

DentEdEvolves VISITATION

**FACULTY OF STOMATOLOGY
MEDICAL UNIVERSITY**

SOFIA

BULGARIA

Pre-Visit Self-Assessment Report
combined with
Visitors Comments

20 – 24 OCTOBER 2001

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PART A

INFORMATION FOR DENTED VISITORS

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Dates for visit: 20th – 24th October 2001

Visitors

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Visitor 5	Rolf Attstrom	Periodontology	Malmö	Rolf.attstrom@od.mah.se
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PART B

SECTION 1: INTRODUCTION AND GENERAL DESCRIPTION

1.1 Introduction

The Faculty of Stomatology is one of the 5 faculties of the Medical University in Sofia.

The Medical University - Sofia is the oldest state medical institution of higher education. It was founded by Decree of His Majesty King Ferdinand in 1917 as a Faculty of Medicine at Sofia University. In 1950 it became independent as Medical Academy with departments of Medicine and Dentistry, joined in 1951 by the Department of Pharmacy. After several following reorganizations by a resolution of the Parliament of May 21, 1995 the institution of higher education became a Medical University. The Medical University of Sofia is the successor to the Medical Academy.

The study of stomatology in Bulgaria initiated in 1942, when the Medical Faculty in Sofia announced the newly opened Dental Department. In 1950 the Department was converted into Stomatological, and in 1951 was founded the Faculty of Stomatology. Since then 12 000 Bulgarian and 679 foreign students have graduated from the Faculty. At present 713 Bulgarian students are studying at the Faculty of Stomatology - Sofia and 164 foreign students from 20 countries.

Duration of the education is 5 years and 6 months a pre-graduate probation. The foreign students study one year Bulgarian language at the Department of Foreign Languages at the Medical University - Sofia. After successfully finished preparatory language course students receive a certificate to enroll in first course of the specialty »Dentistry».

The Faculty of Stomatology has 8 departments: Conservative Dentistry, Periodontology and Diseases of Oral Mucosa, Pediatric Dentistry, Prosthodontics, Oral and Maxillofacial Surgery, Orthodontics, Social Medicine and Public Dental Health and Radiology. Training in dental disciplines is held there. Training in medical disciplines is held in the departments of the Medical Faculty.

The academic staff of the Faculty of Stomatology consists of well-qualified lecturers. Each of them has a Master's degree and all are Doctor Stomatologists (DrS). Some lecturers have a scientific degree PhD, and others – PhD and DMSc as well. This enables the Faculty of Stomatology to be an important center in our country for under-graduation, post-graduation and continuous dental education of dentists, for forums, and discussions, as well as for research work.

Students and post-graduate students obtain contemporary knowledge and practical skills. Some of them take their first steps in research work. Furthermore, we hope that they will be learned to be honest, steady, diligent, sympathetic, and with good manners.

Faculty of Stomatology is in permanent and dynamic contact with the others faculties of the Medical University and University Hospitals, and also with some institutions of Bulgarian Academy of Sciences.

Faculty is situated in the wide downtown. There are good transport communications with the culture capital center.

Introductory Visitors Comments (also [please](#) see the Executive Summary in Section 22 at the end of this Report)

These are the preliminary comments of the Visitors and are clarified and developed at the end of the different sections of this self assessment document. At the outset the Visitors wish to thank the Faculty for their warm reception and compliment those who put together this document in preparation for the DentEd visit. The Dean and the Faculty made every possible effort to put all the information we required at our disposal and every effort was made to show us things as they are without exaggeration or omission. It had a vibrant staff whose members were very proud of its history and the influence of its founding Fathers from both the western and eastern parts of Europe. It was fortunate in having wise and effective leadership in its Dean, Heads of Department and Senior Staff.

The Institute of Stomatology in Sofia in geographic terms is one of the most easterly dental or stomatological schools in Europe. It demonstrates a combination of influences from different parts of Europe. It was apparent that the Faculty of Stomatology had considerable potential for development. Although the institution has a wealth of intellectual resources there are serious funding issues in an economy that is undergoing

major changes. This presents major challenges in prioritizing what might be achieved and requires careful and wise strategic planning for future developments.

Within the Faculty there were those who were keen to uphold the traditions of Stomatology with strong emphasis on the medically related subjects while others were keen to see a greater move towards odontology as one finds in the European Union countries. Nevertheless all were keen to achieve the highest standards and there was a strong sense of wishing to do what is best for the Faculty, patients and students in Sofia. The Visitors commended the notion of identifying educational objectives and outcomes to be achieved rather than concentrating on differences in terminology.

The Visitors were concerned about the application of universal cross-infection control principles which were not adequately applied in many of the clinics. For example, students with gloved hands touched and contaminated charts, lights, chairs etc. Also in some clinics bottles of different medicaments suggested that these could be infected with contaminants from different patients if students and staff were to dip an instrument into them. It was not clear as to whether dental burs were sterilized or disposed of between patients who were treated. The Visitors would be seriously concerned if that were the case but were not sure. The major consequences of inadequacies in this area, Hepatitis A, B, and C and HIV infection are just some examples which could have the most serious consequences for patients and the dental team.

1.2 Mission statement and primary aims and objectives

The Faculty of Dentistry in Sofia is one of the two dental schools in Bulgaria where dental professionals are trained.

Primary aims of the Faculty of Stomatology are to provide high quality undergraduate, postgraduate and continuing education in dentistry and oral health care.

The main objectives of the Faculty are:

- To provide students with basic knowledge and clinical skills for their future professional activity;
- To provide clinical training based on a broad knowledge of the theoretical basis of modern dental science.

Visitors Comments

The visitors would encourage a more clearly defined integrated mission statement agreed by all departments in respect of the stomatological institute's three inter-related primary functions.

- Education
- Research
- Patient care

The Visitors recommend a group that should include young staff to report to the Dean on a clear mission statement. There should be co-ownership between the Ministries of Health and Education and the University, as a stomatological teaching institution is unique in the University. The Mission Statement should embrace influences from colleagues and society. This has serious budgetary implications.

The suggested working group should refer to other European models in preparing a brief Mission Statement that should be agreed on consensus and supported by all.

The mission statement should contain clearly defined aims and objectives which should be stated and achieved and whose outcome should be measured. It is clear that the limitation of resources requires careful consideration as to what can be achieved in each primary function and it would be of considerable benefit to all that once agreement is reached all should appreciate and share the responsibility for upholding the mission statement.

1.3 Characteristics of Curriculum

The present curriculum has been established in 1990. In the recent 2-3 years it was changed according to some structural reorganizations in the Faculty, the necessity of consideration with the Higher Education Law, enlargement of lecture course and introduction of optional subjects.

Dental education is carried out in 5 courses and 6 months pregraduation probation. Each course is divided in **2 terms** - winter, approximately from 15 September till 22 December, and summer, approximately from 15 February till 1 June. **Each term consists of 15 weeks.** The average weekly workload is 33 hours.

The curriculum is based on subject principles. It includes 39 subjects: 27 fundamental and basic medical sciences and 12 dental sciences. The curriculum involves 4945 hours: 1630 h.- lectures and 3315 h. - practice. The ratio is 1:2.

From the subjects 28 are general medical disciplines, and 12 are dental disciplines. The study of the dental subjects spreads over 2725 h., from which 685 h. are lectures and 2040 h. are practical exercises the ratio being 1:3.

After completing every year practice is carried out, and after the 10th term - pregraduation probation. The study ends with state exams in 6 basic subjects: Prosthodontics, Oral Surgery, Conservative Dentistry, Pediatric Dentistry, Orthodontics and Periodontology.

The adopted in the EU Transferable Credit System is applied. ?

Advantages

1. The hours in the curriculum for practical exercises predominate over the lecture hours in the medical sciences as well as in the dental sciences.

2. The percentage of hours for the dental sciences compared to the medical sciences increases continuously in the process of study from the 1st to the 5th course.

3. There is a strict didactic sequence in the curriculum: fundamental disciplines, pre-clinical and clinical disciplines in horizontal and in vertical plane. For example, Pathophysiology follows Physiology in the horizontal plane, in the vertical plane - Anatomy, then Pathoanatomy, clinical disciplines.

4. The curriculum involves good interdisciplinary relations. It is a good background for continuing education.

5. The matter of prevention, etiology, pathogenesis, clinical and para-clinical character, diagnostics, treatment and rehabilitation of dental diseases is well included in the program of each discipline.

Disadvantages

1. The subject principle is a certain premise for a repetition of some topics in different disciplines (for example - matters of prevention).

2. The subject principle is a premise for a certain one-sided examining (consideration) of some topics (for example - the occlusion)?

3. The subject principle makes the system relatively rigid towards the introduction of new topics, which cannot be established as an independent discipline at the same beginning (related to our possibilities).

4. The stomatological aspect of teaching in medical disciplines is insufficient, i.e. it is not subordinate to the future immediate professional engagement of the dentist.

Awaited changes

The awaited changes are the subject principle to be combined with the module and problem-based-learning for a start?

Examinations

The students have the right to pass examinations 3 times in every subject during the year: in ordinary - winter, summer and supplementary- winter, September and final. It is permitted to take a deferred pass with 2 exams. The examinations in general medical subjects consist of test and an oral exam.

The examinations in dental subjects are:

1. Practical exam - for Pre-clinics - on models or phantom heads; for Clinics - on patients.

2. Theoretical exams are on 3 questions - one - written, and 2 - oral.

The state exams are oral.

Received degrees

Those who pass the exams successfully, receive a master degree and a qualification of a dentist (Doctor Stomatologist - DrS) ???.

That, who has defended a dissertation and because of that could apply for an academic rank "Associate Professor" and receive an academic degree PhD, and the following stage of a defended dissertation is for applying for an academic rank "Professor" and receiving an academic degree "Doctor in Medical Sciences" (DMSc) as well.

Structure of training in the curriculum

First course

13 subjects are studied: cytology, dental materials, physics, chemistry, anatomy, histology, biochemistry, Bulgarian language, foreign languages, biology, biophysics, Latin language, computer technology and pre-clinics of prosthodontics.

Exams in: cytology, dental materials, physics, chemistry, biology, biophysics, Latin language, computer technology and Bulgarian language.

Second course

10 subjects are studied: biochemistry, Bulgarian language, foreign languages, anatomy, histology, pathology, physiology, microbiology, pharmacology, pre-clinics of prosthodontics and pre-clinics of pediatric dentistry.

Exams in: anatomy and histology, biochemistry, Bulgarian language, foreign languages, physiology and microbiology.

Third course

12 subjects are studied: general and clinical pathology, pathophysiology, pharmacology, social medicine and public oral health, pre-clinics of prosthodontics, clinics of prosthodontics, pre-clinics of pediatric dentistry, clinics of pediatric dentistry, pre-clinics of conservative dentistry, pre-clinics of dental surgery.

Exams in: general and clinical pathology, pathophysiology, pharmacology, general surgery, medicine of disastrous situations, social medicine and public oral health, pre-clinics of prosthodontics, pre-clinics of pediatric dentistry, pre-clinics of conservative dentistry and pre-clinics of dental surgery.

Fourth course

13 subjects are studied: occupational diseases, radiology, oto-rhino-laryngology, hygiene and epidemiology, internal medicine, infectious diseases, obstetrics and gynecology, clinics of prosthodontics, orthodontics, clinics of pediatric dentistry, clinics of conservative dentistry, periodontology and oral mucosa diseases and clinics of oral and maxillofacial surgery.

Exams in: occupational diseases, radiology, oto-rhino-laryngology, hygiene and epidemiology, internal medicine, infectious diseases, obstetrics and gynecology

Fifth course

10 subjects are studied: forensic medicine and deontology, dermatology and venereology, neurology and psychiatry, ophthalmology, clinics of prosthodontics, orthodontics, clinics of pediatric dentistry, clinics of conservative dentistry, periodontology and oral mucosa diseases and clinics of oral and maxillofacial surgery.

Exams in: all 10 subjects

PREGRADUATION PROBATION - 5 years and 6 months

Subjects	Exam	Total	Lectures	Practical Exercises	I year		II year		III year		IV year		V year	
					I	II	III	IV	V	VI	VII	VIII	IX	X
Computer Technology	II	30	-	30		0/2								
Physics	I	75	45	30	3/2									
Biophysics	II	30	15	15		1/1								
Chemistry	I	75	45	30	3/2									
Biochemistry	III	120	60	60		2/2	2/2							
Biology	II	105	45	60	2/2	1/2								
Latin	II	60	-	60	0/2	0/2								
Foreign Language /Bulgarian,English, French,German, Russian/	III	90	-	90	0/2	0/2	0/2							
Anatomy and Histology	I, III	330	105	225	2/3	3/6	2/6							
General and Clinical Pathology	V	120	60	60				2/2	2/2					
Physiology	IV	180	90	90			2/3	4/3						
Pathophysiology	V	75	45	30					3/2					
Microbiology	IV	120	60	60			2/2	2/2						
Pharmacology	V	105	45	60				1/2	2/2					
Surgical Diseases	VI	75	30	45						2/3				
Medicine of Disastrous Situations	VI	30	15	15						1/1				
Occupational Diseases	VIII	30	15	15								1/1		
Social Medicine and Dental Public Health	VI	90	45	45					1/1	2/2				
Otorhinolaryngology	VII	30	15	15							1/1			
Hygiene and Epidemiology	VII	60	30	30							2/2			
Internal Medicine	VIII	120	60	60							2/2	2/2		
Pediatric and Infectious Diseases	VIII	60	30	30								2/2		
Obstetrics and Gynecology	VIII	30	15	15								1/1		
Forensic Medicine	IX	30	15	15									1/1	
Dermatology and Venereology	IX	45	15	30									1/2	
Neurology and Psychiatry	IX	30	15	15									1/1	
Ophthalmology	IX	30	15	15									1/1	
Dental materials	I	60	30	30	2/2									
Preclinics of Prosthodontics	V	315	75	240		1/2	1/4	2/6	1/4					
Clinics of Prosthodontics	X	390	75	315						1/2	1/4	1/4	1/5	1/6
Orthodontics	X	240	90	150							2/2	2/2	1/2	1/4
Preclinics of Pediatric Dentistry	V	60	30	30				1/1	1/1					
Clinics of Pediatric Dentistry	X	300	75	225						1/3	1/2	1/2	1/3	1/5
Preclinics of Conservative Dentistry	VI	165	45	120					2/4	1/4				
Clinics of Conservative Dentistry	X	375	60	315							1/6	1/5	1/5	1/5
Periodontology and Oral Mucous Diseases	X	195	60	135								1/3	1/3	2/3
Preclinics of Oral Surgery	VI	180	60	120					2/4	2/4				

Clinics of Oral and Maxillofacial Surgery	X	405	75	330							2/4	1/6	1/5	1/7
Maxillofacial Radiology and Oral Diagnostics	VII	45	15	30							1/2			
Dental Allergology		20	10	10										5 weeks x2h/2
Total Hours		4925	1630	3295	27	27	28	28	34	29	38	41	38	39

PREGRADUATION PROBATION: STATE EXAMS:

- | | | |
|---------------------------|-----------|---------------------------|
| 1. Prosthodontics | - 39 days | 1. Prosthodontics |
| 2. Oral Surgery | - 39 days | 2. Oral surgery |
| 3. Conservative Dentistry | - 29 days | 3. Conservative dentistry |
| 4. Pediatric Dentistry | - 20 days | 4. Pediatric Dentistry |
| 5. Orthodontics | - 20 days | 5. Orthodontics |
| 6. Periodontology | - 10 days | 6. Periodontology |

POSTGRADUATE STUDY

The Faculty of Stomatology - Sofia carries out specialization in the following specialties:

Specialty	Duration
Operative Dentistry and Endodontics	2 years
Pediatric Dentistry	3 years
Prosthodontics	3 years
Oral Surgery	3 years
Maxillofacial Surgery	4 years
Orthodontics	3 years
Periodontology and Diseases of Oral Mucosa	3 years
Social Medicine and Public Dental Health	3 years
General Dentistry	3 years
Maxillofacial Radiology and Oral Imaging Diagnostics /after acquired basic dental specialty/	2 years

Visitors Comments

Visitors comments in respect of the different components of the curriculum will be found at the end of each subject area.

A central recommendation is the identification of clear outcome expectations defining what a student should be able to “do” on completion of his/her training. There seemed to be some ambiguity as to the definition of competences and the Visitors suggest that particular attention might be given to the Clinical Competences set out as guidelines by the European Union’s Advisory Committee on the Training of Dental Practitioners. This will be found on the DentEd web site under RESOURCES at www.dented.org.

The Visitors would encourage the maximum participation and **protection?** of students in giving feed-back from their learning process and to have their input on curriculum planning and implementation. Students’ feedback is a critical component of a modern educational approach and the Visitors recommend the establishment of an effective decision-making curriculum committee that would not be undermined by difficult decision making structures.

In general the Visitors believed that there was too much work and time spent in the laboratories. There was a significant need to strengthen the awareness of the importance of integrated holistic patient care. This was prevented by the heavily segregated departmental approach.

The Visitors strongly advise that a **Curriculum Committee** reporting to the Dean be established to carry out the curricular reform, with a significant influence within the system. We suggest that it should include all levels of teachers. One of the main functions of this committee would be to integrate as much as possible the curriculum in order to change the present divergent departmental independent planning.

The structure of such a Curriculum Committee should include:

- Faculty Members at all levels with emphasis on the future (junior staff members?)
- Students
- Administration

The responsibilities of the Curriculum Committee should include:

- Review of the present curriculum including other EU curricula
- Content
- Sequencing
- Scheduling
- Quality assessment

There is a serious need to avoid excessive detail and duplication which is inevitable in the present approach. This problem is by no means unique to Sofia and probably not unique to the Faculty of Stomatology in Sofia either.

Such changes should inevitably result in a reduction in time in the basic, biological and medical sciences although these are critical elements of a modern dental or stomatological program. The Visitors suggest that the Curriculum Committee with the strong endorsement of the Dean and Heads of Department should develop a problem-oriented approach with emphasis on fundamental essential principles and elimination of detail that is detrimental to the learning process. The knowledge base of the medical sciences doubles every two years so it is impossible to teach everything to students. Instead it would be much better if students were taught how to keep abreast of new discoveries with special reference to the use of information and communication technology.

The present curriculum is mainly structured around subjects and disciplines. This means that each department can formulate the teaching/learning objectives independently and make changes as they wish, as long as it remains within the overall frame of the curriculum. The great number of disciplines involved (28 medical, 12 dental) and this discipline-structured approach is limiting the possibilities for change and for an integrated structuring and managing of the overall curriculum.

The visitors recommend to look at the curriculum from three different angles for further development:

Educational

Content

Administrational/organizational

1) Educational

Educational science demonstrates various successful models for improvement. Examples of these models are:

- student centered instead of teacher oriented
- problem based learning instead of factual learning
- programming in study load, including contact hours
- providing variety in learning modes and materials
- implementation of a quality management system
- frequent feedback
- self evaluations

2) Content

The following critical areas need to be considered for further improvement in the curriculum content:

- the amount of technical lab work to be done by students especially in the area of prosthetic dentistry;
- scientific training should be strengthened in the curriculum (e.g. a course on "scientific writing and critical thinking" and a learning objective such as how "to participate in a research project";
- integration within the curriculum at two levels
 - medical and clinical dental subjects
 - basic science and dental subjects
- earlier start with pre-clinical and clinical dental subjects;
- strive more towards a problem oriented curriculum (this might lead to a reduction of total time spent on basic sciences and medical subjects).

SECTION 2: FACILITIES

2.1 General Explanation

The Faculty of Stomatology constitutes a separate building on the Medical University in Sofia. It has a total floor area of 29230.72 m². There are 2 lecture rooms: the first is with 263 places, and the second - with 272 places. The lecture rooms are supplied with necessary appliances for showing slides, video- and films. Besides there are 18 clinical halls with 173 dental units, 5 pre-clinical phantom halls with 62 work places, 12 seminar halls with 245 places, 22 technician halls with 180 work places, 3 probationer's halls with 42 dental units and 1 hall for postgraduate students with 15 dental units. The clinical halls are built so that each student uses an individual small workroom set up with necessary appliances for clinical work. The clinical halls are divided into 9-10 separated small workrooms.

In the building of Faculty there are a microbiological laboratory, a laboratory in dental materials, a dental laboratory, a physical therapy section, a roentgenological section, a repair sections of technicians.

The study in general medical subjects (anatomy, biology, pathoanatomy, internal medicine, general surgery etc.) is held in lecture rooms and seminar halls at Medical Faculty, and clinical exercises in infectious diseases, internal diseases, general surgery, pediatrics etc. - in hospital base of university hospitals.

