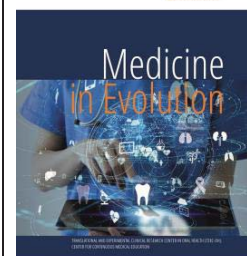


# Inventory of dental students' needs regarding oral health literacy concept



**Sfeatcu R.<sup>1</sup>, Cărămidă M.<sup>1</sup>, Bencze M.A.<sup>2</sup>, Dragomirescu A.O.<sup>2</sup>, Dumitrache M.A.<sup>1</sup>**

<sup>1</sup>Oral Health and Community Dentistry Department, Faculty of Dental Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

<sup>2</sup>Orthodontics and Dento-facial Ortopedics Department, Faculty of Dental Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Correspondence to:

Name: Bencze Maria Angelica

Address: Eforie Street no. 4-6, district 5, Bucharest, Romania

Phone: +40 744 318 013

E-mail address: maria.bencze@umfcd.ro

## Abstract

Aim: to evaluate the knowledge among a group of dental students regarding oral health literacy concept and their needs to improve education level in this regard. Material and method: They were collected data on oral health literacy (OHL) knowledge among 6<sup>th</sup> year dental students from "Carol Davila" U.M.P. Bucharest, Romania. Students involved in the study attended a lecture on this subject and a practical course about OHL level's evaluation tools. Results: before lessons, 210 dental students (mean age 24.3±1.82; 64.8% females) have answered to an anonymous questionnaire and we found out a medium level of knowledge regarding the definition of the concept (33.7% give the right answer) and about the OHL role in: communication with patients (57.5%), health promotion (25.8%), oral diseases prevention (37.3%) and adherence to dental treatment (12.4%). After attending the course and the practical training, most of students recognized the factors affected by oral health literacy skills: dental health knowledge of the individuals/patients (89.9%), health behavior (78.9%) and doctor-patient communication (98.2%). Conclusion: dental students, as future health providers need dental education throughout curricula regarding oral health literacy, an important aspect associated with inequalities in health status and getting communication skills for a patient-centered dental care, according with individual's oral health literacy abilities.

**Keywords:** health literacy, dental students, education, communication

## INTRODUCTION

On the European Union's agenda finds the need to focus on the concept of health literacy, defined as the ability to read, select and understand medical information for the formation of judgments or the right choices about health [1-3].

The level of oral health literacy level heavily influences the way people interact with dental professionals, therefore the literacy of the individual and patient on the right to health is required in order to facilitate transformation the consumer of medical services as an active partner in the system health care [4-6].

It is necessary to introduce in the curriculum of compulsory education a discipline that addresses health issues and develops the skills necessary for the proper functioning of the individual or patient as recipient of health services [7,8].

Every patient needs oral health education, and medical information should be tailored to individual needs [1,2].

Dental students and dentists must be able to adapt medical information depending on each patient' level of understanding, to have educator skills, and theoretical and practical knowledge on health education methods to meet the needs of their patients [1,8].

Patient oral health education is a responsibility of dental health care providers, even more so as at present, patients need more medical information. Adequate provision of medical and dental information will increase patient satisfaction, compliance to treatment, and will improve the condition of oral and general health status [1,5,8].

### *Aim and objectives*

The present study aims to evaluate the knowledge of dental students regarding oral health literacy concept and their needs to improve dental education in this regard.

## MATERIALS AND METHODS

They were collected data on oral health literacy (OHL) knowledge among 6<sup>th</sup> year dental students from "Carol Davila" U.M.P. Bucharest, Romania.

In order to be involved in a research project focused on OHL assessment among adolescents in various communities and adults in dental offices within Oral Health and Community Dentistry Department, dental students attended a lecture on this subject and a practical course about OHL level's evaluation tools.

The Ethical Committee of the above-mentioned university approved the study. This work was supported by „Carol Davila" University of Medicine and Pharmacy, a project number 33898/11.11.2014.

Before and after lessons, 210 dental students (mean age 24.3±1.82; 64.8% females) have answered to the same questionnaire that assessed the knowledge of respondents regarding: the definition and the role of OHL concept in dental practice, as well as factors affected by oral health literacy skills (dental health knowledge of the patient; health behavior, and the dentist-patient communication).

