

OCULAR/EYE PROTECTION FOR STUDENTS DURING DENTAL PRACTICE

Matei Ruxandra*, Liana Todor*, Diana Berechet, Anca Porumb***

*University of Oradea, Faculty of Medicine and Pharmacy, Department of Dental
Medicine, Pta. 1 Decembrie 10, 410068, Oradea, România,
dr.ruxandramatei@gmail.com

**University of Medicine and Pharmacy „I. Hatieganu”, Faculty of Dental Medicine,
Department of Conservative Odontology, Cluj-Napoca, Romania

Abstract

The eye protection is vital to all dental activity. Therefore it is very important to know and to use correctly the means of eye protection. In this purpose we intend to question and analyse the information about eye protection among dental medicine students. We used a 9 question questionnaire and the subjects were the students from IV, V and VI year in Dental Medicine specialization.

Key words: ocular protection, ergonomics, questionnaires, students

INTRODUCTION

Among the issues raised in a dental activity is the eye protection, both mechanically and in terms of the intensity of light radiation (Summit JB et al, 2000, Murphy CD, 1998). Ergonomic talking, insults made by failing to visual analyser measures to protect or relaxation / recovery thereof may lead to decrease of work capacity, low efficiency and low financial profit of course (Anghel M, 2004, Anghel M, 2005).

MATERIAL AND METHOD

To see if there is interest in eye protection during dental therapeutic manoeuvres, a questionnaire was distributed to students in years IV, V and VI of Dental Medicine specialization, academic year 2013-2014, composed of 9 questions. It was voluntary participation. From 171 students answered 105 (61.4%). 75.24% were females and 24.76% male. The answering willing of students was: 86.95% for IV year of study, 53.7% for V year and 50.7% for VI year.

RESULTS AND DISCUSSIONS

To our surprise, the percentage of interest in the survey fell to fourth year students (approx. 87%) for the year VI (51%). Instead, it is encouraging that as they are nearing completion of their studies, use of

eye protection (goggles, curing light filters, etc.) becomes - imposed or not – an "obligation".

For first question: *Do you use eye protection measures during dental maneuvers?* the answers were overwhelming: yes (95% - IV; 86.2% - V; 91.66% - VI), no (5% - IV, 13.79% - V; 8.33% - VI), no response (0% for all years) (fig. 1).

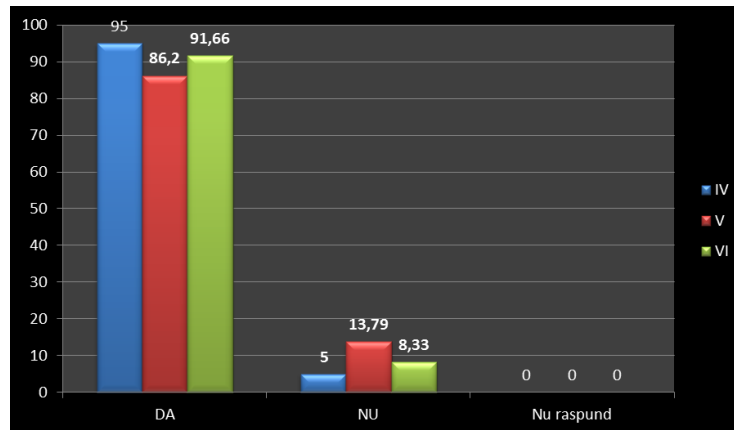


Fig. 1 – The answers to question: *Do you use eye protection measures during dental maneuvers?*

For the second question: *If you use eye protection, this is required?* the results are in fig. 2.

