environment for this purpose [4].

Although the discipline is at the initial stage, we observed that the professors, undergraduates, and administrative people were motivated with the acquired space, very necessary for the in-patients.

Conclusion

The students were greatly motivated with this new reality and all undergraduates had different experiences within the several hospital ambulatory centers: cardiology, geriatrics, obstetrics, pediatrics, surgical center, and ICU.

The first clinical evolutions (patient's evolution reports) showed some deficiencies; however, the discipline's professors together with the medical team transposed this barrier. Considering to the patients, it was generally noted that the most severe systemic diseases showed both the poorest dental hygiene and little motivation of the medical team to modify such condition. Because we mostly dealt with in-patients, we opted to instruct the patient's caregiver to perform oral hygiene.

Considering the aforementioned discussions, it was observed the importance of this new discipline within the curriculum of all Schools of Dentistry. Aware of this reality, the University of Cuiaba anticipates the necessity of professionals with this profile and initiates a discipline capable of inserting the undergraduates within the context of the Hospital Dentistry.

References

1. Camargo EC. Odontologia hospitalar é mais do que cirurgia bucomaxilofacial. *Jornal do site Odonto*. 2005 May;VII(98).

2. Doro GM, Fialho LM, Losekann ML, Pfeiff DN. Projeto "Odontologia Hospitalar". *Revista da Abeno*. 2006;6(1):49-53.
3. Li X. Systemic disease caused by oral infection. *Clin Microbiol Rev*. 2000 Oct;13(4):547-58.
4. Luz PL. Pesquisa e ensino: componentes essenciais do Hospital Universitário. *Arq Bras Cardiol*. 2007 Mar;88(3):371-2.
5. Maltagliati LA, Goldenberg P. Reforma curricular e pesquisa na graduação em Odontologia: uma história em construção. *Hist Ciênc Saúde - Manguinhos*. 2007 Oct-Dec;14(4):1329-40.
6. Mealey BL. Influence of periodontal infections on systemic health. *Periodontology* 2000. 1999 Oct;21:197-209.
7. Meyer DH, Fives-Taylor PM. Oral pathogens: from dental plaque to cardiac disease. *Curr Opin Microbiol*. 1998 Feb;1(2):88-95.
8. Resolução CNE/CES 3/2002. Diário Oficial da União [periódico na internet]. 2002 Mar 4. Available from: URL: <http://www.mec.gov.br/sesu/ftp/resolucao/03020odontologia>.
9. Sergers P, Speekenbrink RGH, Ubbink DT, van Ogtrop ML, de Mol BA. Prevention of nosocomial infection in cardiac surgery by decontamination of the nasopharynx and oropharynx with chlorhexidine gluconate: a randomized controlled trial. *JAMA*. 2006 Nov 22;296(20):2460-6.
10. Silva OMP, Lebrão ML. A organização do atendimento da odontologia hospitalar e da traumatologia buco-maxilo-facial no município de São Paulo. *Rev Odontol Unesp*. 2001 Jan-Jun;30(1):43-54.