RELEVANCE OF THE PROPOSED THEME

The Faculty of Dental Medicine is an essential part of the University of Medicine and Pharmacy „Gr. T. Popa” Iaşi, a higher education institution founded in 1879. The advantage of the university - the tradition - combines happily with the experience and the permanent opening to new.

The Faculty of Dental Medicine has a valuable teaching staff, a modern technical and material base, indispensable in achieving of a competitive teaching act similar to the other national and European universities and a competent research activity, having also skilled graduates, able to provide qualitative dental care.

The edentulous, with its various forms is a complex clinical entity, with profound impact on the balance of the stomatognathic system, while having major implications for social inclusion of the patient in the context of aesthetic requirements that govern the actual society.

The edentulous prevalence in oral pathology diagnoses differ from one country to another, from one period to another, according to a factorial materialized aggregate degree of civilization of that country, in full compliance with health policies and place it prophylaxis in their charge, without circumventing the degree of culture and vision sanogenic each topic separately. Oral rehabilitation of edentulous implanto-prosthetic therapy requires a complex therapeutic algorithm according to the particular clinical case. The toothless association with small and medium substance loss requires augmentation techniques that can be run separately or simultaneously with the labor of implantation.

The large loss of substance in oro-maxillo-facial territory is a clinical entity commonly encountered in dental practice, characterized by a complex clinical picture with severe dysfunction at the morphological and functional level.

The treatment of substance loss by maxillo-facial prostheses and epitheses is characterized by addressing an area of excellence, which requires an accurate ongoing of the clinical stages, in conjunction with technology.

In this master we intend to deepen the concept of oral rehabilitation complex in losses of substance, detailing features of patients with loss of substance oro-maxillo-facial correlated with specific elements of technological nature, which in this area should achieve an efficient equipment level of precision. In the same respect we want to extend research aiming maxillo-facial prosthesis structure and epithesis in order to achieve a high level of biocompatibility.

The current therapies for the rehabilitation of patients with loss of substance in oro-maxillo-facial territory have a high level of complexity, gathering the systematic stages of a complete algorithm, the highest level that the practitioner must know him very well, emphasis falling on modern prosthetic methods in the loss of intra-extraoral substance after tumor ablation, trauma.
The Faculty of Medicine, one of the oldest higher educational establishments of our country was founded in 1879 and was later associated with the other two institutions complement medical training area - the Faculty of Pharmacy and the Faculty of Dentistry. In 1991, the Institute received the university status, and later comprises also the Faculty of Medical Bioengineering, one of its kinds in Romania. The university now boasts a valuable teaching staff and material and technical base with an updated, proper conduct of teaching and scientific research.

The Faculty of Dental Medicine, a component part of the University of Medicine and Pharmacy „Gr. T. Popa” Iaşi, represents one of the most important medical schools in our country, imposing in over 4 decades as a prestigious institution in Romania and other foreign countries.

The European integration of the Faculty of Dental Medicine, Iasi, is reflected by its CIDCDF accreditation (The International Confederation of Deans of Total or Partial French Expression) – the evaluation being made in September 2008 with positive results. Equally, the Faculty of Dental Medicine was evaluated in 2001 by ADEE (The European Dental Association for Education), gaining with this occasion the international recognition of its values and achievements. The Dean of the Faculty of Dental Medicine, Prof. Univ. Dr. Norina Forna, is ADEE Ambassador for Romania and member in the CIDCDF Committee.

The modern academic organization, broadening the teaching staff, students increase, upgrading and equipping the clinics profile requirements of the third millennium have made today's faculty to represent a true model for dental education.

Currently the educational process includes forms of long-term education (6 years), for training future dentists and short-term (3 years), for training specialists for additional professions (College Dental Techniq and College of Dental Nurses). The Faculty organises also postgraduate training for interns, residents, graduate students and dentists who are trained to obtain specific skills. The Faculty of Dental Medicine is one of the largest institutions of its kind in the country, 250 teachers preparing around 850 Romanian and foreign students, more than 130 graduate students and many physicians are in various stages of postgraduate training. Since 2009, within our Faculty there are opened Study Programs in English and French, where students from the entire world can apply.