2.2 Research Laboratories

2.2.1 Laboratory Dental Materials

Introduction

The laboratory helps and participates in training of undergraduate and post-graduate students in basic and specialized courses of dental materials science with lectures and practical exercises. Basic methods for testing of dental materials are applied in the laboratory. Physical, mechanical, technological, chemical and some biological properties of these materials are determined with available equipment. Technologies for producing of dental materials are developed and founded in the laboratory. Distilled and bidistilled water, disinfecting solutions, plastic waxes, stains, etching substances, solutions for Physiotherapy purposes are prepared here.

Manifestations of pathogalvanism and disintegration, and these methods are diagnosticated and shown to the undergraduate and the post-graduate students.

1. Solubility of dental materials.
2. Functional suitability of prosthetic constructions.

Strengths

Highly qualified laboratory personnel; application of modern methods of testing and diagnostics.

Weaknesses

The greatest part of the equipment is outdated - more than 20 years in use.

Innovations and Best Practices

Best application of the acquired experience in teaching and diagnostic activities.

An innovation in the laboratory is a camera oven, 3.6 kW, max. to 1300o C for heat treatment of metal wares, firing of chemical substances, ceramics etc., where the required temperatures are up to 1300o C. There is an electronic thermoregulator for different technological conditions. A technology for producing of porous hydroxyapatite ceramics is developed.

2.2.2 Microbiological Laboratory

Subject of activity

Complete microbiological diagnostics of outdoor and indoor patients of the Clinics of the Medical University in Sofia, the city of Sofia, and Sofia region.

Strengths

1. Specialized microbiological diagnostics of dental and medical diseases.
2. Specialized complete focal and allergological diagnostics of out- and indoor patients.

Weaknesses

- Microbiological laboratory - lack of funds for providing of media and reagents.
- Allergological laboratory - difficulties of pure technical character. Lack of funds for providing of contemporary equipment.

Innovations

- Thermography
- Electroacupuncture for diagnostics of medical and dental diseases.

2.3 Library

General Explanation

The library is founded in 1953. Its main aim is to satisfy the information needs of the undergraduate and the post-graduate students and the academic staff of the Faculty of Stomatology in Sofia. It is the greatest specialized dentistry library in Bulgaria. The practitioners in Sofia and the country can use the library as well.

Strengths

The library disposes of 57449 documentary units. 1/3 of the books are in the field of medicine.
Books - 51020: textbooks - 30290, monographs - 20730.
Periodicals - 6429.

Current periodicals - 64 titles: 31 are subscribed and 33 titles - received through international journal exchange and as a gift.

The library disposes of a reading room (with 30 places), a copying machine for library documents and 3 computers.

The work time is: Monday - Thursday: 8 a.m. - 19 p.m.; Friday: 8 a.m. - 16.30 p.m.

The library staff consists of 3 librarians.

Access to Other Library Resources

The library has access to books of many medical libraries in Bulgaria and abroad through international book lend. It is in close relations with the Central Medical Library in Sofia and the library at the Faculty of Stomatology in Plovdiv.

There is an Internet access and references are made using MEDLINE.

Information Service

The library disposes of an alphabetic and a classified catalog. Since 2000 a training course for using the information sources and Internet has been held.

Weaknesses

Because of lack of funds new monographs and textbooks cannot be bought in time, more journal titles cannot be subscribed, another reading room with computer workstations cannot be equipped and the existing cannot be refurbished as well.

Best Practices

Classical and modern means for information service are combined successfully. The readers are informed not only from catalogs, lists of periodicals, and bulletins for new books, but also from Internet.

Innovations

A program for an electronic catalog of books and registration of readers and books in circulation was bought in February 2001.
The list of the current periodicals and the bulletin for new books are introduced through the Faculty Intranet.

Visitors Comments

The building housing the Faculty of Stomatology was built in 1973 and the space within the building is more than adequate. It could accommodate a significant change in the delivery of the curriculum and patient care. The visiting team did note that much of the equipment was more than twenty years old. The present budget is seriously deficient to provide the necessary resources for the replacement of the existing equipment and the implementation of new technology, especially in the area of ICT. It is important that adequate resources must be identified to allow for significant purchases of new equipment in order to maintain and improve the quality of education, patient services and research activities.

The visiting team did not have the opportunity to visit the research facilities except the microbiology research lab. However, that was mainly a service area. The visiting team recommends that adequate resources be identified to support the research needs of the Faculty and students.

The visiting team acknowledges the difficulty in obtaining funds. The team therefore thinks that it is important that careful planning is a first step. This process should include a thorough analysis of the present state of the physical plans and equipment.

Recognizing that the needs may be extreme the plan should include a year by year strategy to meet these needs.

The Library, supervised by a librarian, is seriously affected by inadequate resources. There is a major shortage of spaces for the population of stomatological students. The Visitors noted some current journals but commend an increase in the available range because of its positive influence on research and independent study, essential components of a Faculty which shows considerable potential.

There was a serious need for information and communication technology and this is a growing area, although the visitors are fully aware of the resource problems. There are current ICT systems for library application that would help improve the efficiency of the library services and the benefits of this would be far reaching.

SECTION 3: ORGANIZATIONAL AND ADMINISTRATIVE STRUCTURES

Person in School who will explain and show this to the visitors:

Name: Galina Konstantinova

E-mail: dental-ask@sun.medun.acad.bg

3.1 Overview

The Faculty of Stomatology is a Faculty at the Medical University in Sofia. That is in fact a state institution of higher education and as a result of this the management system is strictly subordinate to the state regulation of higher education and the financial system - to the budget law.

Management of internal financial supply uses flexibility and original decisions.

- See the Diagram of the Organizational Structure of the Faculty of Stomatology on page 20.

3.2 Budget of the Faculty of Stomatology

Budget is formed by state subsidy and proper incomes.

For 2001 the budget is following :

- State subsidy : 1 743 156 DM
- Proper incomes: 1 294 030 DM

1 Bulgarian lev = 1 German Mark

Students' fees

Depending on their financial statute the students are divided into:

- Students, received /enrolled/ by state subsidy and with an annual fee 241 DM;
- Students with a proper allowance. They are foreign students. A part of them pays a total fee (\$4950), others pay 30% (Macedonian students) or 50 % (students with double citizenship).
- A third group of students who do not pay because they are enrolled by international agreements.

Visitors Comments

It is difficult to comment with confidence on the decision-making structures within the Faculty of Stomatology and especially the issue of responsibility for financial control. This is a central issue in the effective management of changes and the Visitors recommend that the Faculty, in-so-far as is possible, have greater devolved decision-making responsibilities. A stomatological faculty is unique because of its patient care services, applied clinical research and the heavy administrative load. Attention is required towards the needs of the community, in identifying priorities in health care and in the provision of a wide range of specialist services not otherwise available. Care for special need patients such as the medically compromised and socially disadvantaged groups in society is also an issue to be considered. We refer to our recommendations about a Mission Statement jointly authored and agreed by the University, the Departments of Health and Education and the Faculty of Stomatology as the primary focus.

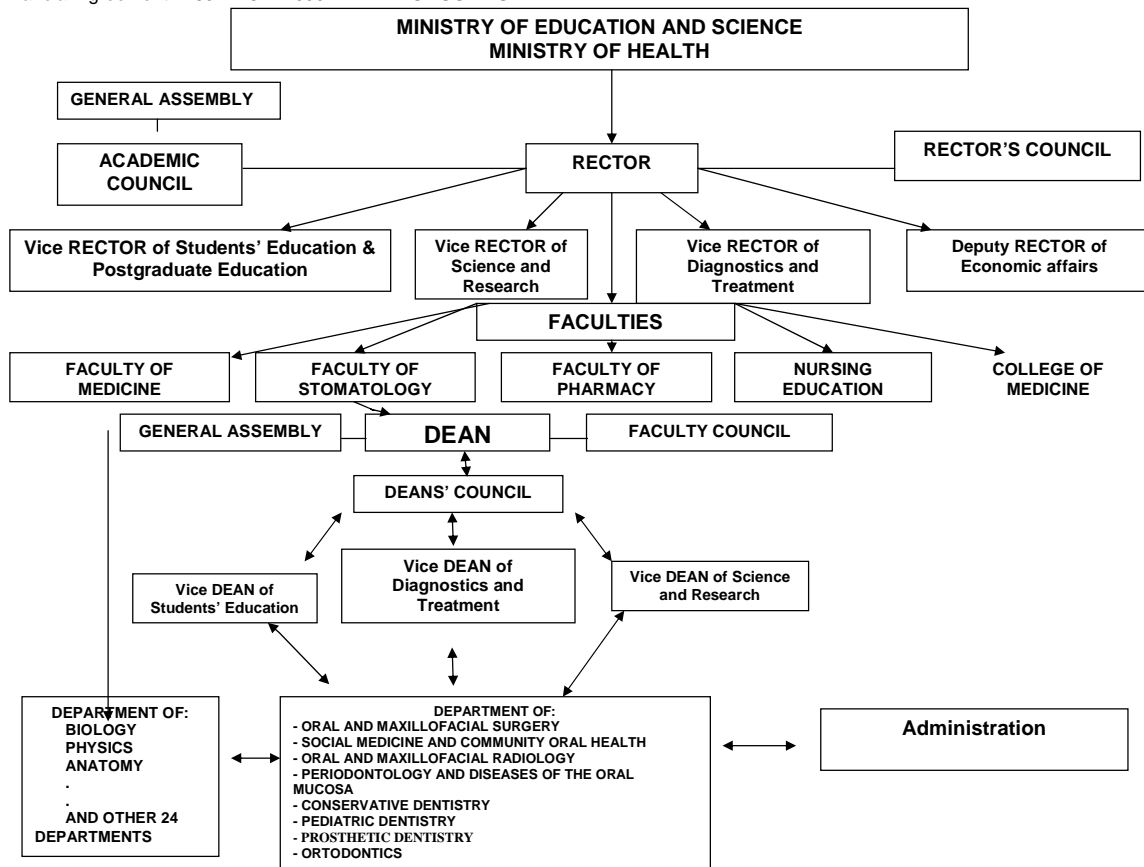
There is an excellent team of leaders under an effective leadership that would be encouraged and could be relied upon if given greater autonomy in decision making and would allow the school to make greater progress. The Visitors are fully aware of the financial constraints within which a university must work but there are matters? that might be opened to a more liberal approach that would encourage and facilitate innovation.

The Faculty uses its resources well, but obviously additional funding is seriously needed to replace the older equipment and a financial plan must be developed for continuous updating and for the acquisition of new technology and library resources.

The Visitors strongly recommend that a strategic financial plan be developed for the future, consistent with the Mission Statement and the faculty priorities.

All of this should be transparent with shared responsibilities ...

The Stomatological Faculty must be given greater freedom in its financial control and development if it is to be more innovative in increasing its income and not contained by the bureaucracy that is very common in all universities throughout Europe. It is understood that there may be scepticism about business and enterprise in the private sector. Nevertheless business has many useful initiatives from which universities could and should learn.



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3.3 Departments

There are 8 specialized basic dental science departments in the structure of the Faculty:

Department of Pediatric Dentistry

Head: Assoc. Prof. Dr. Milena Peneva, DrS, PhD

E-mail: dental-detska@sun.medun.acad.bg

Tel.: (+359 2) 54 12 02

The Department carries out teaching in Pre-clinics of Pediatric Dentistry during 4th and 5th term and Clinics of Pediatric Dentistry during 6th, 7th, 8th, 9th and 10th term. The exams are taken after 5th and 10th term.

The Department provides post-graduate education every year. It is a Collaborating Center of W.H.O.

Department of Conservative Dentistry

Head: Prof. Dr Boris Indjov, DrS, PhD, DMSc

E-mail: indjov@sun.medun.acad.bg

Tel.: (+359 2) 9526062; 51 69 309

The Department carries out teaching in Pre-clinics of Conservative Dentistry during 5th and 6th terms and in Clinics of Conservative Dentistry and Physiotherapy (Operative Dentistry with Endodontics) during 7th, 8th, 9th and 10th term. The exams are taken after 6th and 10th term.

The Department provides post-graduate education and specialization for PhD degree.

Department of Periodontology and Diseases of Oral Mucosa

Head: Assoc.Prof. Dr. Minka Drjankova, DrS, PhD

E-mail: dental-parod@sun.medun.acad.bg

Tel.: (+359 2) 51 88 00; 51 69 235; 51 69 424

The Department carries out teaching in Periodontology and Diseases of Oral Mucosa during 8th, 9th and 10th term, a preliminary oral exam during 8th term, and an exam after 10th term.

The Department provides post-graduate education and specialization for PhD degree.

Department of Prosthodontics

Head: Prof.Dr Todor Peev, DrS, PhD, DMSc

E-mail: dental-protet@sun.medun.acad.bg

Tel.: (+359 2) 51 88 32; 5169 393

The Department carries out teaching in Dental Materials during 1st term, Pre-clinics of Prosthodontics during 2nd, 3rd, 4th and 5th term and Clinics of Prosthodontics during 6th, 7th, 8th, 9th and 10th term. The exams are taken after 1st, 5th and 10th term.

The Department provides post-graduate education and specialization for PhD degree.

Department of Oral and Maxillofacial Surgery

Head: Assoc. Prof. Dr. Radomir Ugrinov, DrS, PhD

E-mail: dental-mfs@sun.medun.acad.bg

Tel.: (+359 2) 952 60 34; 51 69 318

The Department carries out teaching in Pre-clinics of Oral Surgery in 5th and 6th term and in Clinics of Oral and Maxillofacial Surgery in 7th, 8th, 9th and 10th term. The exams are taken after 6th and 10th term.

The Department provides post-graduate education and specialization for PhD degree.

Department of Orthodontics

Head: Prof. Dr. Valentin Moutaftchiev, DrS, PhD

E-mail: dental-ortod@sun.medun.acad.bg

Tel.: (+359 2) 952 59 61; 51 69 390

The Department carries out teaching in Orthodontics during 8th, 9th and 10th term. The exam is taken after 10th term.

The Department provides post-graduate education and specialization for PhD degree.

Department of Social Medicine and Public Dental Health

Head: Assoc. Prof. Dr. Tzvjatco Jolov, DrS, PhD, DMSc

E-mail: dental-smosz@sun.medun.acad.bg

Tel.: (+359) 952 05 64, 51 69 371

The Department carries out teaching in Social Medicine and Public Dental Health during 5th and 6th term.

The exam is taken after 6th term.

The Department provides post-graduate education and specialization for PhD degree.

Department of Maxillofacial Radiology and Oral Diagnostics

Head: Assoc. Prof. Dr. Doan Ziya, DrS, PhD

E-mail: dental-mfs@sun.medun.acad.bg

Tel.: (+359 2) 952 28 18; 51 69 342

The Department carries out teaching in Radiology and Oral Radiology during 7th term. The exam is taken after the same term.

The Department provides post-graduate education and specialization for PhD degree.

All the remaining disciplines studied by dental students are taught at the Medical Faculty of the University.

3.4 Information Technology

The accountant's department of the Faculty employs Full Finance System.

A Personnel Electronic System is developed for the available staff of the Faculty.

An Electronic Student Record System is developed and employed for filing of all students' data.

There are computers in all secretary offices of the departments of the Faculty. The computers are connected to Intranet and Internet.

Personal computer access for students - only in the Central Medical Library of the Medical University.

There isn't an **Electronic Patient Record System** in the Faculty.

SECTION 4: STAFF

Person in School who will explain and show this to the visitors:

Name: Prof. Boris Indjov, Dean

E-mail: indjov@sun.medun.acad.bg

Name: Galina Konstantinova

E-mail: dental-ask@sun.medun.acad.bg

Faculty of Stomatology - Staff Statistics:

A. Personnel – total	389
B. Scholarly Personnel	119
1. Academic Staff	119
• Professors	5
• Associate Professors	16
• Head Assistants	53
• Senior Assistants	25
• Assistants	20
2. Dentists – Clinical Teachers	15
3. Technicians	37
• Dental Technicians	26
• Other Technicians	11
4. Nurses	101
5. Medical Laboratory Assistants	2
6. X-ray Laboratory Assistants	8
7. Health officers	53
8. Administrative Personnel	37
9. Other Personnel	17

Note:

Personnel from Medical Faculty and from University Hospitals hold teaching in general and special medical subjects as well.

List of Academic Staff, by Departments, and their Qualifications

Note:

The undergraduated receives a rank : "Doctor Stomatologist (Dentist) " (DrS).

That, who has defended a dissertation and because of that could apply for an academic rank "Associate professor" and receive an academic degree PhD, and the following stage of a defended dissertation is for applying for an academic rank "Professor" and receiving an academic degree "Doctor in medical sciences" (DMSc) as well.

Department of Conservative Dentistry

Professors

INDJOV, Boris, DrS, PhD, DMSc - Head of the Department

Assoc. Professors

DIMITROV, Slavcho, DrS, PhD

TOPALOVA, Snejanca, DrS, PhD

BOTEVA, Ekaterina, DrS, PhD

Head Assistants

DIMITROVA, Ivanka, DrS, PhD

VASILEVA, Radosveta, DrS, PhD

BRANKOVA, Lilia, DrS

KIRILOVA, Janet, DrS

TODOROVA, Slavka, DrS, PhD

Senior Assistants

IANCHEVA, Sevda, DrS

KUZMANOVA, Ianeta, DrS
RADEVA, Elka, DrS
KAROVA, Emilia, DrS

Assistants

DINOVA, Desislava, DrS
RAICHEV, Ivan, DrS
GUSIISKA, Angela, DrS

Department of Prosthodontics

Professors

PEEV, Todor, DrS, PhD, DMSc - Head of the Department
FILTCHEV, DrS, PhD, DMSc

Assoc. Professors

ANASTASOV, Ivan, DrS, PhD

Head Assistants

KARAJASHEV, Pavel, DrS
BENKOVSKI, Tzvetan, DrS
TODOROV, Stefan, DrS
PAPAZJAN, Edmond, DrS
DRAJEV, Todor, DrS
HADJIEVA, Hrizdana, DrS
VASKOV, Svetoslav, DrS
LALEV, Georgi, DrS
IORDANOV, Bojidar, DrS
JONTCHEVA, Iliana, DrS
KAMENOVA, Julia, DrS, PhD
PAPAZJAN, Hajk, DrS
GEORGIEVA, Dimka, DrS, PhD
PASHOV, Jordan, DrS, PhD
RAJCHEV, Lubomir, Biophysicist

Senior Assistants

JANKOVA, Mariana, DrS
KAZAKOVA, Stefka, DrS
BALJAN, Silvia, DrS
NIKOLOVA, Rajna, DrS
KIROV, Dimitar, DrS
PAVLOVA, Janina, DrS,
NESHEV, Dobri, DrS
TZVETKOV, Nikolai, DrS

Assistants

DAMIANOV, Nikola, DrS
FILTCHEV, Dimitar, DrS
GERDJIKOV, Ivan, DrS
MILANOV, Javor, DrS
CHAKALOV, Ivan, DrS
NIKOLOVA, Neli, DrS

Department of Periodontology and Diseases of Oral Mucosa

Assoc. Professors

DRJANKOVA, Minka, DrS, PhD - Head of the Department

Head Assistants

POPOVA, Hristina, DrS, PhD
UZUNOV, Tzonko, DrS, PhD

Senior Assistants

BOLJAROVA, Teodora, DrS
MLACHKOVA, Antoaneta, DrS
BOJAROVA, Tzveta, DrS

Assistant

DOSEVA, Velitchka, DrS

Department of Maxillofacial Radiology and Oral Diagnostics

Assoc. Professors

ZIJA, Doan, DrS, PhD - Head of the Department
KISELOVA, Angelina, DrS, PhD
CHORBADJIISKA, Lubka, DM, PhD

Senior Assistant

MIHAILOVA, Hristina, DM, DrS

Assistants

KISHKILOVA, Dora, DrS
IOVTCHEV, Dimitar, DM

Department of Oral and Maxillofacial Surgery

Assoc. Professors

UGRINOV, Radomir, DrS, PhD - Head of the Department
IVANOV, Ivan, DrS, PhD
ILIEVA, Neli, DrS, PhD

Head Assistants

SAPUNDJIEV, Petar, DrS, PhD
FAKIH, Hodor, DrS, PhD
DJOROV, Anton, DrS,
IVANOVA, Maria, DrS
BOTCHEV, Valo, DrS, PhD
ANGELOVA, Bogdana, DrS
HINKOV, Dimitar, DrS, PhD
SVESHTAROV, Vassil, DrS
DIMITROV, Dimitar, DrS
FILIPOV, Mihail, DrS
VELITCHKOV, Rumen, DrS
PAPAZOVA, Siika, DM
STEFANOV, Latchezar, DrS
MIHAILOVA, Violetka, DM