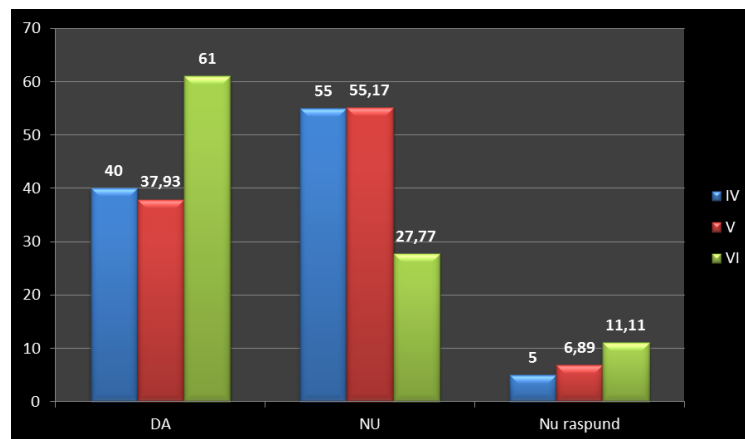


Fig. 2 – The answers to question: *If you use eye protection, this is required?*

From all students, the answer "yes" was in 40% (IV), 37.93% (V) and 61% (VI). The answer "no" was in 55% (IV), 55.17% (V), 22.77% (VI). "No response" was founded in 5% (IV), 6.89% (V) and 11.11% (VI).

For third question: *Do you use eye protection / filters for curing light?* there were following results (fig. 3): yes (65% - IV, 72.41% - V,

55.56% - VI); no (30% - IV, 27.59% - V, 44.44% - VI), no response (5% - IV, 0% for V and VI year).

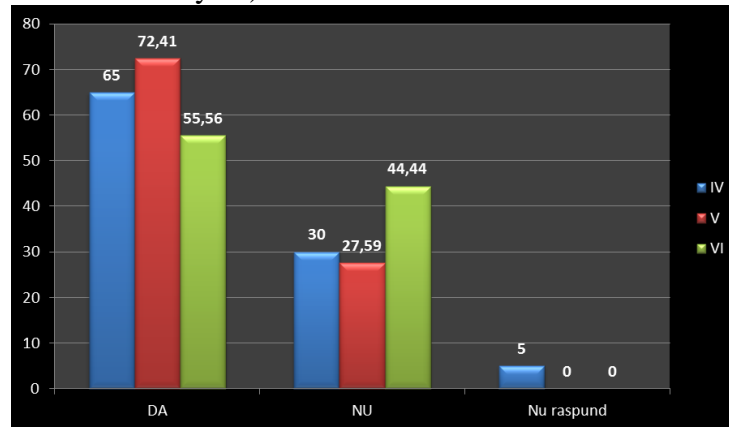


Fig. 3 - The answers to question: Do you use eye protection / filters for curing light?

For the fourth question: *Is eye protection available for patients?*– ”yes” 35% (IV) , 48.28% (V), 55.56% (VI), ”no” 62.5% (IV), 51.72% (V), 44.44% (VI), ”no response” 2.5% (IV) and 0% (V and VI) (fig. 4).

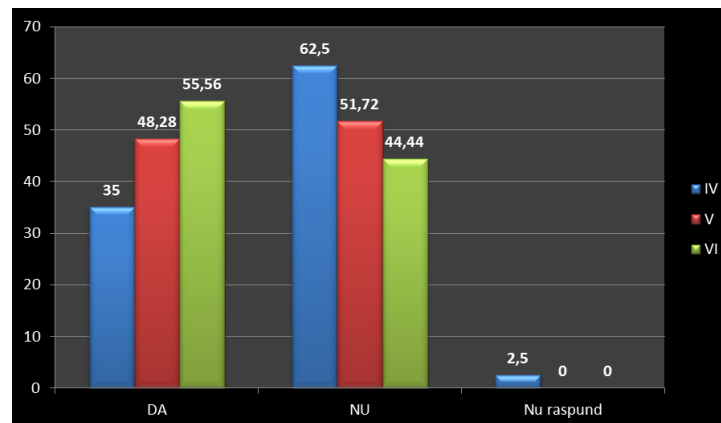


Fig. 4 - The answers to question: Is eye protection available for patients?

