CONTINUED MEDICATION USE IN DENTISTRY: THE IMPORTANCE OF DENTAL RECORDS

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ABSTRACT

Aim: Appoint the main chronic diseases and the most frequent medications used by the patients by the graduation students of Dentistry between 2012 and 2014/A,through patients'dentistry records.

Material and Methods: Two studies were performed: one retrospective in patients' dentistry records, attended at the Clinical School of Dentistry and a cross-sectional study with the students enrolled between the 6th and 9th semester in 2014/B. After the record, the data were inserted on an Excel® spreadsheet to posterior analysis by simple frequency.

Results: Eighty-eight charts were evaluated and applied a questionnaire to 61 students. The most prevalence disease in the attended patients at the clinic and mentioned by the students was the systemic arterial hypertension, 77.25% and 60.66% respectively. Fifty-eight students (95%) affirmed confirming the patients' anamnesis with systemic arterial hypertension, mellitus diabetes and chronic disease. The most used medications by these patients are those to control the systemic arterial hypertension, mellitus diabetes and heart diseases. Seventy-two percent affirmed interest on the purpose of patients' medication; 32.79% say to research about their interaction. By dentistry records analyzed we found that only 5.6% took notes about the time of use of the medications.

Conclusions: The chronic diseases most found in patients were the arterial hypertension, mellitus diabetes and heart diseases. The main medications are used to control diseases previously mentioned. One update of anamnesis record is suggested by the students.

KEYWORDS: dentistry records, medication prescription, buccal manifestations

INTRODUCTION

Technological advances in health science area have increased longevity, and thereby increased the number of chronic disease patients who search dental attendance[1]. It requires more attention by surgeon dentist (SD) because several chronic diseases are controlled by continued medication usage[2], which can implies both on buccal cavity and on the dental attendance itself[3].

Information regarding to these diseases, medication usage and allergic reaction[4] need to be recorded on dentistry records when the anamnesis is performed because it a paramount tool to the SD, and it is the legal evidence about data obtained during the anamnesis, by physical examination. It is also used to evaluate the need of treatment, as well as its carry out and complications. Despite the literature does not define when the anamnesis should be performed again, it

must be performed or re-evaluated whenever the first contact between professional and patient occurs, or whenever there is a complaint. Similarly, the patient record will suffer changes with every new complication or new attendance[5-8].

Souza et al.[5] evidences that main medication used by patients attended in dentistry are those which control hypertension and or mellitus diabetes, and they can be used singly or associated. Patients who are part of this group must be identified, as well as the risks due to the attendance[9]. However, these medications, despite favor a better quality of life to users, they can lead to side effects inside the buccal cavity, like xerostomia, non-specified ulcers, pigmentation on the mucosa or teeth, and gingival growth, which must be observed for diagnosis and posterior treatment or control[6].

Information on anti-hypertensive and oral hypoglycemic therapeutic regimen is essential[5]. The risk on drug interactions can be restricted to drugs which the professional himself/herself prescribes or take to health individuals; however, the possibility to happen it increases with patients who use medication continuously and/or elderly[10].

Despite the SD prescribes medication daily in professional life, master the medication therapy is necessary, further to know drug interactions which can happen when these use is concomitant, no matter on medications exclusively for dentistry problems or in association with other medication already used by the patient to control a chronicle disease[11,12].

Despite non-steroidal anti-inflammatory (NSAIDs) are used in short time in dentistry (2 or 3 days), they can provoke blood pressure increase by reduction of prostacyclins[13,14]. Vasoconstrictor is contraindicated only for patients with systolic pressure> 160 mmHg or diastolic> 100 mmHg[15].

NSAIDs associated to oral hypoglycemic can potentiate the action of this last, because NSAIDs can compete with oral hypoglycemic and provide hypoglycemia[13].

Interaction between oral contraceptive (OC) and antimicrobials prescribed as complementary treatment for oral infections in women is a relatively common situation in dentistry practice; thus the information about the use of this medication is paramount[16].