Senior Assistants

SHARANKOVA, Magdalena, DrS
SABOV, Rumen, DrS
RAJTICHEVA, Veska, DrS
NIKIFOROVA, Halina, DrS
STOITCHKOV, Bisser, DrS
STANIMIROV, Pavel, DrS

Assistants

STOJANOV, Hristo, DrS
KIRILOV, Branimir, DrS

Department of Pediatric Dentistry

Professor

ATANASSOV, Nikola, DrS, PhD

Assoc. Professors

TZOLOVA, Elka, DrS, PhD

KABAKCHIEVA, Rositza, DrS, PhD
PENEVA, Milena, DrS, PhD - Head of the Department

Head Assistants

MARKOVA, Nikoleta, DrS
DOJCHINOVA, Lilia, DrS
GRANCHAROVA, Natalia, DrS
SHARKOV, Nikolai, DrS
TARGOVA, Sashka, DrS
BAKARDJIEV, Petko, DrS
RASHKOVA, Maia, DrS
PASKOVA, Maria, DrS
GOLCHEV, Javor, DrS

Senior Assistant

ZHEGOVA, Galina, DrS

Department of Orthodontics

Professor

MOUTAFTCIEV, Valentin, DrS, PhD - Head of the Department

Assoc. Professor

KRUMOVA, Vera, DrS, PhD

Head Assistants

ANDREEVA, Laura, DrS,
ALAGIOZOVA, Palmira, DrS
GAIDAROVA, Krasimira, DrS
DINKOVA, Miroslava, DrS

Senior Assistants

PETRUNOV, Vladmir, DrS
JORDANOVA, Greta, DrS

Assistants

PETROV, Valeri, DrS
IGNATOVA, Silvia, DrS

Department of Social Medicine and Public Dental Health

Assoc. Professor

YOLOV, Tzvetko, DrS, PhD, DMSc - Head of the Department

Head Assistants

KATROVA, Lidia, DrS, PhD
JANEVA, Krasimira, DrS, PhD

Assistants

BONEV, Boiko, DrS
MIHALEVA, Snezhana, DrS

Visitors Comments on Staff and Staffing

The faculty is well qualified and committed to the Institute. The Student/Faculty rate is excellent. However it is a concern of the visiting team that the Faculty does not appear to have adequate time to develop as complete academicians. The working load in the area of teaching prevents them from personal development and research accomplishments. The Faculty has insufficient time, facilities and finances to interact with their colleagues in other parts of the world. The Institute should identify resources for the development of individuals as part of its financial planning. The Faculty development plan should include student and peer evaluation of their teaching effectiveness, a strategy for focusing their research and the development of skills necessary for promotion. It is vital that the junior members of the faculty should be given the opportunity to interact with their colleagues throughout the world. This interaction can be

accomplished to a degree by the use of ICT. However, means must be developed to allow for Faculty exchange

A comment that seemed relevant was that while there was a good teaching staff to student ratio there seemed to be an imbalance of personnel in other service areas of the institution beyond what was necessary for the efficient running of the institution. The Visitors were also conscious of the need to be sensitive to employment opportunities in a difficult economy. However, excessive not useful numbers could be a drain on general resources and the Visitors recommend a rationalization of personnel in a duly sensitive manner. Longer term planning and rationalizations would permit the use of the resources thus saved to help a structured and strategic financial plan in the modernization of the Faculty.

SECTION 5: BIOLOGICAL AND NATURAL SCIENCES

5.1 CHEMISTRY

Person in School who will explain and show this to the visitors:

Name: Prof. Vanjo Mitev, Head, Department of Chemistry and Biochemistry

E-mail: mitev@medfac.acad.bg

Introduction

In Medical Chemistry for dentists subjects which are selected prepare students for following disciplines like Biochemistry, in which the basic structure of carbohydrates, proteins, fats is examined.

Primary aims

Students to be able to use the structure and the properties of basic biological compounds.

Main objectives

- Study of the applied methods of analysis of structure:
- Analysis of ions in different materials like mercury, lead, potassium etc.
- Corrosion methods
- Structure of polymers

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Chemistry 1 st term	45 3 h. weekly	-	30 2 h. weekly	75	1.52%

Method of learning/teaching

- Lectures
- Seminars
- Practical exercises

Assessment methods

Exam consists of three parts – practical, written and oral.

Strengths

Analysis of tartar
Specialized training of dentists in modern chemistry like stimulating personal work of students

Weaknesses

[Lack of funds](#)

Innovations and Best Practices

Plans for future changes

Staff names

5.2 BIOCHEMISTRY

Person in School who will explain and show this to the visitors:
Name: Prof. Vanjo Mitev, Head, Department of Chemistry and Biochemistry
E-mail: mitev@medfac.acad.bg

Introduction

Biochemistry is one of the most important basic disciplines. It examines biochemical processes in the cell on molecular level.

Primary aims

Biochemistry is a basis for an investigation not only of the processes in human body, but also of the mouth specificity.

Main objectives

The students have to study basic biochemical processes:

- Enzymology
- Bioenergetics
- Metabolism

Functional Biochemistry

Modern directions of Biochemistry are studied during the past 5-10 years:

Proteinkinases
Receptors
Transduction tracts
Transcription factors
Oncogenesis
Factors of growth

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Biochemistry	60	6	54	120	2.43%
1 st term	2 h. weekly	4	2 h. weekly		
2 nd term	2 h. weekly	2	2 h. weekly		
3 rd term					

Method of learning/teaching

- Lectures
- Practical exercises
- Seminars

Assessment methods

- Test
- Written and oral exam

Strengths

The modern methods for studying of Biochemistry are applied. Teaching gives the overall picture of achievements of Biochemistry to date.

Weaknesses

Practical training cost very high and there are not sufficient funds.

Innovations and Best Practices

Facultative course in Biochemistry

Plans for future changes

Staff names

Visitors Comments

The visitors appreciate the efforts made in order to give the students a sound microbiological and biochemical basis for their education. However it is recommended that these subjects should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

5.3 BIOLOGY

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Ilia Tzvetanov Vatev, Head, Department of Biology

E-mail:

Introduction

Biology examines the basic regularities of human organism.

Primary aims

Students to be acquainted with the basic vital processes of human organism.

Main objectives

Students have to obtain knowledge of:

- General Biology
- Immunology
- Molecular Biology
- Ontogenesis
- Evolution

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Biology	45	-	60	105	2.13%
1 st term	2 h. weekly		2 h. weekly		
2 nd term	1 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises
- Seminars

Assessment methods

- Test
- Practical and oral exam

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

Staff names

Visitors Comments

The visitors appreciate the efforts made in order to give the students a sound microbiological and biochemical basis for their studies and education in stomatology. However it is recommended that these subjects should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on fundamental principles and learning how to cope with the exponential growth of knowledge in the sciences taking advantage of new information and

communication technologies. Please note the recommendations in respect of overall curriculum and a suggested »Curriculum Committee” above.

5.4 MEDICAL PHYSICS

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. M. Marinov - Head of the Department of Physics and Biophysics

E-mail: marinov@medfac.acad.bg

Name: Assoc. Prof. N. Popdimitrova - Lecturer in Physics for dental students

E-mail: popdimit@medfac.acad.bg

Introduction

The contemporary hospitals are well equipped with diagnostic and therapeutic appliances. The course in Medical Physics acquaints the students with the basic physical laws, with the principle structure, function and possibilities, which it offers for the dental practice (methods of imaging diagnostics, methods for separation of structural methods for Physiotherapy, methods for analysis of biological specimen, physical base of the electrophysiology, methods for sound diagnostics etc.).

Primary aims

Study of physical phenomena and objective laws and their application connected with the dentistry.

Main objectives

Acquaintance with the basic physical laws and phenomena, necessary for some specialties in the dental education like: physiotherapy, radiography, hygiene, and dental materials science. Acquaintance with physical laboratory methods, applied in the dentistry. Acquisition of skills and abilities for laboratory work, acquaintance with processing of statistical data and presenting the results of the experimental work.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Physics 1 st term	45 3 h. weekly	-	30 2 h. weekly	75	1.52%

Methods of learning/teaching

- Lecture course.
- Seminars.
- Practical laboratory exercises.

Assessment methods

Practical exercises: oral continuous checks throughout the term and written checks in form of a test at the end of the term on the studied practical material.

Lecture course: written presentation of substantial parts of the material with additional oral explanations.

Strengths

Contemporary applications of Physics in diagnostics and treatment in dentistry as well the physical base of learned methods are offered to the students' attention. Physical phenomena and objective laws in the function of the human body, principles of human protection from the noxious physical factors are considered. Basic physical terms, quantities and units are introduced and explained.

Weaknesses

Insufficient hours - this does not correspond to the trends of the technical progress and the possibilities for application of methods and equipment in dental practice. Limited means for providing of technical equipment for training in Physics.

Innovations

A protocol notebook for the results of the practical exercises in Physics has been worked out and introduced since 1999/2000 school year. This gives the possibility for equalization of the requirements to the students and processing and presentation of the measured results.

Plans for future changes

Updating of the lecture course and practical exercises in accordance with their further specializing for the needs of dental science and practice.

Staff names

Ivan Djenev - djenev@ns.medfac.acad.bg
Ivan Antonov - toni@ns.medfac.acad.bg
Vera Hadjimitova - vera@ns.medfac.acad.bg
Pepa Uzunova - pepa@ns.medfac.acad.bg
Dimitar Mihov - mihov@ns.medfac.acad.bg
Zhelka Deleva - deleva@ns.medfac.acad.bg

Visitors Comments

The visitors appreciate the efforts made in order to give the students a sound medical, microbiological and biochemical basis for their education. However it is recommended that these subjects should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

SECTION 6: PRE-CLINICAL SCIENCES

6.1 Anatomy and Histology

Person in School who will explain and show this to the visitors:

Name: Prof. Dr.Vladimir A. Ovcharov, DMSc

E-mail:

Introduction

Anatomy and Histology include the study of macro- and microstructure of the human body.

Primary aims

Students to be acquainted with human body structure on macroscopical, microscopical and ultrastructural level.

Students to be provided with knowledge of pathological affections studied in other disciplines.

Main objectives

Theoretical and practical knowledge and skills by:

Dissections

Microscopical preparations

Ultrastructural level

Acquaintance of students with human body structure

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Cytology, General Histology and General Embriology	30	-	30	60	1.22%
1 st term	2 h. weekly	-	2 h. weekly		
Anatomy-Osteology and Syndes-					
Mology	-	-	15	15	0.30%
1 st term	-	-	1 h. weekly		
Anatomy	45	-	90	135	2.74%
2 nd term	3 h. weekly		6 h. weekly		
Anatomy	30	-	60	90	1.83%
3 rd term	2 h. weekly		4 h. weekly		
Histology	-	-	30	30	0.60%
3 rd term			2 h. weekly		
Total	105	-	225	330	6.70%

Method of learning/teaching

- Lectures
- Practical exercises
- Dissections
- Microscopical preparations
- Ultrastructural preparations
- Facultative courses
- Training and self-training in computer halls
- X-ray scanning
- Organ tomography

Assessment methods

- Test
- Practical, written and oral exam

Strengths

Development of techniques for study of human body structure.

Weaknesses

Lack of funds for modern appliances.

Innovations and Best Practices

Continuously improving with test system, but only introducing; computer halls for out of hall work load; microscopical halls.

Plans for future changes

Staff names

Visitors Comments

The visitors appreciate the efforts made in order to give the students a basis of preclinical sciences for their education. However it is recommended that these subjects should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

6.2 Physiology

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Radoslav Girchev;

E-mail: Girchev@medfac.acad.bg

Name: Assoc. Prof. Lilia Vitanova

E-mail: Vitanova@medfac.acad.bg

Introduction

Human Physiology is taught to the dental students in the 2nd year for two terms.

Primary aims

Study of the life processes in organism, manifesting the relationships between its building structures and its unity with the environment.

Main objectives

Gain of theoretical knowledge of flow and regulation of physiological processes and theoretical knowledge of function of different systems in the organism. Detailed learning of physiology of the maxillofacial region.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Physiology	90	-	90	180	3.65%
3 rd term	2 h. weekly		3 h. weekly		
4 th term	4 h. weekly		3 h. weekly		

Methods of learning/teaching

- Lectures
- Practical exercises.

Assessment methods

The annual assessment mark includes the average annual mark and the marks of the practical and theoretical exam.

Strengths

In process of teaching some emphasis is given to calcium-phosphorus exchange, physiology of maxillofacial region, acid-base equilibrium, physiology of gastrointestinal system, processes of blood coagulation and immunity.

Innovations and Best Practices

Detailed study of the physiology of the maxillofacial region - [a subsidiary textbook for dental students - was published](#). Characteristics of pain, mechanoreceptor and kinesthetic sensibility, characteristics of vascularity in the maxillofacial region. Characteristics of regulation of the motor reactions in the maxillofacial region. Regulation of the calcium-phosphorus exchange. Importance for the physiology of the teeth. Importance of the saliva for the physiology of the oral cavity.

Plans for future changes

To contact with similar departments of Physiology carrying out dental students' training and co-ordination of the curriculum.

Staff names

Assoc. Prof. Radoslav Girchev; E-mail: Girchev@medfac.acad.bg
Assoc. Prof. Lilia Vitanova; E-mail: Vitanova@medfac.acad.bg

Visitors Comments

The visitors appreciate the efforts made in order to give the students a sound physiological basis for their education as physiology provides the basis for normal function and is an essential introduction to the pathological processes. However it is recommended that these subjects should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

6.3 Pathophysiology

Person in School who will explain and show this to the visitors:

Name: Zdravko Asenov Velkov - Senior Research Associate, 2nd degree

E-mail:

Introduction

Theoretical study of the mechanisms of beginning and development of the pathological processes and diseases.

Primary aims

Tasks in theoretical aspect:

- To reveal the close relationship of the pathological physiology to the clinical medicine by studying the etiology, pathogenesis, sanogenesis and tanatogenesis of different pathological processes and diseases;
- To create the theoretical preconditions and to realize experimental models on test animals of different pathological processes and diseases, close to human pathology;
- To study the experimental created pathological models at all levels of the living organism (molecular, subcellular, histological, organic, systematic and organismic).

Tasks in practical aspect:

- To learn to model pathological processes, to make precise observations and to do analysis and synthesis of the gained data by themselves;
- To master a number of operative techniques and manipulations, necessary for their dental practice.

Main objectives

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Pathophysiology 5 th term	45 3 h. weekly	-	30 2 h. weekly	75	1.52%

Method of learning/teaching

- Lectures
- Practical exercises

Assessment methods

- Written and oral exam

Strengths

Weaknesses

Innovations and Best Practices

Video- and movie films

Plans for future changes

Introducing of testing form of exams

Staff names

Prof. Dr. Emil Janev, PhD, Research work
Dr. Ivanka Sirakova, Senior Research Associate, 2nd degree, PhD
Maria Petkova, Senior Research Associate, 2nd degree, PhD
Zdravko Belkov, Senior Research Associate, 2nd degree, PhD
Dr. Metodi Balutzov, Head Assistant, PhD
Dr. Ina Petkova, Head Assistant, PhD
Dr. Emilia Lateva, Head Assistant, PhD
Dr. Totka Andreeva, Head Assistant, PhD
Dr. Radka Hadzijolova, Head Assistant
Dr. Maria Todorova, Research Associate, 1st degree, PhD
Dr. Kiril Petrov, Senior Assistant
Dr. Mimoza Tzvetkova, Senior Assistant
Dr. Simeon Lazarov, Senior Assistant

Visitors Comments

The visitors appreciate the efforts made in order to give the students a sound basis in pathophysiology for their education. The Visitors did not explore the detail of the course but do recommend that pathophysiology should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

SECTION 7: PARA-CLINICAL SCIENCES

7.1. Pharmacology

Name: Assoc. Prof. D-r Ivan Lambev
E-mail: ilambev@medfac.acad.bg

Introduction

A special course in Pharmacology is provided for the dental students in the second and third years of study (fourth and fifth term). At the end of 5th term an exam finalizes the education. Hours in the Curriculum- 105 h.

Primary aims

The main aim of this course is to provide students with the knowledge of basic groups of drugs applied in medical practice for treatment of social valuable diseases. The basic concepts of drug therapy of common diseases will be explained with a specific emphasis on dental practice.

Main objectives

- To study medical preparations and prescription principles.
- To learn basic notions of common pharmacology concerning pharmacokinetics and pharmacodynamics of drugs.
- To study different pharmaceutical groups (mainly contemporary drug forms with their international names), specially emphasizing on pharmacodynamical and pharmacokinetical particularities (bioavailability, plasma half-life, elimination), application and drug interactions.
- Special attention is given to side-effects and toxic effects of some drug groups (digitalis glycosides, amynoglycosides etc.)
- To study commonly met drug groups in dental practice such as: analgesics, anxiolytics, local anesthetics, thrombolytic agents, antiseptics and disinfectants, devitalisation agents, local anti-inflammatory medicines.

Hours in curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Pharmacology	45	4	56	105	2.13%
4 th term	1 h. weekly	2	2 h. weekly		
5 th term	2 h. weekly	2	2 h. weekly		

Method of learning/teaching

Lectures precede practical exercises and begin with common problems of basic Pharmacology concerning pharmacokinetics and pharmacodynamics of drugs. Through weekly two-hours practical exercises students attain skills in drug forms, study how to prescribe drugs, common problems of basic Pharmacology and almost all pharmaceutical groups of medicaments.

Assessment methods

The assessment in Pharmacology includes a test exam, practical exam with prescription writing and oral theoretical exam. The test comprises of basic questions including drug prescription, basic and clinical Pharmacology. In case of test failure a further exam will not be carried out. The final assessment is formed on average annual assessment rating, practical exam assessment and the doubled rating from the oral exam.

Strengths

The dental students obtain theoretical and practical training in Pharmacology, corresponding to the training in the developed West countries. The following elements are applied:

- Multimedia methods of training
- **Computer integrated software for teaching (bought from UK)**
- Video films
- A set of pharmaceuticals and firm prospects
- Continuous test check in Pharmacology during the training.

Weaknesses

Multimedia training possibilities are not utilized in the fullest.

Innovations and Best Practices

- Multimedia methods of training
- Computer integrated programs for teaching (bought from UK)
- Video films
- A set of pharmaceuticals and firm prospects
- Continuous test checks in Pharmacology during the training.

Plans for future changes

- Design of a new textbook of Pharmacology- Updating of the tests in Pharmacology (2nd edition)
- Installing of computers in all teaching rooms.

Staff names

Prof. Dr. N. Bojadjev, DMSc
Prof. Dr. I. Krushkov, DMSc
Assoc. Prof. I. Lambev, PhD
Assoc. Prof. Dr. M. Vlaskovska, PhD
Dr. K. Jakimova, Senior Research Associate, 2nd degree, PhD
Dr. M. Markov, Head Assistant, PhD
Dr. D. Drenska, Head Assistant, PhD
Dr. K. Simeonova, Head Assistant
Dr. S. Surcheva, Head Assistant, E-mail: surcheva@medfac.acad.bg
Dr. J. Budevskva, Head Assistant
Dr. R. Nikolov, Head Assistant
Dr. Z. Markova, Senior Assistant
Dr. K. Marazova, Head Assistant, PhD

Visitors Comments

The visitors did not have an opportunity to discuss in detail this component of the stomatological education and training, very important particularly in this age of rapid development in pharmacology and therapeutics. As for all para-clinical courses the Visitors advocate more integration with stomatology and deeper knowledge of the informations a newly graduating stomatologist or dentist would require to protect his/her patient under treatment. The Visitors recommend that the course in Pharmacology should be specifically tailored for the needs of a stomatologist avoiding detail that rapidly become out of date. Pharmacology should fully integrated with the oral health curriculum and an educational methodology of problem orientated learning should be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

7.2 Microbiology

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Ivan Mitov

E-mail: mitov@medfac.acad.bg

Introduction

Medical Microbiology studies microorganisms causing infectious diseases, infections and immunity.

Primary aims

To acquire basic knowledge of microorganisms, infections and the immunity.

Main objectives

Students to be acquainted with:

Structure and physiology of microorganisms

Antimicrobial chemotherapy

Infections

Defensive mechanism of macroorganisms

Etiology role of microorganism in oral pathology.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Microbiology	60	-	60	120	2.43%
3 rd term	2 h. weekly		2 h. weekly		
4 th term	2 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises
- Seminars
- Circles

Assessment methods

Practical, written and oral exam

Strengths

Providing practical training with multimedia and illustrated materials.