For the question: *Do you require patients to wear goggles during the consultation or dental treatment?* the students answered as following (fig. 5): ”yes” 2.5% (IV), 27.59% (V), 16.67% (VI), ”no” 97.5% (IV), 72.41% (V), 83.33% (VI), ”no response” 0% for all years.

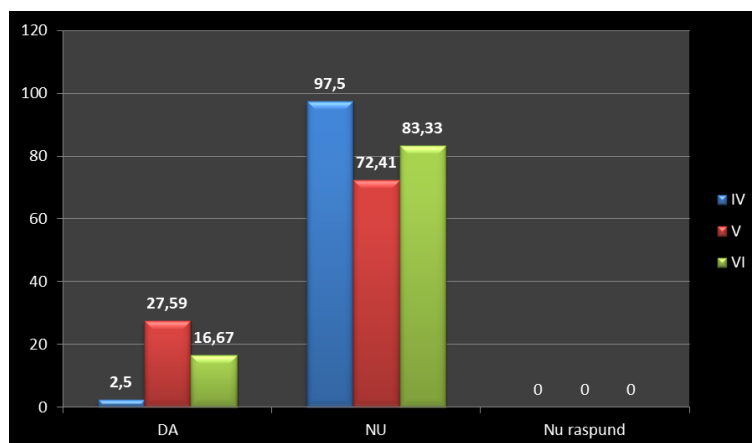


Fig. 5 - The answers to question: *Do you require patients to wear goggles during the consultation or dental treatment?*

The next question: *Do you advise patients with correction glasses to clear them during dental procedures?*

The answers were (fig. 6): "yes" 55% (IV), 68.97% (V), 52.78% (VI), "no" 45% (IV), 17.24 (V), 47.225 (VI), "no response" 0% (IV, VI), 13.79% (V).

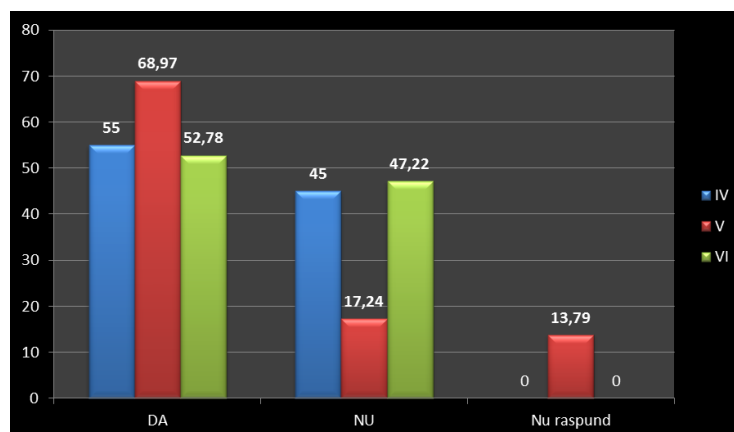


Fig. 6 - The answers to question: *Do you advise patients with correction glasses to clear them during dental procedures?*

The question: *If you wear corrective glasses, do you use the same pair of glasses on the street and during dental work?* was followed by these answers (fig. 7): "yes" 64.28% (IV), 57.14% (V), 54.55% (VI), "no" 35.72% (IV), 42.86% (V), 45.45% (VI), "no response" 0% - all years.