The academic curriculum is equivalent to that used in the most prestigious universities, aiming the development of a modern education, modulated, which enables the multidisciplinary study, and is correlated to a systematic, theoretical and practical knowledge and the level of students' knowledge is evaluated through the transferable credit system used in the European Union, which facilitates international interacademic relations.

In recent years we pursued to achieve the best possible combination of theoretical and practical training duration and the percent of subjects were carefully assessed so that dental disciplines currently occupie 50%, 20% medical and surgical disciplines, fundamental subjects and disciplines of education
25% and general medical disciplines 5% of total training hours for students, figures that show a judicious balance and ensure a complete education of future practitioners.

The intensification of the training in dentistry has made diversifying the main lines of traditional dental education by introducing for the first time in Romania in line with European standards of new disciplines: Endodontics, Pedodontics, Orthodontics, Semiology Dental, Dental Ergonomics, Biomaterials, Bioinstrumentation, Gnatology, Implantology, Community Dentistry, Health Management, Public Oral Health, Geronto-dentistry, Methodology Research, Maxillo-facial Prosthesis and other.

The emphasis on establishing skills for each stage of education and each discipline ensures adequate preparation for future dentists and further improvements in the premises for a further postgraduate training.

The students' preparing and of the other persons enrolled in post-graduate education forms takes place in university laboratories and clinics but also in university laboratories and in some of the biggest hospitals in town, where they are finalzing their specialized training but also the preclinical and medical-surgical.

The significant upgrading of material basis in recent years, which includes performance dental units, a radiology service for the next generation, a dental laboratory of European standards, a complex simulation laboratory, suitably equipped conference rooms, clinics and university's libraries, as well as the computer network, providing excellent conditions for the theoretical and practical training of students, residents, doctoral students and doctors in training postgraduated courses.

A crucial event was the inauguration of the new educational base for students of our faculty, location that can be compared with those of European Universities. The presence of all disciplines within the same location gives restorative nature of interdisciplinarity, as well as providing for the graduate student the overall image training, the deeply inherent of knowledge with a profound medical character of each stage.

This is the first Romanian model of educational base, achieved according to a project based on a entirely original idea, which respects the highest European exigencies. The space is designed and compartmented in such a way so the patients circuit takes place according to the European Union standards, stimulating the practical – integrative character (clinic, technologic, didactic and for research), in the permanent presence of physician / nurse / dental technician triplet.

The building is new, being officially open in May 2007, and offers the necessary infrastructure of a competitive education, at the highest standards and a rigorous medical assistance – materialized through the contract with the Health Assurance House, which refers to all the physicians / teaching staff which work in this institution. Its main objective is to assure to our students the approach of a comprehensive therapeutic algorithm, correlated with simulated and clinical aspects and not eluding the modern technologies – essential directions for a high quality medical act, according with the European requirements.
That the two faculties, Dental and Medical Bioingineering have a shared location is not by chance but is the only possibility of achieving a competitive partnership, being made the necessary infrastructure for carrying out the research and educational activities at the European level, which gathers biomaterials, biotechnology and biomechanical studies of the practical impact of clinical dental aspects.

European facilities of the educational base, the presence of the computerized systems for image acquisition and storage contribute to the development of effective databases and the achievement of competitive therapies.

Equally the computerized transmission of the image associated with modern simulation techniques which preface practical manoeuvres are leading to a high academic teaching process.

The consulting room for implanto-prosthetic rehabilitation is one of the best equipped from Iaşi city and the whole country, being connected through the base’s television system with closed circuit to the amphitheatres where the didactic activity takes place. This consulting room has all the necessary endowment to achieve stomatological interventions highly accurate and complex and fulfill all the sterilization requirements necessary for a space well-fitted to make sophisticated surgical interventions in the maxilla-facial area.

Therefore in this consulting room we made live surgical interventions from the implantology domain, using also revolutionary methods – the KOS implants, non-traumatic, with limited bleeding, gingival insertion and immediate loading – which gives ergonomy to the developing of therapeutic stages, cut short the times with a few months and allows to the patient to return to a normal life much faster.

The intervention was transmitted in real time in front of an auditorium made from physicians participating to our postgraduate lectures and this was for them an unique experience and opportunity, which cannot be found nowhere else in our country and situates our possibilities at the level of the most prestigious universities in Europe.