American Dental Association's scientific board reported its opinion on the subject in 2002[16], and affirmed that except for rifampicin, no study demonstrated changes on ethinylestradiol levels or increased the risk of pregnancy in women who use antimicrobial commonly prescribed in dentistry. However, it is not release the responsibility to detach the importance on the orient the use of mechanical barriers as additional contraception measure during the antimicrobial therapy and one week after the last dose, at least[16,17].

Given that, the aim of this study was trace a profile of more prevalent diseases in patients attended by students of dentistry, as well as the class of medicine more used by these patients. A questionnaire was elaborated and applied to the students regularly enrolled between 6th and 9th semester of the previously mentioned course in 2014/B in order to evaluate the knowledge level on the active principle of medication and the importance of anamnesis during dental care attendance.

MATERIAL AND METHODS

This research had association between two studies: a retrospective search on patient's dentistry record, who was attended at clinical dentistry school from 2012/A to 2014/A; and a cross-sectional study with students enrolled between 6th and 9th semester of the Faculty of Dentistry in 2014/B. Both studies were approved by the Ethics Committee in Research (CAAE 33401714.8.0000.5369).

Data collection was carried out in two stages: firstly through sociodemographic questions, about the systemic disease and on the medication use on patient's reports attended at the clinical dentistry school; the second was the application of a questionnaire to students with sociodemographic questions, on the knowledge about more common chronic diseases in their patients, medication used by them and the oral manifestations caused by the continuum usage of these medications can cause inside the buccal cavity. After report, data were inserted on an Excel® spreadsheet for posterior analysis and descriptive statistics by simple frequency.

Patient's reports from Supervised Internship Clinics (SIC) I, II, III and IV were included; the first attendance occurred within the period previously described and which present chronic diseases, as well as the list of medications used. Patient's reports without anamnesis filled were excluded. Only students enrolled in the Supervised Internship Clinics I, II, III, IV and who signed the informed consent form were participated the research.

RESULTS

RESULTS FROM PATIENT'S REPORTS

From 652 reports analyzed, 88 were included in the research. The mean age of patients was 53 years and 7 months; the youngest patient was 28 years and the oldest 76. Regarding to the gender, 56 were women and 32 men.

From the patients, 64 were attended in SIC used medications to control hypertension, 53 took medication to control some heart disease. About hypoglycemic, only 13 patients used them. And 11 patients used some of these medicines concomitantly.

Only two students written down the time of use the medicines, despite 40.98% of students had mentioned they ask.

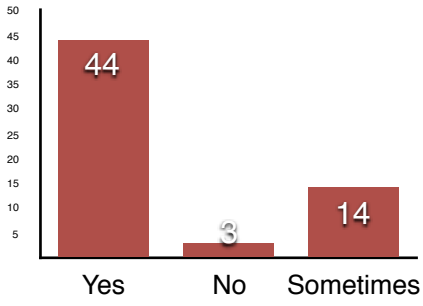
The prevalent disease among patients attended in the clinic and mentioned by students was hypertension; 77.27 % and 60.66%, respectively.

RESULTS FROM STUDENTS

From 62 students, only one of them did not accept participate. Around 95% of students affirmed they had attended some patient with chronic disease, reporting the mean from 2 to 5 patients by student. From them, 58 (95%) asserted confirm the anamnesis of patients with chronic disease. However, even if the patient does not have history of chronic disease or does not report it,51 (86.89%) students check the anamnesis.

Regarding to the interest degree of students to know the purpose of medication of his/her patient, we can observe by the graph 1 that most of them affirm positively (72.13%). Meanwhile, only 20 (32.79%) students search to know the interaction of these medicines.

Graph 1. Students' interest to know the medications purpose.



Buccal manifestations caused by chronic use of medicine, according to students, are disposed in table 1.

Only 42.62% of students asked the women patients if they use oral contraceptive.

On buccal manifestations reported by patients to students after starting use medications, 8.20% affirmed already had attended patients with this complaint.

About upgrade the anamnesis, 26.23% of students affirm it is necessary and suggested the insertion of some questions disposed on table 2.