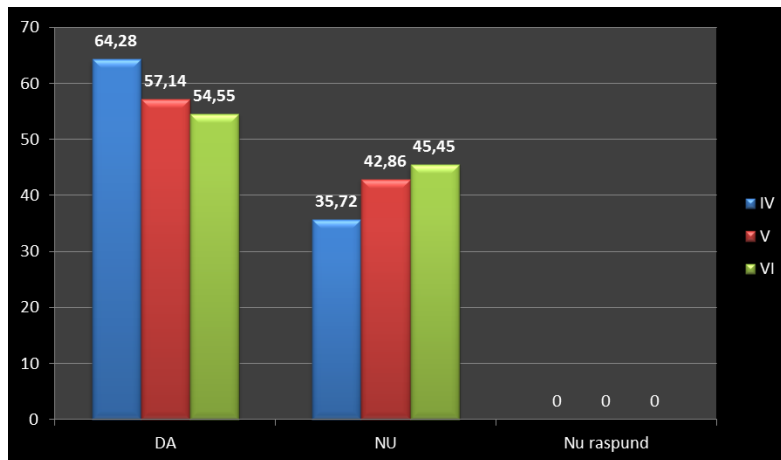


Fig. 7 - The answers to question: *If you wear corrective glasses, do you use the same pair of glasses on the street and during dental work?*

For the question *What kind of eye protection do you use?* the answers were variable (fig. 8):

- Protection glasses/ goggles 70% (IV), 58.62% (V), 64% (VI)
- Facial shield 2.5% (IV), 0% (V, VI)
- Correction glasses 10% (IV), 3% (VI)
- Correction glasses and protection glasses 2.5% (IV), 6.8% (V), 3.55% (VI)
- Correction glasses and facial shield 10% (IV)
- Facial shield and protection glasses 3.44% (V)
- Don't use 2.5% (IV), 5.55% (VI).

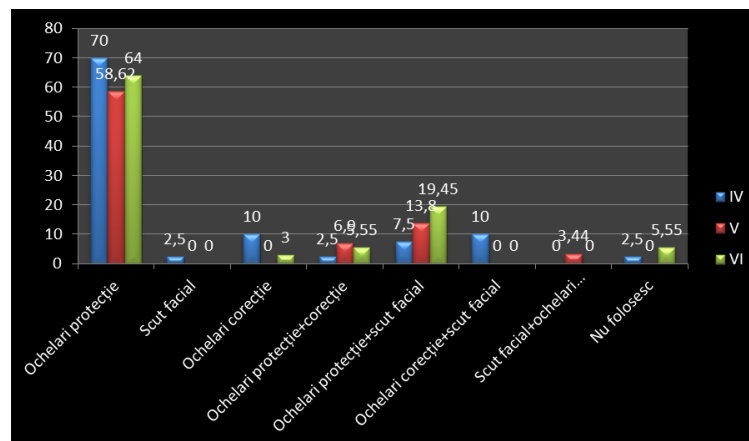


Fig. 8 - The answers to question: *What kind of eye protection do you use?*

Last question was about *How do you sanitize the eye protections?*

The students answered in vary ways, from "water and soap" to "special solutions for lens and glasses". Unusual answers were about

medicines/drugs for hygiene or not using disinfectants at all. The most popular disinfectant was Mikrozyd spray/tissues.

It was noted that there is a lack of use in patient eye protection (eg. protection glasses). On the other hand we were very happy to find that the means of operator eye protection are known and implemented from IV year (first year in which students are practicing on living patients).

It also emerged that there are still not properly known categories of substances used in cleaning / disinfecting eye protections.

CONCLUSIONS

Enjoying the small number of students with addictions occult, but being aware that the eye dentist is overwhelmed by the very nature of his profession, we - the authors - we intend to press for implementing the use of conscious means of eye protection and establish solutions / protocols in order to maintain optimal levels of its operation.

REFERENCES

1. Anghel, Mirela, Diagnosticul oral, Ed. Orizonturi universitar, Timișoara, 2004
2. Anghel, Mirela, Noțiuni generale de ergonomie dentară, Ed. Orizonturi universitare, Timișoara, 2005
3. Murphy, CD, Ergonomics and the dental care worker, American Public Health Associations, 1998
4. Pirte, Adriana – Note curs diagnostic orodentar și ergonomie, 2010
5. Summit, JB, Robins, WJ, Schwartz, RS, Operative dentistry, Quintessence, Chicago, 2nd ed, 2000