The Faculty of Dental Medicine is developing a comprehensive scientific research, which includes all levels (basic science, clinical and epidemiological research), involving all departments and disciplines, through cooperation of all teachers, students and graduates, which are in various forms of postgraduate training. The prestigious scientific results are found not only in numerous articles in professional journals and also the monographs and numerous treaties which are points of reference in the Romanian literature but also in the nominating in our faculty of a Collaboration Centre O.M.S.

The Faculty of Dental Medicine in Iaşi has established contacts and developed relationships with international interacademic prestigious institutions in Freiburg, Paris, Lausanne, Brussels, Athens, Nancy, Haddasa and Frankfurt being recognized as an institution that forms professionals and as a center of medical research with results of international interest.

Through cooperation with the Ministry of Health, Ministry of Education and Research, and the National Union of the Dental Associations, our faculty wishes to help to promote oral health, improve relevant laws and promote and develop the profession of dentistry.
One of the main achievements of our faculty during the last years is represented by the winning of three projects with structural European funds, which are developed in order to modernize the dental medical education process and to raise it to the highest European standards of quality. These three projects are interrelated, combining the theory and the practice as well as the didactic act with the last-generation endowments. These projects will allow materializing the first integrated curricula of dental medicine, unitary at national level. We implement in Iaşi the first Pilot Center of Formation Specialists and Resources in Oral Rehabilitation – cutting-edge field in dental medicine, which introduces in Romania for the first time the most modern methods of education in the world – telemedicine systems and computer-assisted simulation. The efficacy of the obtained results is evaluated through the partnership with an abroad university, “Johann Wolfgang Goethe” – Frankfurt, which will create the adequate framework for a permanent adjustment according with the European exigencies.

To conclude, we can enumerate a few didactic performances under the sign of new, European standards, avant-garde and interactivity:

- The introduction in the Romanian medical education of the periointegration concept, complex concept which gives viability to the implant-prosthetic solutions; its basis are found in fundamental researches regarding the deposition of active hydroxyapatite on the implant surface, research subject included in the national CNCSIS grants.

- Beginning with the interrelation theoretical preparation – practical applicability, the dental physician – dental technician – medical assistant trinomial was introduced in the medical education and the Education Clinical Base functional as well as, for the first time in Romania, in the Iaşi Dental Medicine Faculty curricula; these aspects lead to a competitive dental care activity, connected to the exigencies of the European Union.

- The introduction of the concept of minimal invasive diagnosis and therapy which is found between the noninvasive diagnosis methods (computerized thermography or alternative methods for treatment - laser) in the students curricula – master studies.

- The introduction, for the first time at national level, of the population screening regarding the oral status correlated with the general health status, in order to implement a national prophylactic program for adults. We created The Day of Prophylaxis, at regional level (Moldova), which offer the appropriate framework to quantify the population health status and sanitary education level, and to share free of charge oral hygiene products and documentation materials.

- The implementation of the concept of computer assisted simulation by bringing in faculty the specific equipment available only in a few top international universities (USA and only 2 European universities) through the European project „Strategies of practical preparation for
the quick integration on the labor market of the students specialized in dental medicine”, contract no.: POSDRU/90/2.1/S/63942.

- The introduction in the usual study methods of the virtual library through the European project „Adaptation of the superior dental medical education offer to the labor market needs and the knowledge - based society”, contract no.: POSDRU/86/1.2/S/63699.

- The providing of a functional endowment unique in Europe, comparable with similar Universities from Canada and USA, with boxes system, computer in each box and modern methods to transmit the information, based on the video and audio connection between the spaces reserved for the patients treatment and the faculty’s amphitheaters, through a TV system with closed circuit.

- The acquisition through European fund of the last – second technologies, instead some common acquisitions in the same domain. Some relevant examples are the computerized axiography, the ROBODENT system (POSDRU Project, contract no. 62208), as well as the computer assisted simulation systems.

The Faculty of Dental Medicine has a rich and ancient tradition not only in terms of medical university but also in post-graduate training for graduates, offering the possibility of PhD, residential and perfectioning courses.

The excellent teachers trained and the modern technical-material basis are arguments that sustain the ongoing of the Postgraduate Master programs at the Faculty of Dental Medicine, and the areas proposed for this program include development of priority directions of current dentistry worldwide.