In terms of oral health literacy role, there were four variants of answer, namely: communication, health promotion, oral disease prevention, and adherence to dental treatment.

In order to assess the differences,  $p$ -value<0.05 was considered statistically significant.

## RESULTS

Present study revealed a medium level of knowledge regarding the definition of the concept (33.7% give the right answer) and about the OHL role in communication with patients (57.5%), health promotion (25.8%), oral diseases prevention (37.3%) and adherence to dental treatment (12.4%) (Figure 1).

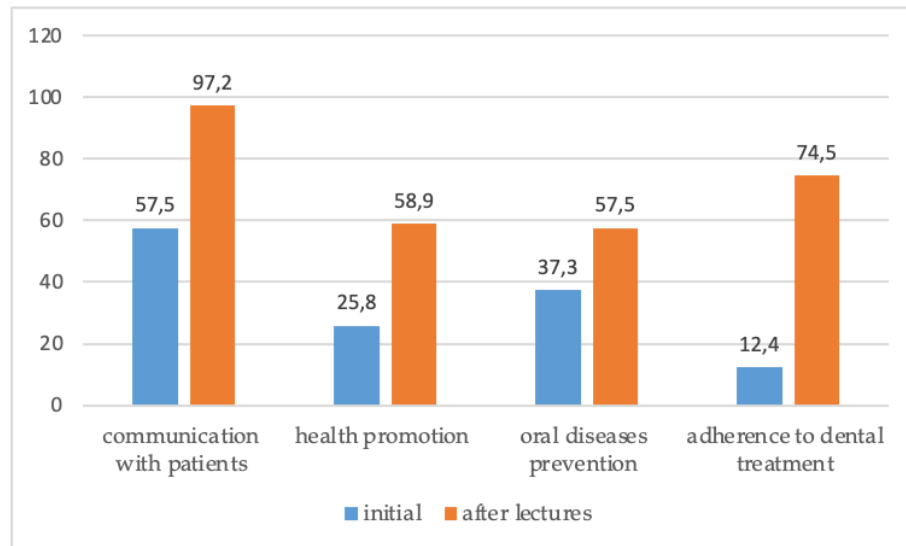


Figure 1. Dental students' knowledge regarding OHL role in dentistry (%)

After attending the course and the practical training, most of students recognized the factors affected by oral health literacy skills: dental health knowledge of patients (89.9%), health behavior (78.9%) and doctor-patient communication (98.2%) (Figure 2).

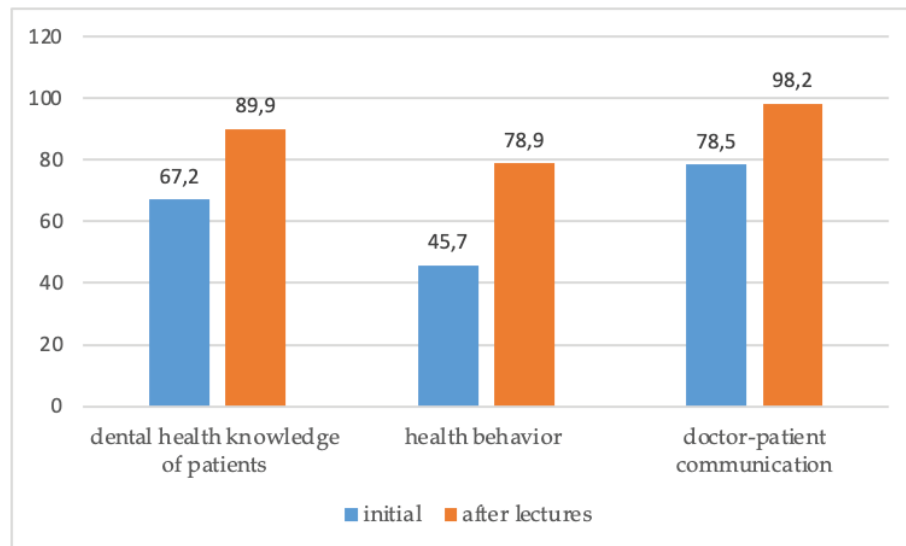


Figure 2. Knowledge regarding factors affected by oral health literacy skills (%)

Statistical improvement of students' knowledge regarding all three aspects evaluated in terms of oral health literacy (OHL) concept is presented in Tabel I.