Weaknesses

Lack of funds for means of practical exercises.

Innovations and Best Practices

Plans for future changes

Staff names

Visitors Comments

The microbiological basis of oral health and disease with the increasingly complex nature of the new bacterial and viral infections and prion contamination make this a subject of great relevance for the stomatologist or dentist. As for all para-clinical courses the Visitors advocate an integration of learning with stomatology and especially a realistic appreciation of what a newly graduating stomatologist or dentist requires in order to protect his or her patient under treatment. The Visitors recommend that the course in

microbiology should be specifically tailored for the needs of a stomatologist and the avoidance of detail that rapidly becomes out of date. Microbiology should fully integrated with the oral health curriculum and an educational methodology of problem orientated learning should be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

7.3 Pathoanatomy

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. Ivan Mihailov, Head, Department of Pathology

E-mail:

Introduction

General and Clinical Pathoanatomy examines the problems of morphological essence of diseases.

Primary aims

Dental students have to obtain knowledge of:

General pathological processes in human organism

Morphology of pathological processes in mouth (oral cavity) head and neck

Main objectives

Students have to study:

3.1 General pathological processes in cellule and in the intercellular substance.

3.2 Basic changes in circulation by inflammation.

3.3 Possibility for regeneration of different tissues

3.4 Common knowledge of tumors

3.5 Pathology of oral cavity and digestive tract

3.6 Basic nosological units

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Pathoanatomy	60	-	60	120	2.43%
4th term	2 h. weekly		2 h. weekly		
5 th term	2 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises
- Seminars
- Individual practical work with histological preparations and macroscopic museum preparations as well

Assessment methods

Practical and theoretical written and oral exam

Strengths

Training in pathoanatomy does not yield to training in pathoanatomy in European countries. A rich collection of morphological essences of diseases is used.

Weaknesses

There is no contact to colleagues from the Faculty of Stomatology.

Innovations and Best Practices

Plans for future changes

Staff names

Visitors Comments

The visitors appreciate the efforts made in order to give the students a sound basis in pathoanatomy for their education. However it is recommended that these subjects should be more integrated into the oral health curriculum and that an educational methodology of problem orientated learning be employed with an emphasis on basic principles and with learning how to cope with the exponential growth of scientific knowledge taking advantage of the new information and communication technologies. Please note the recommendations in respect of the overall curriculum and the suggested "Curriculum Committee" above.

SECTION 8: HUMAN DISEASES

8.1 Internal Medicine

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Konstantinova

E-mail: kchernev@sun.medun.acad.bg

Introduction

Internal Medicine is a basic discipline of general medical education for dental students. The taught matter is in accordance with the needs of dental education and practice.

Duration: 2 terms - 7th and 8th.

Primary aims

Teaching in Internal Medicine:

- Acquaints the dental students with the subject, etiology, basic knowledge of clinical run and oncoming changes in soft tissue of oral cavity and dentition in most often and socially important medical diseases;
- Acquaints the dental students with pathogenetic significance of oral diseases to nascence, evolution and prognosis of viscera diseases.

Main objectives

- The dental students as medical specialists need to obtain significant medical knowledge and to acquire self-reliance as well qualified medical specialists.
- To master some basic observation methods (measurement of arterial pressure, counting and characteristics of pulse, assessment of basic laboratory and biochemical results in their dental practice etc.).
- To understand the functional and morphological problems and interaction with internal pathology and oral pathology.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Internal Medicine	60	4	60	120	2.43%
7 th term	2 h. weekly	2	2 h. weekly		
8 th term	2 h. weekly	2	2 h. weekly		

Method of learning/teaching

- Lecturers with academic rank read clinical lectures in Internal Medicine;
- Qualified specialists -assistants in Internal Medicine with sufficient experience; lead clinical practical exercises at the bedside of patients;
- Tutorials;
- Self-learning of the taught material from the Textbook of Internal Medicine specially written for the needs of dental students

Assessment methods

- Continuous assessment of knowledge and skills by:
 - a) Assistants in seminar clinical practical exercises;
 - b) Periodical test exam of parts of the taught material during terms.
- Exam by lecturers with academic rank at the end of the 8th term.

Strengths

Clinical training in Internal Medicine on topics of Internal Pathology in the dental practice.

Weaknesses

Some dental students do not show sufficient assessment of importance of the taught material in Internal Medicine, so they do not attend the lectures and they express insufficient interest.

Innovations and Best Practices

- Optimization and updating of study program in Internal Medicine for dental students every 3-4 year.
- Saturation of the learning process with more illustrated lectures, films etc.
- Equalization of the study program in Internal Medicine for both dental faculties - in Sofia and Plovdiv.
- Periodical test exam of parts of the taught material during terms.

Plans for future changes

Development and improvement of the activities.

Staff names of academic rank lecturers and assistants from the Department of Pre-clinics of Internal Medicine of the Medical University teaching the dental students:

Prof. Dr. Valentin Kolarski, DMSc - specialist in Gastroenterology and Internal Medicine
Dr. Diana Petrova, PhD - Head Assistant, specialist in Gastroenterology and Internal Medicine
Dr. Stefan Nikolov - Head Assistant, specialist in Gastroenterology and Internal Medicine
Dr. Vladimir Vladov - Head Assistant, specialist in Nephrology and Internal Medicine
Dr. Alexander Todorov - Senior Assistant, specialist in Internal Medicine

Visitors Comments on the whole Section

The study of the subjects broadly covered by the term "Human Diseases" (i.e. General Medicine and General Surgery and their related subjects) are perceived to be the strengths of a stomatological approach over an odontological approach. This is based on the concept that a stomatologist or dentist must have a sound basis in the general medicine in order to provide a more holistic approach to patient care. Few will dispute that principle. However the question must be raised as to the level of detail that is necessary in order to have a stomatologist or dentist competent in these areas as they might apply to his or her daily activities. Whilst the principles of understanding the implications of systemic diseases as they would impinge on oral health and disease and vice versa are fully accepted there is a limit as to what can be achieved in a five year training period. These subjects cannot be taught to a level of detail that compromises the time required to train a stomatologist or dentist to be competent in the routine elements of primary dental care.

Another important observation relates to the methods of education and training in human diseases. There are no apparent educational objectives as to what should be expected of a graduate on completion of the course and no outcome measurements.

Added to this is the serious concern that stomatologists could be expected to have any realistic competence in such important areas where they have only been exposed to a very theoretical education and even more important no further training so that when a need for this information might arise it might have been so long since their theoretical training their practical abilities will be less than desirable to safely handle the case.

These serious reservations from a team of visitors mainly from odontological training programmes must not be interpreted to imply that these subjects are unimportant to the dentist or stomatologist. The opposite is the case. For these reasons we strongly recommend that the emphasis should be placed on fundamental principles of clinical and realistic competences that need to be maintained over a lifetime of professional practice. Life support being one important example.

The visitors appreciate the efforts made in order to give the students a sound basis for their studies and education in the human disease. However, if this programme in stomatology is to be allowed approach the system of education in the European Union there needs to be a radical restructuring of the medical sciences for students of stomatology and focusing on outcome analysis. We strongly advise that these subjects should be more integrated with the oral health care curriculum and that an educational

methodology of problem orientated learning be employed with an emphasis on fundamental principles and learning how to cope with the exponential growth of knowledge in the medical sciences taking advantage of new information and communication technologies. Please note the recommendations in respect of overall curriculum and a suggested »Curriculum Committee" above.

8.2 Surgical Diseases

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dimiter Jankov

Introduction

Training in General Surgery acquaints the students with principles of surgical treatment of diseases.

Primary aims

Students have to obtain basic knowledge and skills of surgical treatment of diseases.

Main objectives

Students have to obtain knowledge of treatment of:

- Burns
- Injuries
- Bandages etc.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Surgical Diseases	30	-	45	75	1.52%
6 th term	2 h. weekly		3 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises

Assessment methods

Practical and theoretical exam

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

Staff names

Visitors Comments

Please refer to comments in respect of 8.1

8.3 Otorhinolaryngology

Person in School who will explain and show this to the visitors:

Name: Prof. Dr. D. Dimov
 E-mail:

Introduction

This discipline is taught in the winter term of the 4th year of dental education.

Primary aims

Main objectives

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Otorhinolaryngology 7 th term	15 1 h. weekly	-	15 1 h. weekly	30	0.61%

Methods of learning/teaching

Lectures and practical exercises

Assessments methods

Oral exam at the end of the winter term

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

Staff names

Visitors Comments

Please refer to comments in respect of 8.1

8.4 Hygiene and Epidemiology

Person in the school who will explain and show this to the visitors:
 Name: Assoc. Prof. Dr. B. Popov, DMSc

Introduction

The subject is studied in the IV course.

Primary aims

Main objectives

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum

Hygiene 7 th term	20 2 h. weekly	-	20 2 h. weekly	40	0.81%
Epidemiology 7 th term	10 2 h. weekly		10 2 h. weekly	20	0.40%

Method of learning/teaching

- a/ Lectures
- b/ Practical exercises

Assessment methods

- The term exam is common for both - Hygiene and Epidemiology. Questions distribution in the exam ticket corresponds to the distribution of the hours in the curriculum and due to it the final mark is formed with bigger percentage of Hygiene because it is with bigger horarium. Before oral exam is made test checks for objectifying of the assessment.
- Questions from the subject are not included in the state exam for acquiring "a diploma in dentistry".
- At this stage the Department of Hygiene, Ecology and Occupational Diseases does not provide for changes in learning and assessment as well.

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

Staff names

Visitors Comments

Please refer to comments in respect of 8.1

8. 5 Dermatology and Venereology

Person in the school who will explain and show this to the visitors:

Name: Prof. Dr. N. Tzankov, PhD, DMSc, Head, Department of Dermatology and Venereology

Introduction

The study in Dermatology and Venereology is an obligatory part of the training process of the students in dentistry. This is not only because of the necessity of receiving a general medical culture but also because of the fact that most of the learned diseases are localized in the oral cavity.

The course is held at the building of Clinic of Dermatology and Venereology in the 5th course during the 9th term.

Primary aims

- To be acquainted with the fundamentals of dermatology and venereology, and in detail with cutaneous diseases and sexually transmitted diseases, localized in the oral cavity.

Main objectives

- Eruption units and their characteristics in oral mucosa
- Anamnesis and status of a patient
- Basic external medicaments
- Histopathologic processes on skin and in oral cavity
- Infectious diseases
- Autoimmune cutaneous diseases
- Sexually transmitted diseases

- Diagnostic methods
- Treatment

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Dermatology and Venereology	15	-	30	45	0.91%
9 th term	1 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises
- Training process is aided with slides, instructional films etc.

Assessment methods

- A colloquium is held during the term
- An exam is held at the end of the term

Strengths

Training is held directly in the patient's presence, so that it is not only "in theory". Each student has an opportunity to work with diagnostic appliances.

Weaknesses

Because of the lack of patients, all the learned diseases cannot be shown to the students. Such cases are shown with slides.

Innovations and Best Practices

Plans for future changes

- Introduction of a computer- and a multimedia-assisted training
- Introduction of a test exam.

Staff names

Visitors Comments

Please refer to comments in respect of 8.1

8.6 Paediatric and Infectious Diseases

Person in the school who will explain and show this to the visitors:
 Name: Dr.Plamen Rachev - Head Assistant

Introduction

Training in Pediatric and Infectious Diseases is carried out in the 8th term and includes 12 hours lectures and 12 hours practical exercises in Infectious Diseases and 18 hours lectures and 18 hours practical exercises in Pediatric Diseases. We consider these hours to be sufficient for fulfillment of main aims and objectives for training of dental students.

Primary aims

- Diagnostics of basic infectious diseases, practical skills of students for behavior modeling
- Development of correct approach to prevention of infectious diseases

Main objectives

- Acquisition of knowledge of most spread and socially important infectious diseases and the quantity of information is in accordance with the main aims.
- Acquisition of practical skills for diagnostics of certain infectious diseases.
- Working out of algorithm for practical behavior in order to prevent the expanse of some infectious diseases, especially the droplet infections (Morbilli, Rubella, Varicella, Scarlatina etc.) and such diseases, spread by blood (Hepatitis B and C and AIDS).
- Detailed learning of changes in oral cavity by different infectious diseases.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Pediatric and Infectious Diseases 8 th term	30	-	30	60	1.21%
	2 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures and practical exercises.
- In relation to the lectures we aim at maximum illustration of the taught material - applying slides, but we consider it necessary to improve the illustration and by that means the quality of teaching, if modern multimedia technology is applied.

Assessment methods

Assessment is carried out in an exam together with the Department of Pediatric Diseases. Time limited practical exercises do not justify the introduction of continuous assessment. We consider the design of exam test would improve the objective assessment.

Strengths

Teaching is carried out for 45 days and the existing in this moment infectious pathology is demonstrated. Some diseases with a cyclic recurrence in other months in the year cannot be seen in the practical exercises. Additional means for illustration of the social important diseases are applied.

Weaknesses

For the purposes of taking and recording a medical history in patients it is necessary to apply knowledge which is acquired in other medical disciplines (Neurology, Dermatology etc.), studied in later terms. It is necessary to allow time for obtaining of skills typical for the above-mentioned disciplines. Because the infectious diseases are an interdisciplinary subject, we consider it must be studied at the end of the course of clinical no dental disciplines.

Innovations and Best Practices

Plans for future changes

Staff names

The introduction of a new set of tests, developed and edited together with the Department of Pediatric Diseases is forthcoming.

Visitors Comments

Please refer to comments in respect of 8.1

8.7 Obstetrics and Gynecology

Person in the school who will explain and show this to the visitors:
Name: Assoc. Prof. Dr. Metodi Istatkov, Head of the course

Introduction

- Students must be acquainted with basic knowledge in the field of Obstetrics and Gynecology
- The subject is taught during summer term in the 4th course.

Primary aims

- a) Acquisition of abilities and skills by treatment of pregnant and maternity patients
- b) Giving a necessary competent aid during birth when there is not a doctor or a midwife

Main objectives

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Obstetrics and Gynecology	15	-	15	30	0.61%
8 th term	2 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises

Assessment methods

Oral exam at the end of the term

Strengths

- The best traditions in medical education and its permanent modernization are used in the program of teaching.
- Instructional films and slides are used for adding to students` knowledge.

Weaknesses

Innovations and Best Practices

Plans for future changes

Staff names

Assoc. Prof. Dr. M. Istatkov
Assoc. Prof. Dr. B. Marinov
Assoc. Prof. Dr. St. Ivanov
Dr. Iv. Kovachev - Assistant
Dr. M. Tzankova - Assistant
Dr. M. Sirakov - Assistant
Dr. Zh. Karagiozova - Assistant
Dr. L. Damjanov - Assistant
Dr. A. Dukovski - Assistant
Dr. R. Dimitrov - Assistant

Dr. M. Chamova - Assistant
 Dr. P. Popivanova - Assistant
 Dr. D. Tzenov - Assistant
 Dr. V. Novachkov - Assistant
 Dr. L. Veltova - Assistant

Visitors Comments

Please refer to comments in respect of 8.1

8.8 Occupational Disease

Person in the school who will explain and show this to the visitors:
 Name: Assoc. Prof. Dr. Anton Savov, PhD, Head, Department of Occupational Diseases
 Assoc. Prof. Dr. Tanja Kuneva, PhD
 E-mail: savov@sf.inet.bg

Introduction

Timely examination and discovery of occupational changes in oral cavity and precarcinomas promote considerably for the early diagnostics, the prophylactics and the treatment not only of systemic occupational diseases but also of oral pathology.

Regulations for the order of informing, registering, confirmation, appealing and reporting of the occupational diseases /see State newspaper, 2001, No 33/ specifies the duties of each dentist to announce all doubtful cases of an occupational disease in the National insurance institute, which requires the dentists to have a knowledge of occupational damages in the dental practice. The Regulations meets the requirements of the European Social Code.

Primary aims

To be acquainted with damages of oral mucosa, periodontium and dental structures appearing as a result of occupational risk factors /chemical, immunohypersensitive, physical etc., as well as the characteristics of the most frequent occupational diseases among dentists and dental assistants in order to be limited the occupational damages and the labor accidents.

Main objectives

- Acquisition of knowledge in the field of diagnostics of occupational dental damages
- Acquisition of the expertise of those damages related to adequate medical, social and legal actions /labor readjustment, disabilities, legal expertise etc./
- Occupational risk and labor accidents in dentistry
- To be acquainted with the most frequent occupational diseases among dentists and dental assistants related to their prophylactics.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Occupational Diseases	15	-	15	30	0.61%
8 th term	1 h. weekly		1 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises

Assessment methods

- Continuous assessment

Strengths

The students in dentistry are acquainted with clinical manifestations of such occupational diseases as mucous damages, periodont and dental structures because of the action of unhealthy labour conditions at the Centre of Occupational Diseases. The Centre is the only base for training in this field.

Weaknesses

The students have not a opportunity to examine further the patients with occupational damages.

Innovations and Best Practices

Plans for future changes

Continuous assessment to be substituted by an oral exam without a grade or with an oral exam with a grade for a better motivation and preparation of the students and better assessment of their knowledge as well by an exam with a lecturer with academic rank.

Staff names

Assoc. Prof. Dr. Anton Savov, PhD, Head, Department of Occupational Diseases - Otorhinolaryngology, Occupational Diseases

Assoc. Prof. Dr. Tania Kuneva, PhD, Internal Medicine, Clinical Toxicology, Occupational Diseases

Assoc. Prof. Dr. Elisaveta Petrova, PhD, Pulmonary Diseases, Occupational Diseases

Assoc. Prof. Dr. Veneta Kostova, PhD, Neurology, Occupational Diseases

Assoc. Prof. Liljanda Elenkova, PhD - Lawyer with a thesis in Occupational Diseases

Dr. Mihailina Dobrevska, Dentist, General Dentistry, specialization in the University "Maria et Pierre Kuire"

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Paris

Dr. Krasimira Dinkova, PhD, Head Assistant, Internal Medicine, Occupational Diseases

Dr. Zlatka Stoineva, PhD, Head Assistant, Neurology, Occupational Diseases

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Dr. Latinka Nakova, Head Assistant, Neurology, Occupational Diseases

Dr. Anelia Kamenova - Research Associate, 2nd degree - Neurology, Occupational Diseases

Visitors Comments

Please refer to comments in respect of 8.1

8.9 Neurology and Psychiatry

Person in School who will explain and show this to the visitors:

Neurology

Name: Prof. Dr. Penko Shotekov; Assoc. Prof. Dr. Nikolai Nikoevski

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Psychiatry

Name: Assoc. Prof. Dr. Toma Tomov; Assoc. Prof. Dr. Vihra Milanova

E-mail: Vihra@medun.acad.bg

Introduction

The functioning of the nervous system is the basis of all processes and the entire activity of the organism. The dentist is a medical professional whose high qualification, more close specialization and improvement must be built on solid theoretical base. He, like every doctor, must treat and protect not the particular organ but the whole organism of the patient. In order to understand, distinguish and cure the pathological processes and diseases, which are objects of his specialization, he must be well grounded in the clinical medicine subjects. Therefore he must obtain some knowledge of neurology and psychiatry as well.

Primary aims

The main purpose of the education in neurology and psychiatry are:

- Obtaining of concrete knowledge and learning about the syndromes and the basic neurological units with their specific effects on the work of the dentist.
- Obtaining knowledge of urgent therapeutic activities in the process of studying the neurological and psychopathological syndromes. This knowledge is necessary for the dentist in order to render assistance if necessary and to transport the patient in a proper way.
- Acquainting with basic symptoms of mental disorders according to International Classification of Diseases Nr. 10, adapted to the general practice.
- Principles of treatment and recommendations for consulting.

Main objectives

- The dentist must receive detailed knowledge of the syndromes and the diseases of the peripheral nerves in the head, face and oral cavity - some of the diseases are studied and treated by both the dentists and the neurologists (like the neuralgia of nervus trigeminus, the neuralgia of nervus glossopharyngeal and others).
- The knowledge of the pain syndromes in the head and the oral cavity are necessary both for rendering consulting differential diagnosis and assistance to the neurologist.
- Grave complications of inflammatory processes of the teeth and oral cavity may be brain diseases (secondary bacterial meningitis and meningoencephalitis, brain abscesses etc.). In these cases the duties and responsibilities of the neurologists, dentists and neurosurgeons are equal.- Many vascular, dystrophic, neoplastic, inflammatory and other diseases of the cerebrum cause serious motor, sensory and trophic disorders of the face and the oral cavity, which the dentist must be acquainted with in order to estimate the difficulties, which they create for his specific work.
- Identification and evaluation of the basic symptoms of mental derangement.
- Receiving basic knowledge of the therapeutic methods in neurology and psychiatry.
- Legal and deontological aspects of patients' care.