DISCUSSION

Dentistry records is an instrument on ensure quality of treatment and must be founded on technical and legal rules[4]. According to the Federal Council of Dentistry, patient's records in dentistry need to content at least the patient's identification, his/her clinical history, a detailed clinic examination, complementary tests, plans for treatment and its evolution[8]. Further all and any new information have to be inserted on the patient's record[7]. Non elaboration and non-upgrade the dentistry records are ethical breach, according to the Dental Code of Ethics (Art 9, CFO – 118/2012)[8].Unfortunately, cases in which the patient's record is filled inappropriately are not uncommon[18].

It also can be observed on patient's records analyzed in this work, considering the great number excluded by lack of information or because they were uncompleted. As academic environment is one of the main responsible by the complete professional training, the student has the full knowledge the importance of these information is paramount. It can enable knowing the patient as a whole and assume an appropriate professional attitude. The subject on students know the Dental Code of Ethics is in the last semester in most courses, what is important detach.

Despite the possibility to consider that it occurs in a small space to fill important information, it is not a justification the lack of interest to search these kinds of information and write them down in another place.

Create strategies to generate more awareness on the importance of appropriate filling the patient's record during the academic stage is urgent.

Dental care to patients with chronic diseases is increasingly every day[19,20]. The number of young patients with chronic disease is growing[21], what reinforces the importance to better attention when filling dentistry reports, by both students and professionals.

In order to avoid drug interaction due to simultaneous use of another medicine, a wide knowing on these medications or food is necessary. Nevertheless mainly the appropriate and complete anamnesis should be carried out to know the patient's profile, as well as remove or add information[4,11,12]. Despite data found in this research highlight interest in search these information, most students find

information on prescribe restrictions of medicine used in dentistry.

Table 1. Buccal manifestations caused by chronic medicine usage, according to the students involved in the research.

Manifestation	Quantity
0 - Not applicable	5
1 - Xerostomia	28
2 - Hyposalivation	16
3 - Gingival hyperplasia	2
4 - Candidiasis	3
5 - Ulcers	27
6 - Burning mouth	7
7 - Dental staining	3
8 - Clefts	1
9 - Periodontal problems	1
10 - Stomatitis	1
11 - Burns	2

Table 2. Suggestions of new questions to insert on anamnesis record.

Questions
Patient with Diabetes Mellitus?
Patient with HIV virus or Hepatitis?
Time of use of medicationand posology:
Oral contraceptive usage?
Space to write down the date of anamnesis and filling the dentistry report:
Space to fill about laboratory tests.

Costa et al.[7] detach and Trento et al.[22] reinforce limitation of students when there is medicine prescription, no matter by prescription or inclusion; clinical, ethical or legal criteria; it reinforces a need by more integration between the subject and the clinical practice. Findings in this work corroborate this limitation.

The increase in life expectancy and the increased number of young people with chronic disease point to a need for better holistic look to the patient attended for dental care.

Bertollo et al.[11] detach the existence of an online system Uptodate® which have updated information about new drugs and drug interaction, and smartphone apps, such Medscap® and Micromedex®, which verify drug interaction quickly and regarding to professional needs.

In a world globalized through data network with instant consult to information and the easy access to online leaflet medication by apps in smartphones and tablets is a strong ally to dentistry safe practice.

Little knowledge on drug interactions detached by several authors[19,20] is reinforced by findings in this study, despite they have knowledge on the main buccal changes due to chronic disease[2-5,23,24].

Dentistry report used for this research did not show information on the use or not of OC, and despite it is a medication, numerous times it is not wrote down on the indicated place for medication used. It can be justified by the results that less than 50% of students affirmed ask patients if they use this

medication. This information on the patient's report tis important because can avoid unwanted pregnancy[13-14,17]. Insert a specific question could contribute to intensify information.

CONCLUSIONS

Before the results we observed that more common chronic diseases found in patients at UNISUL were arterial hypertension, mellitus diabetes and heart diseases.

The main medications are those used to control diseases previously mentioned.

Regarding to the students' interest level on the active principle, less than half showed interest.

We suggest an update on the dentistry record, especially the inclusion of time of medication usage, increase the space to include medication, date the anamnesis performed and use of oral contraceptive.

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