Table I. Improvement of students' knowledge regarding OHL

	Before education lessons	After education lessons	<i>p</i> -value
Definition of oral health literacy	33.7 %	98.5 %	<i>p</i> *=0.00
<b>Oral health literacy role</b>			
Communication	57.5 %	97.2 %	<i>p</i> *=0.02
Health promotion	25.8 %	58.9 %	<i>p</i> =0.09
Oral disease prevention	37.3 %	57.5 %	<i>p</i> *=0.07
Adherence to dental treatment	12.4 %	74.5 %	<i>p</i> *=0.00
<b>Factors affected by oral health literacy skills</b>			
Dental health knowledge of the patient	67.2 %	89.9 %	<i>p</i> =0.04
Oral health behavior	45.7 %	78.9 %	<i>p</i> =0.04
Dentist-patient communication	78.5 %	98.2 %	<i>p</i> =0.10

## DISCUSSIONS

Two studies that assessed the level of health literacy in adults and adolescents in Bucharest confirm data from the literature showing that there is correlation between patients' education level, socio-economic status, pattern of dental visits, and self-perception of the oral health status [9, 10].

Prevention in dental care is less effective in patients with low level of knowledge and oral health literacy because they usually don't understand the importance of prophylaxis, regular check-ups and a healthy life-style [10].

There is a bidirectional relationship between health literacy and medical knowledge: literacy skills increase vocabulary and this could improve the comprehension of medical information [9].

Lack of dental knowledge is an important predictor for reduced oral health literacy level; therefore, in dental practice it is necessary to identify patients with low health literacy level in order to tailor the education message [10].

In this regard, dental students need to receive continuing education in terms of oral health literacy concept in order to realise the importance of practical aspects in daily practice in offices and communities [9, 10].

It is important to raise awareness about the need to know and apply health literacy strategies in dentistry with the aim to improve the oral health outcomes for patients and individuals, whereas dentists and dental students are the main sources of adequate medical and dental information [9].

## CONCLUSIONS

Dental students, as future health providers need dental education throughout curricula regarding oral health literacy, an important aspect associated with inequalities in health status and getting communication skills for a patient-centered dental care, according with patient's oral health literacy abilities.

## REFERENCES

1. Sfeatcu IR, Dumitrache MA și colab. Conceptul de alfabetizare în sănătatea orală. Editura Curtea Veche, București, 2016.
2. Kickbusch I, Pelikan JM, Apfel F, Tsouros AD. (ed.) World Health Organization. Regional Office for Europe. Health literacy. Solid facts. 2013.
3. Nutbeam D. Evolving concept of health literacy. Soc Sci Med 2008;67(12):2072-78.

4. Zarcadoolas C, Pleasant A, Greer DS. Understanding Health Literacy: An Expanded Model. *Health Promot Int* 2005;20(2):195-203.
5. Vasilache S. The relationship between medical literacy and trust in healthcare in Romania. *Management and marketing*. 2010;5(2):93-102.
6. O'Loughlin K. Health Literacy: Foundation of Patient Understanding. Presentation 101 at The Art of Patient Understanding Symposium, Chicago, IL, October 29, 2014.
7. Bohlman LN, Panzer AM, Kindig DA. Health literacy: a prescription to end confusion. *National Academy of Sciences*. 2004
8. Zastrow S. Oral Health Literacy. Alternate Delegate, Minnesota, Resolution Number: 201/2015.
9. Sfeatcu R, Dumitrache MA, Căramidă M, Funieru C, Oancea R, Didilescu A. Aspects of oral health literacy in adults. *Medicine in Evolution* 2019;XXV(4):427-431.
10. Sfeatcu R, Caramidă M, Funieru C, Dumitrache MA, Ionescu E. The relationship between teenagers' oral health literacy, dental use behavior and dental health knowledge. *Medicine in Evolution* 2016; XXII(2):262-267