Hours in the Curriculum and methods of learning/teaching

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Neurology and Psychiatry	16	-	14	30	0.61%
9 th term	1 h. weekly		1 h. weekly		
9 th term	4 h. weekly		3 h. weekly		

Where:

- 2 lectures x 2 hours - General Neurology
- 3 lectures x 2 hours - Special Neurology
- 1 lecture x 2 hours - General Psychiatry
- 2 lectures x 2 hours - Special Psychiatry

Assessment methods

Oral theoretical exam

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

Staff names

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 Assoc. Prof. Dr. Nikolai Nikoevski, e-mail: lpopov@ttm.bg

Assoc. Prof. Dr. Toma Tomov, Head of the Department of Psychiatry
Assoc. Prof. Dr. Vihra Milanova e-mail: Vihra@medun.acad.bg

Visitors Comments

Please refer to comments in respect of 8.1

SECTION 9: ORTHODONTICS AND CHILD DENTAL HEALTH

9.1. Orthodontics

Person in the school who will explain and show this to the visitors:
 Name: Prof. Valentin Moutafchiev, Head, Department of Orthodontics
 E-mail: dental-ortod@sun.medun.acad.bg

Introduction

- Duration of the teaching course in Orthodontics is 4 terms /7th, 8th, 9th and 10th term/ with 225 h.
- Lectures - 75 h.
- Practical exercises - 150 h.
- Development of dental-maxillary system and facial skeleton, etiology and diagnostics of dental-maxillary malocclusions and anomalies, basic dental-maxillary malocclusions and anomalies /in dental arches and occlusion/, prophylactics of dental-maxillary malocclusions and anomalies and complex treatment of diseases in maxillofacial region are introduced in the lecture course.

Primary aims

Training of general dental practitioners for primary and secondary prophylactics of dental-maxillary malocclusions in order to be included about half the children who need an orthodontic treatment.

Main objectives

- a) Training for assessment and control of development of dental arches and occlusion and the growth;
- b) An acquisition of basic biometric and radiographic methods for diagnostics of dental-maxillary malocclusions and anomalies;
- c) Training for clinical diagnoses of the dental-maxillary malocclusions and anomalies and an orientation of cases which are beyond the competence of the general dental practitioner;
- d) Acquisition of basic methods of primary prophylactics of dental-maxillary malocclusions and anomalies;
- e) Training for application of basic appliances for primary and secondary prophylactics of dental maxillary malocclusions and anomalies;
- f) Preparation for participation in complex treatment of maxillofacial region diseases.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Orthodontics	90	4	146	240	4.87%
7 th term	2 h. weekly	1	2 h. weekly		
8 th term	2 h. weekly	1	2 h. weekly		
9 th term	1 h. weekly	1	2 h. weekly		
10 th term	1 h. weekly	1	4 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises

Assessment methods

- Oral exam
- Written exam
- Tests

Strengths

- a) An acquisition of basic diagnostic methods and a treatment plan in a term
- b) Each student must diagnosticate individual diagnosis and treatment of 2 patients and control a 3rd patient as well;
- c) Joint discussion of the treatment plan, difficulties and results of treatment in the students' group.

Weaknesses

- Lack of modern textbook in orthodontics
- Non-applying of fixing techniques by interceptive treatment in mixed dentition
- Lack of system requiring adequate responsibility and activity of the students during the term.

Innovations and Best Practices

- Conducting a prophylactic examination by the students
- Introduction of a diagnostic term
- Individual diagnose and treatment of patients by each student.

Plans for future changes

- Publishing of a suitable textbook in orthodontics
- Preparation of illustrated materials for computer-assisted work

Staff names

Prof. MOUTAFTCIEV, Valentin, DrS, PhD - Head of Department of Orthodontics
Assoc. Prof. KRUMOVA, Vera, DrS, PhD
Dr. ANDREEVA, Laura, DrS - Head Assistant
Dr. DIMOVA, Galina, DrS - Head Assistant
Dr. ALAGIOZOVA, Palmira, DrS - Head Assistant
Dr. GAIDAROVA, Krasimira, DrS - Head Assistant
Dr. DINKOVA, Miroslava, DrS - Head Assistant
Dr. PETRUNOV, Vladmir, DrS - Senior Assistant
Dr. JORDANOVA, Greta, DrS - Senior Assistant
Dr. PETROV, Valeri, DrS - Assistant
Dr. IGNATOVA, Silvia, DrS - Assistant

Visitors Comments

Orthodontics is taught in 4 terms (7-10). In semester 1 the students are introduced to technical and laboratory work, semester 2 is spent in the teaching of basic diagnosis (on study models and cephalometric analysis, with a manual put together by their teachers). On semester 4-5 the clinical approach to patients is applied and the students are allocated 1 new patient each for diagnosis and treatment planning. Simple cases only are chosen (class 1 – 2 malocclusion in the early mixed dentition) as the Department approach –according to their objectives- is to teach the students the principles of diagnosis and the skill to identify the need of treatment and possible indications for referral to specialists of the cases not within the competence of the General Dental Practitioner). As indicated in most updated CV, further orthodontic training –like treatment with full fixed appliances and the management of more complex cases- should be addressed by post-graduate schools run by University Institutions.

Staff appear to spend adequate time with the students in discussion and there is a strong stress on small groups seminars on treatment planning and evaluation of outcomes. A little too much time appears to be spent during semester 1 on basic wire bending and technical exercises which might not be very useful in the future clinical activity of a general practitioner.

At a post-graduate level complex treatment (including orthognatic procedures planning with the Department of Oral Surgery) is dealt with.

The 4 students appear to come mostly from foreign countries even though 1 job is reserved for Bulgarian students (economic reasons, higher fees for foreigners). There has been a suggestion that more specialists are needed in the country.

Case load between students and staff is about 120 patients/year. The students are expected to produce 10 finished cases at the end of their course, similar to an international Board.

No screening method for case selection and input of patients and no informatic coding of patients appears to be in use at any level - see Global congress Report from the Prague DentEdEvolves meeting (4.2).

The department would benefit from more reading material and an updating of the library, with access to the international literature. Some problem-orientated learning rather than simple records and patients'

examination by the students might be recommended and would implement experience also at undergraduate level.

There is no indication on the need of treatment in the population (a figure of about 50% of the children needing orthodontics was quoted). This is a serious deficiency which this Department could address for Government agencies and we commend such an initiative for consideration. A national survey could be useful in planning services and manpower at both public health and private level and leadership in this would come from the Department.

The Visitors would not interfere with approaches to resolve the problem of untreated orthodontic cases but were concerned that short-term pragmatic approaches might cause serious long term complications for the community. Orthodontic treatments in the hands of inadequately trained personnel, however well-intentioned, should be seriously questioned. The Visitors stress that there is no element of protectionism of orthodontists as this was written by a person who is not an orthodontist.

Also some stress on preventive and interceptive orthodontics is indicated, with more integration with the Departments of Dental Public Health and Prevention and Pediatric Dentistry.

9.2 Child Dental Health

Person in school who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Milena Peneva, PhD, Head, Department of Pediatric Dentistry

E-mail: dental-pedodont@sun.medun.acad.bg

Introduction

The course in Pediatric Dentistry is held by the specialized Department of Pediatric Dentistry within the framework of 4th - 10th term /from 2nd to 5th course/. The course is divided into 2 parts:

- Pre-clinics of Pediatric Dentistry- from 4th to 5th term
- Teaching of histogenesis, morphology and physiology of dental structures- oral mucous and periodontium, as well as oral biology / dental plaque, oral ecosystem, saliva and all physiological protective processes in oral cavity/.
- Clinics of Pediatric Dentistry
- A phantom course is studied as the practical tasks are made on phantom heads for pediatric cariesology and endodontics during 6th term.
- A course in prophylactics of dental diseases with practical purpose is held during 7th term.
- Clinical work on patients from 1 to 16 years old is done during 8th, 9th and 10th term.
- Lectures, consistent with the subjects of terms, are read during the whole course in Pediatric dentistry.
- Theoretical seminars are held and clinical cases are discussed, besides the practical work, during the course in Pediatric Dentistry.

Testing of students' knowledge is carried by the system of practical, theoretical oral and written exams.

Primary aims

- a) To be given a theoretical background of oral biology on which is built knowledge in prophylactics and clinics of pediatric dentistry;
- b) To be given an opportunity of clinical experience and clinical thinking necessary in the beginning of dental practice.

Main objectives:

- a) Teaching of histogenesis, morphology and physiology of dental structures and oral biology
- b) Complex prophylactics of dental diseases
- c) Acquiring practical skills on phantom head
- d) Clinics, prophylactics and treatment of dental caries and its complications by temporary and children's permanent teeth
- e) Clinics, diagnostics and treatment of oral mucous diseases and periodontal diseases in the childhood
- f) Pharmaceuticals and materials applying in pediatric dentistry.

Hours in the curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of
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					hours in the curriculum
Pre-clinics of Pediatric Dentistry	30	30	-	60	1.22%
4 th term	2 h. weekly	2 h. weekly			
5 th term	2 h. weekly	2 h. weekly			
Clinics of Pediatric Dentistry	75	9	216	300	6.09%
6 th term	1 h. weekly		3 h. weekly		
7 th term	1 h. weekly		2 h. weekly		
8 th term	1 h. weekly	3	2 h. weekly		
9 th term	1 h. weekly	3	3 h. weekly		
10 th term	1 h. weekly	3	5 h. weekly		
Total	105	39	216	360	7.31%

Method of learning/ teaching

- Lectures
- Seminars and discussions
- Practical works on phantom heads
- Practical works on patients

Assessment methods

- Continuous assessment
- Tests
- Practical exams
- Theoretical /oral and written/ exam
- State exam

Strengths

Training in Pediatric dentistry is successfully due to the combination of fundamental theoretical knowledge and sufficient prophylactic and practical skills, as well as providing conditions for clinical thinking of the students - necessary factors for the beginning of individual clinical practice.

Weaknesses

Insufficient funds for supply with materials of the training process.

Innovations and Best Practices

Application of all modern materials and methods related to dental treatment of the children.

Plans for future changes

In the future the training will be brought up to date in connection with the Health reform in Bulgaria.

Staff names

Assoc. Prof. PENEVA, Milena, DrS, PhD - Head of the Department of Pediatric Dentistry
 Prof. ATANASSOV, Nikola, DrS, PhD
 Assoc. Prof. TZOLOVA, Elka, DrS, PhD
 Assoc. Prof. KABAKCHIEVA, Rositza, DrS, PhD
 Dr. MARKOVA, Nikoleta, DrS - Head Assistant
 Dr. DOJCHINOVA, Lilia, DrS - Head Assistant
 Dr. GRANCHAROVA, Natalia, DrS - Head Assistant
 Dr. SHARKOV, Nikolai, DrS - Head Assistant
 Dr. TARGOVA, Sashka, DrS - Head Assistant
 Dr. BAKARDJIEV, Petko, DrS - Head Assistant
 Dr. RASHKOVA, Maia, DrS - Head Assistant

Dr. PASKOVA, Maria, DrS - Head Assistant
Dr. GOLCHEV, Javor, DrS - Head Assistant
Dr. ZHEGOVA, Galina, DrS - Senior Assistant

Visitors Comments

Pediatric Dentistry is taught in 7 semesters (4-10) and is divided in a pre-clinical section –spent mainly in a propedeutic course in the laboratory on the 8 phantom heads and in the teaching of preventive measures, behavioural science and psychology - at the end of which individual practical competence is checked before the students progress in the clinical work on children during the clinical part of the teaching for the next 5 terms. Practical exercises and seminars in smaller groups are frequently held and staff appears to work in strict contact with the students.

The students are required to perform a number of procedures on patients and recruiting a suitable number of young children (up to 15 years of age) appears to be somewhat of a problem since the old NHS which included systematic surveys in the schools has been changed. However, a »status” is collected for each child, oral hygiene methods are explained on an individual basis, and some preventive measures are applied (sealants in some cases). It would appear that mainly emergency care is provided and no recall program is officially set up, even though students seem to plan and record a full course of treatment in their log book. No full records of patient treatment were mentioned within the Department, even though a diagnostic form was filled in during the first visit.

Oral medicine and oral pathology in pediatrics are also taught within the Department of Pediatric Dentistry but no clear differentiation is specified between pediatric Dentistry and Pathology.

More problem related teaching and learning should possibly be facilitated and a more comprehensive approach to children care is recommended, together with a more integrated and systematic collaboration with other courses, in particular with orthodontics and periodontics.

9.3. Oral Medicine and Oral Pathology in Pediatrics

Person in the school who will explain and show this to the visitors:

Name : Assoc. Prof. Dr. Milena Peneva, PhD, Head, Department of Pediatric Dentistry

E-mail : dental-pedodont@sun.medun.acad.bg

Introduction

Oral Medicine and Oral Pathology in the childhood as a lecture course are studied in the course in Pediatric dentistry during 9th and 10th term. The duration of the course is 30 hours. Single clinical cases are discussed during the whole teaching in Clinics of Pediatric Dentistry. Illustrated clinical seminars are held, where different clinical cases of oral cavity diseases connected with systemic diseases in childhood and adolescence are shown.

Primary aims

- a) To give sufficient information about etiopathogenesis, clinics, diagnostics and treatment of oral mucous diseases, periodontium and the teeth in connection with systemic diseases in childhood.
- b) Creating of clinical thinking and ability for diagnostics on the basis of clinical data.

Main objectives

- Study of etiology, pathogenesis and clinics of oral mucous diseases connected with systemic diseases by children.
- Learning of etiology, pathogenesis, clinics and treatment of diseases of gingiva and periodontium connected with systemic diseases by children.
- Possibility for diagnosticating of different dental changes as a result of systemic diseases or hereditary tainted status.
- Diagnostication and treatment of acute herpes gingivostomatitis, recurrent aphtae, oral candidiasis etc.
- Diagnostication and treatment of symptomatic stomatitis, cheilitis and glossitis in childhood.

Hours in the curriculum

- Lecture course - 30 hours
- There are not an estimated number of hours for Clinics of this kind of pathology - it is studied during the whole course in Clinics of Pediatric Dentistry.

Method of learning/teaching

- Lecture course with demonstration of clinical cases on slides;
- Clinical demonstration of adequate cases during the practical exercises of Clinics of Pediatric Dentistry;
- Clinical seminars for discussion of different clinical diagnoses according to preliminary documented and illustrated cases.

Assessment method

- Continuous assessment
- Theoretical term exam (written and oral)
- State exam

Strengths

Teaching of Oral Medicine and Oral Pathology of the childhood give an opportunity to acquire clinical knowledge, which will be useful for the future dentists in their individual practice.

Weaknesses

Teaching of Oral Medicine and Oral Pathology is not carried during one cycle of exercises and seminars by reason of the specificity and the rarely diseases of those kinds.

Innovation and Best Practices

Introduction of a great diversity of demonstration material in connection with oral pathology in the childhood and creating better system for students' study in this field.

Plans for future changes

Creating and using multimedia aids for demonstration and discussion of cases connected with oral pathology.

Staff names (see 9.2)

Visitors Comments

See the comments in 9.2 above.

SECTION 10: DENTAL PUBLIC HEALTH AND PREVENTION

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Tzvetko Jolov, DrS, PhD, DMSc, Head of Department of Social Medicine and Public Dental Health

E-mail: tiolov@yahoo.com

Introduction

- Theory and methodology of social medicine.
- Public health - indices and assessment methods
- Epidemiology and epidemiological methods in dentistry.
- Sociological methods and their use in dentistry.
- Financing of health care system and dental health care system.
- Management of dental practice.
- Organization of dental treatment process.
- Ergonomics in dentistry.
- Dental health - status and tendencies. Indices for estimation.
- Ethical issues in dental practice.
- Health laws.

Primary aims

To train future dentists to be able to act effectively for health promotion, prevention and treatment of dental diseases, according to the academic knowledge and public expectations, based on bio - psycho - social structure of the individual.

Main objectives

- To be able to make decisions, based on the understanding of bio - psychosocial structure of the individual.
- To be able to take professional and ethical responsibility for the patient and society.
- To be able to communicate and to achieve the mutual consent with the patients and other health personnel.- To know ethical norms and health laws.
- To know the structure and function of health care system, particularly dental healths care system.
- To be able to measure and estimate the dental status of population, its trends and factors, which influence it.
- To obtain skills for leadership of dental team.
- To obtain sufficient and appropriate scientific and ethical base for continuing education.

Hours in the Curriculum:

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Social Medicine and Public Dental Health	45	-	45	90	1.82%
5 th term					
6 th term					
	1 h. weekly		1 h. weekly		
	2 h. weekly		2 h. weekly		

Note

This number of hours is not only for Dental Public Health, but also for other modules as Behavioral Sciences, Communications, Health Laws, Ethics, and Practice Management.

Method of learning/teaching

- Lectures
- Practical exercises in small groups
- Seminars in small groups

Assessment methods

Colloquium after 5th term and exam (written and oral) after 6th semester.

Strengths

The course in Dental public health covers in significant rate the topics and purpose of the subject.

Weaknesses

- The program is not sufficient by hours
- The education in Dental Public Health is held only in two terms - 5th and 6th
- There is not sufficient personal work for students
- The theoretical teaching prevails over the practical
- There is not sufficient contact with practicing dentists

Innovations and Best Practices

- Cases discussions
- Attracting active students in extra - curricula forms
- Participation in Academic Link Project
- Dynamic updating of program according to changes in health care system.

Plans for future changes

- To enlarge the curriculum to 150 hours (3% of total amount of hours of dental curriculum)
- To enlarge the program in 4 terms
- To enhance practical teaching and students' self work
- To include a state exam on Dental Public Health before graduation. These hours include all modules of the discipline, including behavioral sciences, communications, health laws, ethics, and practice management.

Staff names

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 Dr. Snejana Ivanova Mihaleva, Assistant,

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Visitors comments

A total of 90 hours during semesters 5 and 6, dealt with Dental Public Health and Prevention. It also included topics such as Law, Ethics, Behavioural Science and Patients and Practice Management.

There is a wish to increase time and integrate the subject with other courses but the rather comprehensive teaching appears at the moment to be much focused on methodology and lectures with little practical application.

The enthusiastic staff are planning epidemiological surveys at a national level but so far official systematic data only appear to be available for population > 60 (dated 1987) showing a DMF > 25 increasing with age. A DMF figure of 3.5 was quoted for the 12 years old group. No periodontal and orthodontic treatment need have been analyzed at any level.

Systematic national surveys at different ages of both oral health and treatment need are suggested and would be useful in services and manpower organization.

The teaching of the organization of dental services and preventive methods, of practice management and record keeping, possibly with an emphasis on systematic coding systems, might be increased also at a practical level.

We recommend that the joint collaborative effort recommended in respect of Paediatric Dentistry and this Department should include innovations in respect of treating and educating students in the care of persons with special needs. This would be helpful for the growing reputation of the Stomatological Institute.

SECTION 11: RESTORATIVE DENTISTRY

11.1 Conservative Dentistry

Person in School who will explain and show this to the visitors :

Name: Prof. Boris Indjov, DrS, PhD, DMSc, Head, Department of Conservative Dentistry

E-mail: indjov@sun.medun.acad.bg

Introduction

Conservative Dentistry is a discipline that combines Operative Dentistry, Endodontics and Physiotherapy.

Operative Dentistry

Operative Dentistry includes aetiopathogenesis, diagnostics, treatment and prevention of dental caries and non-cariou lesions of hard dental tissues. Students learn all basic principles of preparation and obturation with different dental materials.

Teaching in Operative dentistry is carried out in 2 stages:

- The first stage is a pre-clinical phantom course. It is held during 5th and a part of 6th term. (The rest of 6th term is for a pre-clinical phantom course in Endodontics). The phantom course in Operative Dentistry includes lectures for the whole course from about 130-140 students and in groups by 6-7 students - demonstrations, seminars and practical exercises on phantom heads and extracted teeth under the direction of an assistant. Students acquire theoretical and practical knowledge of necessary instruments, principles of classical cavity preparation and that for adhesive materials, technique for making obturations from different obturation materials including molded obturations and pin technique. Students are admitted to a practical exam on phantom heads if they have already made: cavities for dental amalgam- from I Class - 12; from II Class -13 and from V Class -1; cavities for composite materials and glass-ionomer cements - from III Class - 3; from IV Class - 3 and from V Class -1; cavities for cast obturations - 2; pin placement - 3; dental amalgam obturations - 3 and obturations from composite materials and glass-ionomer cements - 3 or total - 6 obturations on phantom and extracted teeth.
- The second stage is a clinical course and includes 7th - 10th terms. Students are taught in diagnostics, treatment and prevention of carious and non -cariou diseases of hard dental tissues under observation of an assistant. Students are admitted to a practical exam if they have a completed treatment of 43 cases with caries simplex with dental amalgam obturations, composite materials, and 10 cast obturations, composite material inlays - at will, or total - 53 obturations on patients.

Primary aims

The primary aim is achievement of theoretical knowledge and clinical skills for diagnostics, treatment and prevention of diseases of hard dental tissues.

Main objectives

- Acquisition of principles of asepsis and antiseptic infection control.
- Aetiopathogenesis, histology of dental caries and non-cariou diseases of hard dental tissues.
- Clinical characteristics and diagnostics of diseases of hard dental tissues including physical methods.
- Pain control
- Remineralisation - treatment of diseases of hard dental tissues without obturation.
- Treatment of diseases of hard dental tissues with restorative dental materials (amalgam, composite resins, glass-ionomer cements, cast obturation, inlays of composite materials).
- Restoration of deeply destroyed teeth with pinsands posts.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Pre-clinics of Conservative Dentistry	45	10	110	165	3.35%
5 th term	2 h. weekly	4	4 h. weekly		
6 th term	2 h. every 2 nd week	6	4 h. weekly		
Clinics of Conservative Dentistry	60	5	310	375	7.61%
7 th term	2 h. every 2 nd week	3	6 h. weekly		
8 th term	2 h. every 2 nd week		5 h. weekly		
9 th term	2 h. every 2 nd week	2	5 h. weekly		
10 th term	2 h. every 2 nd week		5 h. weekly		
Total	105	15	420	540	10.96%

Method of learning/teaching

Lectures, seminars, demonstrations, practical exercises in Pre-clinics (work on model and phantom head) and Clinics (patient treatment); use of illustration materials: slides, video, films and sometimes CD.

Assessment methods

Each student has a pre-clinical and clinical exercise book for registration of his practical work.

- Continuous checks of practical work.
- Continuous theoretical checks during seminars.
- Practical exams in Pre-clinics (after 6th term) and Clinics (after 10th term).
- Term theoretical exam in Pre-clinics (after successfully taken practical exam at the end of 6th term) and Clinics (after 10th term).
- State exam in Conservative Dentistry (after pregraduation probation).

Strengths

- Insurance of sufficient number of patients for clinical work.
- A direct link between theory and practice.

Weaknesses

- Necessity of refurbishment of phantom teaching rooms
 - Necessity of clinical base modernization
 - Lack of financial support of scientific research activity
 - There are no colloquiums between the pre-clinical and clinical exam
- No training in fourhanded practice and with rubber dam

Innovations and Best Practices

- Required obligatory practical work for each term.
- Working out of inlays of composite dental materials.

Plans for future changes

- Improvement of clinical assessment criteria in Operative Dentistry
- Refurbishment of phantom and clinics teaching rooms

- Introduction of caries risk tests

Staff names

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TOPALOVA, Snejanca - DrS, PhD, Assoc. Professor, Therapeutic Dentistry
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VASILEVA, Radosveta - DrS PhD, Head Assistant, Therapeutic Dentistry
TODOROVA, Slavka - DrS, PhD, Head Assistant, Therapeutic Dentistry
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KUZMANOVA, Ianeta - DrS, Senior Assistant, General Dentistry
RADEVA, Elka - DrS, Senior Assistant, Therapeutic Dentistry
KAROVA, Emilia - DrS, Senior Assistant, Therapeutic Dentistry
DINOVA, Desislava - DrS, Assistant
RAICHEV, Ivan - DrS, Assistant
GUSIISKA, Angela – DrS, Assistant

Visitors Comments

Students in general appreciate what they learn in this part of the curriculum and the attitude and dedication of the teachers towards teaching in the students is rated positively. There is an open attitude from the side of the teachers with regard to the subject matter. The visitors understand that the theory of operative dentistry is mainly disseminated through lectures, handouts, written by the head of the department and textbooks (translation of up to date English textbooks into Bulgarian language). Slides are mainly used in the lectures to clarify the subject matter. Preclinical and clinical skills are taught by live demonstrations in small groups (5-7 students). It is the visitors opinion that the students are well prepared for their future profession. However there are some points of concern which need to be addressed.

- the most severe limitation is the old fashioned equipment in both pre-clinic and clinic. First priority should be to find the financial means to renew the equipment and bring it up to standard.
- it is recommended to shift further away from the concept of pinned amalgams towards minimal invasive adhesive dentistry using composites.
- it is appreciated that students are learning the full range of restorative techniques, including cast inlays.
- treatment planning and decision-making is covered to a certain extent from the theoretical point of view, however it is strongly recommended to pay more attention to a scientific approach of treatment planning and decision making by documenting all steps in data gathering and pro's and con's of different treatment options for each patient in a structured way. Such a plan should form the basis for communication between Faculty, student and patient and between departments.
- The visitors are of the opinion that there is an urgent need for a good central patient record keeping system in the school, serving the various clinical departments, including x-rays.
- As to the quality of the clinical treatment, due to a collapse of the water system in the school during our visit, there was no opportunity to see the students at work
- The total time available for conservative dentistry seems to be adequate. However, it is recommended that students start earlier in the programme (3 - 4th semester) with their pre-clinical exercises.
- The scientific training of students should be developed more. A good start could be to require written reports on the basis of a thorough critical appraisal of the literature (review)
- The use of rubber dam is not practiced at all in this school. It is recommended to introduce it in the curriculum.
- Dental ergonomics and the theory and practice of four-handed dentistry should be addressed more in theory and practice

11.2 Endodontics

Person in School who will explain and show this to the visitors :

Name: Prof. Boris Indjov, DrS, PhD, DMSc, Head, Department of Conservative Dentistry

E-mail: indjov@sun.medun.acad.bg

Introduction

Teaching in Endodontics is an integral part of Conservative Dentistry and it includes a pre-clinical and a clinical course.

Pre-clinical course is a phantom course and it is a continuation of a phantom course in Operative Dentistry during 6th term and includes lectures for the whole course from about 130 -140 students and demonstrations, seminars and practical exercises by groups from 6-7 students. Practical exercises are carried out mainly on extracted teeth - 5 single-rooted and 5 multirooted teeth and they include: armamentarium, access cavity preparation, intracanal treatment procedures - measuring of the canal length, cleaning and shaping, root canal obturation, restoration endodontically treated tooth / total 8/ including posts or cores.

The clinical course is carried out during 7th - 10th term. It includes lectures, demonstrations, seminars and practical exercises by groups from 6-7 students. Students acquire theoretical and practical knowledge of right diagnosing and treatment of dental pulp and periodontic diseases, means and methods for treatment, control on the healing processes, prevention of complications and retreatment of endodontically treated teeth. Students are admitted to a practical exam if they have already finished root treatment on 9 single-rooted and 11 multirooted teeth, 8 posts and cores restorations /casts, dental amalgam or composite materials/ of endodontically treated teeth. Total: 95 restoration from Pre-clinics and Clinics of Conservative Dentistry /Operative Dentistry and Endodontics/.

Primary aims

Study and practical acquisition of basic methods for diagnostics and dental pulp and periodontic diseases treatment

Main objectives

- A) Acquisition of principles of asepsis and antiseptics
- B) Anatomic and physiological features of dental pulp and periodontium
- C) Etiology and pathogenesis of dental pulp and periodontic diseases
- D) Clinics and diagnostics of dental pulp and periodontic diseases
- E) Treatment and prevention of dental pulp and periodontic diseases
- F) Errors and complications in endodontic treatment
- G) Retreatment of endodontically treated teeth
- H) Endodontic emergency
- I) Endodontic microbiology
- J) Internal and external bleaching of discolored teeth
- K) Physical methods for diagnostics and therapy.

Hours in the Curriculum

Please see 11.1

Method of learning/teaching

Lectures, seminars, demonstrations, practical exercises in Pre-clinics (work on single- and multi-rooted teeth) and Clinics (individual patient treatment).

Assessment methods

- Continuous checks of practical work.
- Theoretical checks of seminars.
- Practical exams in Pre-clinics (after 6th term) and Clinics (after 10th term).
- Term theoretical exam in Pre-clinics (after successfully taken practical exam at the end of 6th term) and Clinics (after 10th term).
- State exam in Conservative Dentistry (after pregraduation probation).

Strengths

- Consecutive thematic teaching in Pre-clinics and Clinics
- Sufficient number of endodontically treated cases

Weaknesses

- Apical Surgery as a part of the Surgical Endodontics is taught in the Department of Oral and Maxillofacial Surgery.
- Lack of computer system for periodical checks and self-assessment

Innovations and Best Practices

- Obligatory practical work for each term
- Electrometric and roentgenographic determination of working length of the root canals
- Intraligamental anesthesia
- Lateral condensation

Plans for future changes

- Increasing the assessment criteria of endodontic clinical practice
- Individual work with the best students and stimulating their scientific and research thinking.
- Introduction of certain nosological units to be worked out during the pregraduation probation.
- Discussion of scientific articles with the students from 4th and 5th courses.

Staff names

See 11.1 Conservative Dentistry - the same staff names

Visitors Comments

Most of the comments given under 11.1 are applicable here as well. The use of rubber dam, specifically in the field of endodontics must be introduced. The techniques and procedures for shaping, cleaning and filling of the canals as used in this area of clinical dentistry are adequate. The visitors support the suggested innovations and plans for future changes in the field of endodontics (a more research oriented approach, improvement of assessment criteria and procedures, etc).

11.3 Prosthodontics. (Fixed and Removable Prosthodontics. Edentulous State).

Person in School who will explain and show this to the visitors:

Name: Prof. Todor Peev, DrS, PhD, DMSc, Head, Department of Prosthodontics

E-mail: dental-protet@sun.medun.acad.bg

Introduction

The study in Clinics of Prosthodontics is held in 5 terms:

- In 6th term - phantom course
- In 7th, 8th, 9th and 10th term study is carried out in fixed and removable prosthodontics and treatment of edentulous state at the same time.

Primary aims

The aim of the students' study in Clinics of Prosthodontics is training and practical learning of the methods and the means of research and treatment of masticatory system.

Main objectives

- a) Treatment of tooth crown defects
- b) Treatment of tooth abrasion
- c) Treatment of disorders in occlusion and articulation
- d) Treatment of dental arches defects with bridges
- e) Treatment of dental arches defects with removable dentures
- f) Treatment after total edentulousness
- g) Maxillofacial prosthetics

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical	Total Hours	% of total
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			exercises		number of hours in the curriculum
Dental Materials	30	4	26	60	1.22%
1 st term	2 h. weekly		2 h. weekly		
Pre-clinics of Prosthodontics	75	16	224	315	6.39%
1 st term	1 h. weekly	4	2 h. weekly		
2 nd term	1 h. weekly	4	4 h. weekly		
3 rd term	2 h. weekly	4	6 h. weekly		
4 th term	1 h. weekly	4	4 h. weekly		
5 th term					
Clinics of Prosthodontics	75	25	290	390	7.92%
1 st term	1 h. weekly	6	2 h. weekly		
6 th term	1 h. weekly	4	4 h. weekly		
7 th term	1 h. weekly	4	4 h. weekly		
8 th term	1 h. weekly	5	5 h. weekly		
9 th term	1 h. weekly	6	6 h. weekly		
10 th term					
Total	180	45	540	765	15.53%

Method of learning/teaching

- Lectures
- Lecture demonstrations
- Clinical exercises
- Seminars

Assessment methods

- Oral exams
- Practical exams - on phantom models and on patients
- Tests
- Written answers on questions

Strengths

Combination of various assessment methods balances the weaknesses of each one of them.

Weaknesses

Training and conducting of practical exams and tests control take up much time and means.

Innovations and Best Practices

Innovations in training process are not easy and everyday work. They are related to the change in the curriculum and for that reason they are realized after substantial analysis.

Plans for future changes

The plans for future changes are in connection with the standardization of curriculum with the one in the European Union countries.

Staff names

Prof. PEEV, Todor, DrS, PhD, DMSc - Head of the Department of Prosthodontics
 Prof. FILTCHEV, DrS, PhD, DMSc
 Assoc. Prof. ANASTASOV, Ivan, DrS, PhD
 Dr. KARAJASHEV, Pavel, DrS - Head Assistant
 Dr. BENKOVSKI, Tzvetan, DrS - Head Assistant
 Dr. TODOROV, Stefan, DrS - Head Assistant

Dr. PAPAŽJAN, Edmond, DrS - Head Assistant
Dr. DRAJEV, Todor, DrS - Head Assistant
Dr. HADJIEVA, Hrizdana, DrS - Head Assistant
Dr. VASKOV, Svetoslav, DrS - Head Assistant
Dr. LALEV, Georgi, DrS - Head Assistant
Dr. IORDANOV, Bojdar, DrS - Head Assistant
Dr. JONTCHEVA, Iliana, DrS - Head Assistant
Dr. KAMENOVA, Julia, DrS, PhD - Head Assistant
Dr. PAPAŽJAN, Hajk, DrS - Head Assistant
Dr. GEORGIEVA, Dimka, DrS, PhD - Head Assistant
Dr. PASHOV, Jordan, DrS, PhD - Head Assistant
RAJCHEV, Lubomir, Biophysicist - Head Assistant
Dr. JANKOVA, Mariana, DrS - Senior Assistant
Dr. KAZAKOVA, Stefka, DrS - Senior Assistant
Dr. BALJAN, Silvia, DrS - Senior Assistant
Dr. NIKOLOVA, Rajna, DrS - Senior Assistant
Dr. KIROV, Dimitar, DrS - Senior Assistant
Dr. PAVLOVA, Janina, DrS - Senior Assistant
Dr. NESHEV, Dobri, DrS - Senior Assistant
Dr. TZVETKOV, Nikolai, DrS - Senior Assistant
Dr. DAMIANOV, Nikola, DrS - Assistant
Dr. FILTCHEV, Dimitar, DrS - Assistant
Dr. GERDJIKOV, Ivan, DrS - Assistant
Dr. MILANOV, Javor, DrS - Assistant
Dr. CHAKALOV, Ivan, DrS - Assistant
Dr. NIKOLOVA, Neli, DrS - Assistant

Visitors Comments

Most of the remarks made in section 11.1 are applicable also for the field of prosthodontics. . It is strongly recommended to review the programme and to replace the time gained by reducing this part of the curriculum by research related activities as named under 11.1. For the future of the dental profession it is considered crucial to strengthen the academic skills and attitude of the students. Implantology and the related suprastructures should be introduced in the curriculum, both theoretically and practically.

Registration methods for occlusion and articulation (e.g. face-bow) deserves more attention in the curriculum.

11.4 Occlusion and Function of the Masticatory System

Person in School who will explain and show this to the visitors:

Name: Prof. Andon Filchev, DrS, PhD, DMSc

E-mail: dental-protet@sun.medun.acad.bg

Introduction

Occlusion and the function of the masticatory system are fundamental questions for Prosthodontics and for that reason they are included in the curriculum of the Department of Prosthodontics. They are learned within the framework of 10 terms - from 1st to 6th course. The study is divided into:

- A course in Pre-clinics of Prosthodontics
- A course in Clinics of Prosthodontics

Primary aims

Pre-clinics of Prosthodontic

The students must obtain theoretical knowledge and practical skills so they can reproduce in details on their own morphological features of bite plane of natural teeth; analyze it and correct it on phantom models by artificial crowns, bridges, partial and total dentures as well as taking into consideration physiologic-functional unity of the teeth, periodontium, mandible joints, masticatory muscles and central nervous system.

Clinics of Prosthodontics

The students must obtain theoretical knowledge and practical skills in diagnosing, analyzing, articulating and selective grinding of the occlusal contacts in the oral cavity of the patients, not only on natural, but also on artificial masticatory areas as well as taking into consideration physiologic-functional unity of the teeth, periodontium, mandible joints, masticatory muscles and central nervous system.

Main objectives

- Obtaining good knowledge of anatomy of bite plane of natural teeth.
- Study of theoretical bases of occlusodontology and gnathology in particular occlusal-articulation relationships and knowledge application into practice.
- The students in the course of Pre-clinics of Prosthodontics make the basic kinds of dentures on phantom models themselves in order to learn and reproduce correctly the occlusal-articulation relationships.
- In the course in Clinics of Prosthodontics the students treat patients. The main aim of the course is the complex rehabilitation of masticatory system, including the reproduction of the optimum occlusal-articulation relationships as well.
- Study of the methods of prophylactics and treatment of the diseases of the masticatory system and the temporo-mandibular joint as a result of functional disorder.
- Teaching of the methods of prosthetic treatment of periodontal diseases and their application into practice.
- Teaching of the methods of rehabilitation of the functional suitability of the masticatory system through maxillofacial prosthetics after surgical interventions.

Hours in the Curriculum

Please see 11.3

Method of learning/teaching

- Lectures
- Practical exercises
- Laboratory exercises for Pre-clinics of Prosthodontics
- Clinical exercises for Clinics of Prosthodontics

Assessment methods

- Approval and assessment of practical work during each term
- Practical and theoretical exams at the end of each course

Strengths

Adequate theoretical and practical training in Occlusodontology and Gnathology and the function of masticatory apparatus as well.

Weaknesses

Modern methods of Gnathology cannot be applied due to lack of articulators and facial arches as well.

Innovations and Best Practices

- Introduction of the system »Adapta» with polypropylene cap for making crowns and bridgeworks.
- Introduction of a wax dipping technique for making the waxed caps for crowns and bridgeworks.
- Introduction of the wax additive technique by P. Thomas for moulding of the bite planes of phantom models.
- Wax additive technique for shaping of four single cast crowns and two four-unit bridges on maxilla and mandible as well.

Plans for future changes

Supply of articulators and facial arches and their introduction to the training

Staff names

Please see 11.3

Visitors comments

Recommendations given in 11.1 are also applicable here.

11.5 Dental Materials

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Ivan Anastasov

E-mail: dental-protet@sun.medun.acad.bg

Introduction

Teaching in Dental Materials is held in the 1st term with 30 hours lectures and 30 hours practical exercises.

Primary aims

Primary aim is the students to be acquainted with the materials used in the dental practice.

Main objectives

- a) To study the origin, production and commercial appearance of the materials
- b) To learn the composition of the materials
- c) To study chemical, physical, and biological properties of the materials
- d) To study the use of the materials
- e) To study the methods of their processing
- f) To learn the methods of coming to optimum chemical, physical, aesthetic and biological properties of the materials during their processing in laboratory and clinical conditions.

Hours in the Curriculum

See 11.3

Method of learning/teaching

Lectures, demonstrations, practical exercises, seminars.

Assessment methods

The students are assessed according to a six point system of marks through practical and theoretical exam.

Strengths

The combination of practical and theoretical exams gives an idea of the complete preparation of the students.

Weaknesses

Insufficient and outdated material and technical base and lack of specialized instructional films.

Innovations and Best Practices

Introduction of practical exam and yearly lecture program renovation.

Plans for future changes

Introduction of test assessment system and bringing it in conformity with the European Union countries.

Staff names

See 11.3

Visitor Comments

Recommendations given in 11.1 are also applicable here.

SECTION 12: PERIODONTOLOGY AND ORAL MUCOUS DISEASES

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Minka Dryankova, DrS, PhD, Head of the Department of Periodontology and Diseases of Oral Mucosa

E-mail: dental-parod@sun.medun.acad.bg

Introduction

Course of Periodontology and Oral Mucous Diseases continues 3 terms, starting from 8th term - 4th year and finishing 10th term - 5th year.

Primary aims

- Teaching of prevention, diagnostics, treatment and control of periodontal diseases and oral mucous diseases.
- Develop specialists of Periodontology and Oral Mucous Diseases.

Main objectives

Teaching of instruments and instrumentation, carrying out of clinical prophylactics at health and diseased periodontium, diagnostics of periodontal diseases and oral mucous diseases, periodontal diseases and oral mucous diseases treatment, prevention of indicated diseases.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Periodontology And Oral Mucous Diseases	60	6	129	195	3.96%
8 th term	1 h. weekly	-	3 h. weekly		
9 th term	1 h. weekly	3	3 h. weekly		
10 th term	2 h. weekly	3	3 h. weekly		

Method of learning/teaching

Lectures, practical exercises, seminars, demonstrations, consultations, self-training

Assessment methods

- Term practical and theoretical exam (oral and written exam).
- Preliminary oral exam: process of continuous assessment.
- Term assessment: theory, practice
- State exam

Strengths

Expanding practical training and demonstration of new treatment methods.

Weaknesses

The course starts late, insufficient hours for phantom training - one exercise weekly.

Innovations and Best Practices

Histological and microbial exams.

Plans for future changes

- Increasing of the hours for teaching - two exercises weekly
- Beginning of course one term earlier
- Introduction of entire phantom course with exam at the end

Staff names

Assoc. Prof. Dr. Minka Dryankova, DrS, PhD - Head of the Department
Dr. Tzonko Uzunov, DrS, PhD -Head Assistant, Responsible for administrative and teaching work
Dr. Hristina Popova, DrS, PhD - Head Assistant, Responsible for teaching and curing process
Dr. Tzveta Boyarova, DrS - Senior Assistant
Dr. Antoaneta Mlachkova, DrS - Senior Assistant
Dr. Teodora Boljarova, DrS - Senior Assistant
Dr. Velichka Doseva, DrS - Assistant

Visitors Comments

The clinical facility for education in periodontology was divided into a section for the undergraduate teaching and a section for more complex surgical procedures. The staff at the department demonstrated enthusiasm and competence in both clinical and educational aspects of periodontology.

The students start the education in periodontology during the 8th semester and continue during the 9th and 10th semester. Theoretical and clinical examination is undertaken in the end of the 8th and 10th semester. In addition periodontology is a part of the state exam during the 11th semester. The students are obliged to carefully report their patient treatment in a logbook, which follows the students during the study time in the department. The logbook describes in detail the requirements for the student in periodontology and the student registers continuously the progress of their patient treatment. Attempts are made to let the student treat the same patient in the department of periodontology and the departments for restorative dentistry and orthodontics. It is the visitors impression that the content of the education was sufficient to provide the students with the competences necessary for handling of periodontal diseases in ordinary dental practise. However, in order to strengthen the affective aspects of the subject, education in periodontology is recommended to be initiated earlier in the curriculum. Also in view of the widespread occurrence of periodontal diseases the time in the curriculum spent on periodontal diseases is suggested to be increased. Although an integration between periodontology restorative dentistry and orthodontics has been established, such integration between other clinical subjects and periodontology could also be initiated. The visitors further support the plans for future developments indicated in the department's self-assessment report.

SECTION 13: ORAL SURGERY AND DENTAL RADIOGRAPHY AND RADIOLOGY

13.1 Oral and Maxillofacial Surgery

Person in the school who will explain and show this to the visitors:

Name: Assoc. Prof. Radomir Ugrinov, DrS, PhD, Head, Department of Oral and Maxillofacial Surgery

E-mail: dental-mfs@sun.medun.acad.bg

Introduction

The course in Oral Surgery includes the subjects Pre-clinics of Oral and Maxillofacial Surgery and Clinics of Oral and Maxillofacial Surgery as well. Students in dentistry study the first subject during 5th and 6th term. During 5th term the lecture course is 30 hours /2 hours a week/ and 60 hours practical exercises / 4 hours a week/. During 6th term the distribution of lectures and practical exercises is the same. The second subject is Clinics of oral and maxillofacial surgery, and it is taught during 7th, 8th, 9th and 10th term. During 7th term - lectures- 30 hours; practical exercises -60 hours; during 8th term - lectures - 15 hours; exercises - 90 hours; during 10th term - lectures - 15 hours; exercises - 105 hours.

Primary aims

Teaching aims at acquisition of examination methods, diagnostics and treatment of surgical diseases of teeth, oral cavity and maxillofacial region.

Main objectives

- Study of etiology, pathogenesis and clinics of surgical diseases
- Learning of aspects of prophylactics of surgical diseases
- Acquisition of methods of diagnostics and pre-hospital treatment
- Introduction of research, diagnostics and patients' treatment by the conditions of pre-hospital aid
- Each student must be acquainted with the modern methods of prophylactics, diagnostics and surgical patients treatment

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Pre-clinics of OMFS	60	4	116	180	3.65%
5 th term	2 h. weekly	2	4 h. weekly		
6 th term	2 h. weekly	2	4 h. weekly		
Clinics of OMFS	75	3	327	405	8.22%
7 th term	2 h. weekly	2	4 h. weekly		
8 th term	1 h. weekly	-	6 h. weekly		
9 th term	1 h. weekly	1	5 h. weekly		
10 th term	1 h. weekly	-	7 h. weekly		
Total	135	7	443	585	11.88%

Method of learning/teaching

Acquisition of knowledge, formation of abilities and skills are realized by:

- Lectures
- Seminars
- Consultations

Acquisition of practical abilities and skills are realized by:

- Models

- Schemes
- Reproduction of separate nosological units through examination and descriptions of clinical cases by domain of pre-hospital and hospital aid.

Basic scheme of acquisition of practical abilities and skills is:

- Lecturer - student under school conditions /reception-room, an ambulatory operating room, hospital room/ with patient who is a partner in the school process.

Assessment methods

Continuous checks

- Planned form - test, preliminary oral exam, seminars;
- Unplanned form - testing, examination of patients;
- Term exams - practical /with patients/ and theoretical /written and oral/.
- State exam

Strengths

Acquisition of the separate nosological units by inflammatory diseases, traumatic diseases, cancer diseases, congenital and acquired defects in oral cavity and maxillofacial region are carried out with the participation of patients.

Weaknesses

- Insufficient technical equipment / appliances, instruments, medicines and materials/;
- Lack of phantom models;
- Insufficient teaching in borderline medical subjects.

Innovations and Best Practices

Introduction of surgical days according to schedule with the participation of the students from 9th and 10th term in the operating rooms for pre-hospital aid.

Plans for future changes

Extensive use of audio-visual means in students' training.

Staff names

Assoc. Prof. UGRINOV, Radomir, DrS, PhD - Head of the Department of Oral and Maxillofacial Surgery

Assoc. Prof. IVANOV, Ivan, DrS, PhD

Assoc. Prof. ILIEVA, Neli, DrS, PhD

Dr. SAPUNDJIEV, Petar, DrS, PhD - Head Assistant

Dr. FAKIH, Hodor, DrS, PhD - Head Assistant

Dr. DJOROV, Anton, DrS - Head Assistant

Dr. IVANOVA, Maria, DrS - Head Assistant

Dr. BOTCHEV, Valo, DrS, PhD

Dr. ANGELOVA, Bogdana, DrS - Head Assistant

Dr. HINKOV, Dimitar, DrS, PhD - Head Assistant

Dr. SVESHTAROV, Vassil, DrS - Head Assistant

Dr. DIMITROV, Dimitar, DrS - Head Assistant

Dr. FILIPOV, Mihail, DrS - Head Assistant

Dr. VELITCHKOV, Rumen, DrS - Head Assistant

Dr. PAPAZOVA, Siika, DM - Head Assistant

Dr. STEFANOV, Latchezar, DrS - Head Assistant

Dr. MIHAILOVA, Violetka, DM - Head Assistant

Dr. SHARANKOVA, Magdalena, DrS - Senior Assistant

Dr. SABOV, Rumen, DrS - Senior Assistant

Dr. RAJTCHEVA, Veska, DrS - Senior Assistant

Dr. NIKIFOROVA, Halina, DrS - Senior Assistant

Dr. STOITCHKOV, Bisser, DrS - Senior Assistant

Dr. STANIMIROV, Pavel, DrS - Senior Assistant

Dr. STOJANOV, Hristo, DrS - Assistant

Dr. KIRILOV, Branimir, DrS - Assistant

Visitors Comments

The visitors were impressed with the range and extent of treatment carried out in this unit. It was not entirely clear as to why the patient clinical treatment facilities should be separate from a general hospital particularly in the context of shared resources and access to intensive care. However it was not the Visitors' remit to make comment on such issues and they were careful not to cause difficulties in recognition of the extraordinary work being undertaken in this unit with four operating theatres (two more advanced) 8 working units and 64 beds facilities that were indicative of a comparatively well resourced unit.

The importance of Oral and Maxillofacial to Stomatology and dentistry needs to be carefully protected and further developed especially if a decision is made to move this unit as an integral part of the General Hospital. Should this occur the Faculty members independence with the hospital needs to be protected and developed as equals with other surgical colleagues because moving to the hospital could result in isolation.

It must be a cause for concern that despite the significant time devoted to this subject the stated competences of the students seem little different to those expected of students in school with less than half to one-third of the time. In view of the advanced care provided by the faculty members it is a pity that stomatological graduates do not gain greater competence than tooth extractions in this area.

The Visitors therefore recommend a reduction in the number of hours allocated to Oral and Maxillofacial Surgery from 12% of the total curriculum to perhaps 5% although the visitors are not in a position to make such mathematical determinations. At the same time the students should be given greater experience in practical minor oral surgery of a simple nature so that they are all capable of simple surgical removal of buried roots and uncomplicated simple impactions prior to graduation.

Once again the Visitors would prefer to place emphasis on an integrated approach to curricular design and refer the reader to the Executive Summary of the Visitors at the end of the document in Section 22.

13.2 Maxillofacial Radiology and Oral Diagnostics (Radiography and Radiology)

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Doan Ziya, PhD, Head, Department of Maxillofacial Radiology and Oral Diagnostics

E-mail: dental-roentgen@sun.medun.acad.bg

Introduction

Introducing basics of Radiology, module of Medical Radiology, a course of Maxillofacial Radiology.

Primary aims

- a) Student course
- b) Postgraduate course

3. Main objectives

Each student must obtain knowledge of:

- a) Imaging of normal respiratory system and deviations of it.
- b) Imaging of normal cardiovascular system and deviations of it.
- c) Imaging of normal urinary system and deviations of it.
- d) Imaging of normal digestive system and deviations of it.
- e) Imaging of normal skeleton and joints and pathology.
- f) Obtaining good knowledge of basic radiological examinations concerning facial skeleton (intraoral, panoramic, extraoral examinations, special examinations of maxillofacial region).
- g) Examination of inflammatory changes of jaws.
- h) Benign and malignant tumors of facial skeleton and soft tissues.
- i) Maxillary sinus diseases.
- j) TMJ disorders.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Maxillofacial Radiology and Oral Diagnostics	15	-	30	45	0.91%
7 th term	1 h. weekly		2 h. weekly		

Method of learning/teaching

- Lectures
- Practical exercises
- Diagnostic exercises

Assessment methods

- Continuous practical assessment
- Final exam at the end of the term both theoretical and practical.

Strengths

- Integration of theoretical and practical knowledge
- Adequate position of radiological course to other clinical disciplines in the dental curriculum.

Weaknesses

- Insufficient hours for lectures and practical exercises.
- Insufficient technical equipment.
- Digital imaging is not introduced because of lack of funds.

Innovations and Best Practices

Each student is stimulated to examine and demonstrate his own cases with the help of his assistant not only during the Radiology course but also throughout his later education.

Plans for future changes

Proposal for lengthening of Radiology course, increasing hours in the dental curriculum, developing a program, keeping the quote for medical Radiology, detailed course in maxillofacial radiographic anatomy and two exams at the end of each term (7th and 8th).

Staff names

Assoc. Prof. Doan Ziya, DrS, PhD – Head of the Department of Maxillofacial Radiology and Oral Diagnostics
 Assoc. Prof. Kiselova, Angelina, DrS, PhD
 Assoc. Prof. Chorbadjiiska, Liubka, DrS, PhD
 Dr. Hristina Mihailova, MD, DrS – Senior Assisstant
 Dr. Dora Kishkilova, DrS - Assistant
 Dr. Dimitar Iovchev, MD - Assistant
 E-mail: dental-roentgen@sun.medun.acad.bg

Visitors Comments

This Department is well staffed with enthusiastic leadership. The quality of those radiographs that were seen was appropriate. The Visitors asked about radiation scatter in view of the room in which the panoramic machine was housed but were told that this was not a cause for concern despite the fact there

were windows on either side of the room and the Visitors were not certain whether these were sufficient despite the distance from the source of radiation.

There seemed to be a shortage of intra-oral machines.

The Visitors were very supportive of an independent dental radiographic department which faced challenges in having it updated to keep abreast of recent ionizing radiation regulations such as those from the European Union.

SECTION 14: ORAL MEDICINE AND ORAL PATHOLOGY

In the Faculty of Stomatology there is not a separate disciplines Oral Medicine and Oral Pathology. They are parts of the courses in the Department of Pediatric Dentistry (see Section 9.3) and Department of Periodontology and Oral Mucous Diseases (see Section 12).

Visitors Comments

The Visitors suggest that consideration be given to the development of these disciplines as fundamental influences on student education and appropriate training in oral medicine and pathology. The Visitors believed that Oral Pathology and Oral Diagnosis was ill-defined. It was difficult to determine the content of these subject matters.

14.2 Oral Diagnostics (Dental Allergology, Focal Diagnostics, and Oral Microbiology)

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Doan Ziya, PhD, Head, Department of Maxillofacial Radiology and Oral Diagnostics

E-mail: dental-roentgen@sun.medun.acad.bg

Introduction

Establishment of criteria for assessment of oral pathology in allergological, immunological and bacterial aspect.

Primary aims

Establishment of a lecture course and a program for practical exercises in Dental Allergology and Oral Microbiology.

Main objectives

Allergology:

- Oral diagnostics - subject, principles and contemporary methods;
- Iatrogenic factors as stomatogenic fields of disturbance and chronic loading syndrome.
- Reactivity of organism in connection with stomatogenic fields of disturbance.
- Behaviour of the dentist in a situation of rapid allergic reaction.
- Chronic focal diseases, diagnostics, treatment and prevention.

Microbiology

- Oral flora
- Anaerobic flora of oral cavity
- Bacterial infections
- Abscess-inflammatory diseases in the maxillofacial region
- Antimicrobial chemotherapy, contemporary antibiotic and chemotherapeutic medicines.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Dental Allergology 9 th term	10	-	10	20	0.41%

Method of learning/teaching

- Lecture course

- Practical exercises
- Seminars

Assessment methods

An exam

Strengths

Considerable role of the Oral Medicine and Oral Pathology in diagnostics of dental and medical diseases.

Weaknesses

Insufficient hours

Innovations and Best Practices

Plans for future changes

Staff names

See 13.2

SECTION 15: INTEGRATED PATIENT CARE AND DENTAL EMERGENCIES AND SPECIAL NEEDS PATIENTS

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Radomir Ugrinov, Head, Department of OMFS

E-mail: dental-mfs@sun.medun.acad.bg

Name: Prof. Boris Indjov, Head, Department of Conservative Dentistry

E-mail: indjov@dental.sun.acad.bg

There isn't a separate discipline in Integrated Patient Care and Dental Emergencies and Special Needs Patients.

The Faculty supports the philosophy of integrated patient care, bringing together all aspects of oral health care in the context of patients' general health. This aspect of the curriculum is covered under the disciplines Oral and Maxillofacial Surgery (4 hours lectures and 4 hours practical exercises in the 6th and 9th terms), Conservative Dentistry, Endodontics, Pediatric Dentistry and Prosthodontics, Periodontology and Oral Mucous Diseases (2 hours special lectures and permanent practical exercises).

In Pediatric Dentistry - special training for affecting the behaviour of children during the dental treatment - 4 hours lectures and practical exercises and integration of the knowledge and practical skills in clinical work during the whole course of the training. Clinical demonstrations are carried out for treatment of handicapped children under general anaesthesia.

Care of special need patients is included as a lecture also in the curriculum of Dental Public Health.

Visitors Comments

There is a serious need in the Stomatological Faculty to institute a structured approach where students carry out integrated patient care and considered this an important deficiency especially when graduates on qualifying have to treat patients on an integrated basis and not in departmental or specialist units. The final six months offers an ideal opportunity to devise such a unit and simulate the variety of patient care in a realistic and practical fashion.

Oral Diagnostics as a Dental Emergency

Introduction

This is a stand-alone course, which has been taken during the 9th term in the Department of Maxillofacial Radiology and Oral Diagnostics.

Primary aims

- Diagnosis and treatment of focal, and ?????
- Allergic diseases

Main objectives

- Diagnosis according to the clinical picture
- The relationship between systemic disease and the clinical picture of the oral area
- Diagnosis according to para-clinical examinations
- Carrying out a complex focal and allergic diagnosis
- Planning a complete treatment
- Carrying out a complex treatment
- Establishing the earlier and later results of the treatment
- Being able to react in an emergency situation

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Dental Allergology 9 th term	10	-	10	20	0.41%

Method of learning/teaching

- Lectures
- Practical exercises
- Seminars
- Demonstrations
- Examination

Assessment methods

- Continuous assessment
- Summary exam in the end of the term

Strengths

Variety of patients with different diseases from all over the country.

Weaknesses

Inability of treating all needed patients because of minimal number of hours in the curriculum.

Innovations and Best Practices

The oral diagnosis made in the Faculty of Stomatology is helping variety of doctors in different specialties. This is a big success of the Bulgarian Dentistry.

Plans for future changes

Introducing new methods of diagnosis and treatment.

Staff names

See 14.2.

Visitors Comments

As stated above there is a serious need in the Stomatological Faculty to institute a structured approach where students carry out integrated patient care and considered this an important deficiency especially when graduates on qualifying have to treat patients on an integrated basis and not in departmental or specialist units. The management of emergency cases is one component in the comprehensive training of stomatologists and the same principles apply to this area. The final six months offers an ideal opportunity to expand such an approach and simulate the variety of patient care in a realistic and practical fashion.

SECTION 16: BEHAVIOURAL SCIENCES

16.1 Behavioral Sciences

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Tzvetko Jolov, PhD, DMSc, Head of Department of Social Medicine and Public Dental Health

E-mail: tiolov@yahoo.com

Introduction

This topic is not a separate module. It is included in program of Dental Public Health.

Primary aims

Main objectives

Hours in the curriculum

(See Section 10)

Method of learning / teaching

- lecture

Assessment methods

Strengths

Weaknesses

- Insufficient hours of education.
- Insufficient collaboration with clinical departments of the Faculty.

Innovations and Best Practices

Plan for future changes

Include the topic in the new curriculum and programme.

Staff names

See Section 10.

16.2 Communications

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Tzvetko Jolov, PhD, DMSc, Head, Department of Social Medicine and Public

Dental Health

E-mail: tiolov@yahoo.com

Introduction

This topic is not a separate module, but there are practical exercises and seminars, dealing with communications, which are included in the program of Dental public health:

- Interpersonal relations in dental practice
- Holistic approach to the patient
- Dental health personnel - professional requirements
- Teamwork in dental practice

Primary Aims

To develop skills for effective communications with patients and other dental health personnel in the students.

Main objectives

- To be able to obtain an informed consent of the patient for the treatment
- To obtain skills for successful communication with the so-called »difficult patients».

Hours in the Curriculum

See Section 10.

Method of teaching/learning

Practical exercises (seminars in small groups)

Assessment methods

Exam (written and oral) at the end of 6th semester

Strengths

Training of the students for their future role of dental professionals.

Weaknesses

The education is mostly theoretical and out of practice - for example: there are case discussions, not real patients etc.

Innovations and Best Practices

»Role play» and case discussions.

Plans for future changes

To introduce a separate module on this topic in the program and participation in the educational process of guest lecturers.

Staff names

See Section 10.

Visitors Comments

There is increasing emphasis on the need to increase the amount of teaching and practical application of the behavioural sciences in the curriculum. This is an area in which there are significant cultural differences ranging which need to be taken into consideration and where there are significant regional variations. The safe and compassionate care of patients is fundamental to dentistry and stomatology and the Visitors believed that more attention might be given to this very important discipline and try to implement practical classes as opposed to lectures and theoretical approaches. The behavioural sciences should apply throughout the clinical departments so that in addition to the biological and technological elements of holistic patient care, the school should also incorporate much more of the psycho-social influences on health gain, disease and the care of patients. Sofia, unfortunately like the vast majority of dental and stomatological schools throughout the world lacks sufficient emphasis and perhaps even appreciation of the importance of behavioural sciences and their importance in promoting the highest levels of professional behaviour in the future cohort of practicing stomatologists. This of course is integrated with the fundamental ethical and moral principles as well as the more defined areas of jurisprudence.

16.3 Ethics and Jurisprudence

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Tzvetko Jolov, PhD, DMSc, Head of Department of Social Medicine and Public Dental Health

E-mail: tiolov@yahoo.com

Introduction

There is no special training in this topic but two lectures of the subject SMPDH have such content:

- Moral norms and principles in dental practice
- Health legal regulations

Primary aims

To prepare the future dentists to take professional and ethical responsibility for patients and society.

Main objectives

- To be acquainted with health legal regulations
- To know the structure and functions of dental health service
- To create a system of values in students, comprising modern moral principles and norms of professional conduct
- To know the rights and obligations of doctor and patient
- To know the ways of avoiding clinical accidents

Hours in the curriculum

See Section 10

Method of learning/teaching

- lectures

Assessment methods

- term exam

Strengths

Students are being trained for their future social role of dental practitioners.

Weaknesses

This training is held in the 6th semester, which is far away from graduation and actual practicing. Issues of health law that are taught change a lot till the moment of graduation, because of dynamic changes in our country.

Innovations and Best Practices

Dynamics in teaching - updating the lectures, following the changes in health law.

Plans for future changes

Teaching in this field to be situated in upper course.

Staff names

See Section 10.

Visitors Comments

The Comments entered in 16.2 apply also to this section although the Visitors would be anxious to separate issues of ethics and perceptions of personal/professional morals from the more factual base of jurisprudence. In other words we need to stress the importance of individual responsibility for a code of moral behaviour and within the norms of an accepted professional ethical base and subject to the tenets of jurisprudence that apply in the region.

16.4 PRACTICE MANAGEMENT

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Tzvetko Jolov, PhD, DMSc, Head, Department of Social Medicine and Public

Dental Health

E-mail: tiolov@yahoo.com

Introduction

There is no definite cycle. The program of Dental Public Health includes the following lectures and seminars (10 hours totally):

- Financing of dental care
- Organizing the process of treatment and diagnosis
- Analyses and assessment of results of dental service
- Labor-hygiene problems of dental practice: cross-infection control and risk management in dental practice
- Management of health care system and dental health
- Personnel characteristics of the dental team members
- Dental units

Primary aims

To be able to organize dental practice that guarantees safe working environment and corresponds to the legal and ergonomic requirements.

Main objectives

- To know the legal and architectural requirements to open a dental practice
- To know the legal and ethical conditions of team work
- To be able to cope with risk management problems in dental practice

Hours in the Curriculum

(See Section 10)

Method of learning/teaching

Lectures, seminars, practical exercises and acquaintance with safety requirements

Assessment methods

Questions in the final term exam

Strengths

Utilizing visual aids (films, slides). Role-plays.

Weaknesses

There are no practical exercises in real environment.

Innovations and Best Practices

Discussions on cases from educator's clinical practice.

Plans for future changes

Staff names (See Section 10)

Visitors Comments

The Visitors welcome the plans to implement change in the future to encourage practice management development in the curriculum. Once again we stress the importance of an integrated approach in the development of this area. The political and economic changes that have recently taken place are profoundly influential on a rapidly changing social and health care environment. The Visitors are not competent to say how a practice management course could include the anticipated not to mention the unanticipated developments that seem to be moving Sofia towards increasing financial security. Perhaps there would be merit in identifying an individual in the Faculty who might co-ordinate student visits to modern practices outside the dental school as well as engage students in small business management principles in order to equip them for a very challenging future.

Extra SECTION

Subjects Taught at the Faculty of Stomatology Sofia NOT Included in the DENTED Questionnaire

1. Medicine of Disastrous Situations

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Raina Chakarova, PhD - Head of the Section »Medicine of disastrous situations”.

E-mail:

Introduction

In accordance with the state requirements for the higher medical schools the dental students are taught in Medicine of Disastrous Situations in the 6th term of the 3rd year.

Primary aims

The aim of training in Medicine of Disastrous Situations is the dental students to obtain knowledge of:

- Biological effect of different destroying factors in disastrous situations;
- Diagnostics, sorting out, medical aid and treatment of traumatic and radiation injuries, intoxication

by high toxic agents, the most often met epidemiological diseases at catastrophes;
Organization, planning and management of the health care in disastrous situations etc.

Main objectives

- Training in organization and management of medical provision of the population in disastrous situations.
- Training in organization and management of medical provision of the population in radiation accidents.
- Training in organization and management of medical provision of the population in arising of centers of chemical contamination by strong toxic agents.

The quantity and the character of theoretical and practical training of dental students are in accordance with their professional training and the aims, which they have, in the health care system in extreme situations.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Medicine of Disastrous Situations	15	-	15	30	0.61%
6 th term	1 h. weekly		1 h. weekly		

Method of learning/teaching

- Lectures, practical exercises and seminars.

The specific character of the teaching matter of the discipline Medicine of disastrous situations requires to pay attention to such methods, which would increase the students knowledge: working out of cases, situation tasks etc.

Assessment methods

Conventional methods of oral examining and tests at different cognitive levels. The training in Medicine of disastrous situations is completed with oral exam without a grade.

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

Future plans for improving the practical training of dental students provide for their participation in experimental-field practices of health structures.

Staff names

Assoc. Prof. Dr. Raina Chakarova, PhD - Head of the Section »Medicine of disastrous situations».
Assoc. Prof. Dr. I. Mihailova, PhD
Dr. S. Nikolova, PhD - Research Associate ,1st degree
Dr. M. Mileva, PhD - Research Associate ,1st degree
Dr. Z. Chuchulieva - Research Associate ,1st degree
Dr. V. Zahariev - Head Assistant
L. Badinski - Head Assistant

Visitors Comments

The Visitors would refer to the comments in respect of 8.1. This was not discussed in detail but could be an historical influence from an earlier curriculum in different political climate. The Visitors should not make such judgement however but once again emphasise the importance of being realistic as to what skills a stomatologist can learn and retain over a professional lifetime in life support procedures. The problem the Visitors continued to have was to understand how in just five and a half years students could develop competence and retain it in such a wide range of subjects and recommend a more realistic set of outcome objectives, but ones that are measured.

2. Computer Technology

Person in School who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Ing. N. Vrabchev

E-mail:

Introduction

The discipline Computer Technology for students in dentistry is taught in the 2nd semester. Exercises are carried out in computer rooms of the Medical University - Sofia and they are predominantly of practical nature with elements of theory in IT, computer systems architecture, grounding in data bases design, word processing, work with finished software and analytical statistics, with statistic software - Statgraphics or SPSS.

Primary aims

The aim of this course is the dental students to be acquainted with the contemporary PC and basic software, applied in the practice.

Main objectives

- To be able to work with operation system Windows 9x,
- To master the basic principles of text processing with Word (versions 6 and higher),
- To be acquainted with the requirements and the rules for building relation databases and to design data bases with interactive software package WORKS or ACCESS,
- To obtain basic knowledge in Biostatistics and to be acquainted with contemporary statistics software.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Computer Technology 2 nd term	-	-	30	30	0.61%

Method of learning/teaching

Assessment methods

The examination consists of practical work with computers - independent design of database, data input and working out of report or text editing and discussion of a question in Information Theory. The grade is alternative - yes (passed) and no (additional knowledge and skills are required).

Strengths

Weaknesses

Innovations and Best Practices

Plans for future changes

It is recommended the program to be enlarged with problems of Medical Information Theory, information processes in biological objects and contemporary information and telecommunication technologies - Internet, WWW, mobile cell communications etc. Hours in the curriculum should be 60 - 15 of them - lectures. The name of the discipline must be Medical Information Theory. The exam must be with a grade.

Staff names

Assoc. Prof. Dr. Ing. N. Vrabchev
 Assoc. Prof. Dr. G. Ranchov
 S. Stefanov - Head Assistant
 A. Filipova - Head Assistant
 J. Ilieva - Head Assistant
 D. Djonova - Head Assistan

Visitors Comments

The Visitors are very concerned about the challenge to all dental and stomatological institutes in this respect. We strongly suggest that the University invest in training, hardware and software programmes in order to keep abreast of the rapid developments that are taking place ensure that Sofia does not fall behind in the whole area of information and communication technology. This is a challenge to all schools and few can feel comfortable with their preparation for this new era. Sofia is no different to most but the Visitors felt it was at a greater disadvantage to dental schools in the European Union in this respect. Once again a difficult challenge which requires the support of the University.

3. Languages: Bulgarian, Latin, English, French, German, Russian

Person in the school who will explain and show this to the visitors:
 Name: Senior Lecturer M. Radeva, Head, Department of Language Learning
 E-mail:

3.1 Bulgarian

Introduction

Foreigners who are students at the Faculty of Stomatology in Sofia learn Bulgarian. Bulgarian is taught in the 1st and 2nd course, during 1st, 2nd, 3rd and 4th term. Teaching in the 1st course is based on knowledge and abilities acquired in the pre-preparation course.

Primary aims

To learn, to read, to write, to speak and to understand Bulgarian during their study at the Faculty of Stomatology, and to use the language in everyday life as well.

Main objectives

The teaching process includes:

- Authentic texts from the learned in the 1st and 2nd course disciplines
- Basic phonetic rules
- Morphology
- Syntax
- Lexicology, stylistics, medical terminology

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Bulgarian	-	-	90	90	1.82%
1 st term			2 h. weekly		
2 nd term			2 h. weekly		
3 rd term			2 h. weekly		

Method of learning/teaching

Exercises with pragmatic purpose.

Assessment methods

- Tests
- Term test-papers
- Yearly exams /both in the 1st course and in the 2nd course/

Strengths

An energetic, an ambitious, and highly qualified lecturer staff

Weaknesses

- Lack of modern textbooks for 1st and 2nd course
- Unhygienic seminar halls
- Hours in Bulgarian are not fixed in the syllabus by the educational department

Plans for future changes

To eliminate the weaknesses mentioned above.

Visitors Comments

See below

3.2 Latin

Introduction

Latin is taught during the 1st year. Students are acquainted with specific specialties and possibility of the modern medical terminology. The course begins with presenting of Latin alphabet and characteristics by Latin pronunciation. Teaching gives an equal start for all the students.

Primary aims

- To give a complete picture for composing and using the medical terminology and their possibilities as well.
- To help individual work and acquired knowledge of the learned material from the other subjects presenting medical terminology as a system, meeting the needs of international communication.

Main objectives

- To be introduced and helped by acquisition and using of anatomical and histological nomenclature.
- To reveal the possibilities of many-aspect clinical terminology.
- To be acquainted with characteristics of pharmacological terminology.
- To explain language principles and rules by composing of diagnoses and prescriptions.
- To be explained the function as a building material, which medical Latin fulfills by creating of new terms or by up dating of used ones in medicine.
- To present the separate terms as a product of a definite kind of knowledge.

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Latin 1 st term 2 nd term	-	-	60 2 h. weekly 2 h. weekly	60	1.21%

Method of learning/teaching

Teaching is based on the classical principle in science: ignorance - creative discovery - acquisition.

Assessment methods

- Oral and written continuous checks
- Term written papers

Strengths

- An equal start for all the students
- The usual model of lesson is changed with new educational cycles for creating stable suggestive links in knowledge of the students.
- Focus is on the creative application of the lesson's information and its retaining through:
 - Searching of answers and decisions
 - Socio-cultural associations

Weaknesses

Innovations and Best Practices

- Lecturers in the Department of foreign language V. Nikolova and I. Koleva are authors of the textbook LINGUA LATINA MEDICINALIS. The Textbook offers new methods in training of specialists in medicine and dentistry and presents socio-cultural history of medical terminology as well.
- Points system has been used for assessment of term written papers for several years.

Plans for future changes

Visitors Comments

See below.

3.3 English / French / German / Russian

Introduction

Foreign languages for Bulgarian students are taught in the 1st and 2nd course. Teaching includes up dating and systematizing of grammatical knowledge, acquisition of terminology in the field of medicine and dentistry, as well as style characteristics and verbal means of scientific presentation.

Primary aims

- Use a foreign school literature in medicine and dentistry
- Translation of a foreign specialized scientific text into Bulgarian
- Use of dictionaries
- Professional communication in foreign language

Main objectives

- Improving of pronunciation, the cadences of speech, intonation by reading and speaking
- Introducing of characteristics of scientific text
- Using languages for academic aims by developing: a plan of scientific reports, papers, annotation, summary and review
- Developing of abilities for using of bibliographical sources and Internet /in English/
- Developing of abilities and strategies of learning and scientific information processing

Hours in the Curriculum

Discipline	Lectures	Seminars	Practical exercises	Total Hours	% of total number of hours in the curriculum
Foreign Language	-	-	90	90	1.82%
1 st term			2 h. weekly		
2 nd term			2 h. weekly		
3 rd term			2 h. weekly		

Method of learning/teaching

- The sessions are held on the base of communication approach for teaching and acquisition.
- Training is consistent with practical needs of the students: common language - specialized language.

Assessment methods

- Continuous assessment (3 term texts, an oral translation, summary statement of specialized medical text)
- Final project

Strengths

- The traditional grammatical-translation approach is substituted by development of reproductive-communication abilities.
- The course is simultaneously wide-scoped and closely specialized in relation to the language.

Weaknesses

- Insufficient hours for practical exercises

- The course cannot achieve an optimum effect because the students in the group have a different command of the language

Innovations and Best Practices

- Including of specialized Internet sites in English training
- Development of abilities of assessment and self-assessment.
- Improving of the scope and the type of term and yearly projects.

10. Plans for future changes

Increasing of participation of the group by development of term and yearly projects.

Visitors Comments

Language education is part of the curriculum. Latin is taught in two semesters. Apart from that, foreign students learn Bulgarian for a year before they start the stomatological programme. After that they have three more terms of the Bulgarian language in the first year of their study. Foreign languages which are offered include English, French, and German. Students are obliged to take a diagnostic test and are then divided into groups according to their levels of proficiency. We were impressed by the fact that a great majority of them speak very good English. This is important as English has become the major scientific language and without it there is a great barrier to studying the recent literature and publishing.

It seems students feel a personal responsibility and need to be competitive in this field. They work with Internet resources using their home PC's, they are looking for possibilities to travel abroad, many of them graduated from English, German, or French high schools. In some cases however, and this is the case mainly with the junior staff, there was a feeling that being overwhelmed with the work load they do not have time enough for further development in other fields, and some of them feel they have lost the proficiency they had at the beginning of their study.

Regrettably there are no foreign language classes for the Faculty.

SECTION 17: EXAMINATIONS, ASSESSMENTS AND COMPETENCES

Person in school who will explain and show this to the visitors:

Name: Assoc. Prof. Dr. Milena Peneva, PhD

E-mail: dental-pedodont@sun.medun.acad.bg

The basic examinations are in the following dental subjects:

- Prosthodontics
- Conservative Dentistry
- Oral and Maxillofacial Surgery
- Pediatric Dentistry
- Orthodontics
- Periodontology and Oral Mucous Diseases
- Radiography and Radiology
- Social Medicine and Public Dental Health

State exams are taken in the subjects:

- Prosthodontics
- Conservative Dentistry
- Oral and Maxillofacial Surgery
- Pediatric Dentistry
- Orthodontics
- Periodontology and Oral Mucous Diseases

Each exam consists of 2 parts:

- a) An exam in Pre-clinics on each subject / with the exception of Orthodontics/
- b) An exam in Clinics on each subject.

Each basic exam includes both a I) practical and a II) theoretical oral exam.

I.a) The grading of the practical exam in Pre-clinics is an average of some obligatory elements in the exam in

every discipline:

- In Pediatric Dentistry - microscope preparations, slides, cavity preparation on models and phantom heads, endodontic treatment on models and phantom heads etc.
- In Prosthodontics - tooth arrangement, making and sealing crowns etc.
- In Oral and Maxillofacial Surgery - instruments and anaesthesia.
- In Periodontology – colloquium – assessment of practical skills for instruments and instrumentation

on models and phantom heads without a mark.

- In Conservative Dentistry - cavity preparation on models and phantom heads, endodontic treatment

on models and phantom heads.

I.b) The grading of practical exam in Clinics is an average of the grades of the separate stages of the corresponding treatment:

- Conservative Dentistry - caries treatment and endodontic treatment etc.
- Prosthodontics - making removable and fixed (constructions) dentures
- Oral and Maxillofacial Surgery - anaesthesia and tooth extraction
- Pediatric Dentistry - caries treatment on temporary and permanent teeth
- Orthodontics - analysis of models and bending wire elements
- Periodontology and Oral Mucous Diseases – diagnostics and treatment of periodontitis on patients

within 6 hours in two attendances.

II) Theoretical exam consists of written summary on a question and an oral testing of 2 questions of the conspectus.

The formative assessment of the student is based on the above-mentioned assessments.

How much does the school rely on exams to motivate students?

The students are motivated through:

1. Exactingness
2. Dispensation from practical exam
3. Use of additional literature for increasing of the knowledge and more successful presentation on the exams

Strengths

- Continuous development
- Up dating and improving of the assessment methods

Weaknesses

Lack of modern objective computer tests.

Innovations and best practices

Introduction of written summary on a question of the conspectus following the theoretical exams.

Plans for future changes

Introduction of computer tests.

Explain as to what level external examiners are involved

The external examiners from the Faculty of Stomatology in Plovdiv are involved to participate in state exam in Prosthodontics.

What formal completion of an exam is required of the school/university for students to qualify and register as dentists /e.g. final examination/

The students take state theoretical oral exams in the following subjects:

- Prosthodontics
- Conservative Dentistry
- Oral and Maxillofacial Surgery
- Pediatric Dentistry
- Orthodontics
- Periodontology and Oral Mucous Diseases

Visitors Comments

The Visitors did not have time to examine the structure of the examinations system applied. In discussion with students it was a great source of anxiety but this is hardly unique. The Visitors were of the view that whether or not we like it, examinations and assessments are the major motivators of student learning. The Visitors have already expressed their profound concern about the level of detail taught and it seemed that much of this detail, relatively irrelevant, was included in assessments and examinations in Sofia. This could be seriously detrimental to a learning programme.

The Visitors advocate that if the Stomatological Faculty accept the advice of the Visitors in respect of a Curriculum Committee that an essential component of that should be one to rationalise the examination process and ensure that it complimentary to the educational and learning process rather than dominating it. There is a need to identify what the student needs to know and what can be reasonably expected of him or her and base the assessment methods on a more structured approach. The Visitors urge the Curriculum Committee to protect students from any Department that abuses its authority in examinations to place an unbalanced pressure on students to study that one subject at the expense of others and therefore undermining the integrated approach that the Visitors are advocating. We commend for the Schools consideration the Global Congress Report on Assessment Methods and Quality Improvement

which covers these matters and is available on the web site www.dented.org/dentedevolves.php3 prior to publication.

SECTION 19: STUDENTS AFFAIRS

Student representatives who will discuss this:

- Final Year:** Milen Dimitrov
Rositza Pirinska
- Fourth Year:** Elitza Ruseva
Vihren Bashakov
- Third Year:** Alexandar Petrunov
Maria Baeva
- Second Year:** Tzvetelina Petrova
Tzvetan Angelov

19.1 Basic Data from Dental Schools

- a) Average number of dental students qualifying per year during the past years: 110-115
b) Average number of dental students admitted to the first year during the past years: 115-125
c) Length of course in years and/or semesters: 6/10 years/semesters
d) Is there a separate period of vocational training following graduation as a dentist in your country?
YES
e) Is that organized by the University/Dental School? YES

19.2 List different postgraduate courses

For every clinical discipline:

- Long term courses – for 3 years
- Short term courses – for 2 years.
 - a) Thematic short term courses
 - b) Individual short term courses

Operative Dentistry and Endodontics - 2 years

Pediatric Dentistry - 3 years

Prosthodontics - 3 years

Oral Surgery - 3 years

Maxillofacial Surgery - 4 years

Orthodontics - 3 years

Periodontology and Diseases of Oral Mucosa - 3 years

Social Medicine and Public Dental Health - 3 years

General Dentistry - 3 years

Maxillofacial Radiology and Oral Imaging Diagnostics (after acquired basic dental specialty) - 2 years

19.3 Describe briefly student-counseling services in the University

- Private consultations. Student Office.
- Bulgarian Dental Students Association
- Student Council

Visitors Comments

The students constitute a great intellectual potential at this school. They are dedicated to the field of their study, they are open to new ideas and insights, approaches and discussions, eager to learn and develop contact with fellow students from other stomatological schools. They seem to be willing to take personal responsibility for what they are doing, and where they are going. Many of them have the necessary critical thinking skills and readiness to express their personal opinions without fear. However, not always is this appreciated and made a full use of by the Faculty. In some cases, the instruction is more teacher-oriented than student-oriented and students may only be passive participants in the learning process with little space for expressing opinions about the teaching methods used, not alone getting any sort of feedback if

they do express criticism. This, however, is more a matter of individual instructors. It is necessary to emphasize the students' great respect for their Dean, appreciation of his open and direct way of articulating and consequent solving problems, and developing enthusiastic, healthy academic environment in which students' opinions are appreciated and asked for.

The "official" students communication with the Faculty is via the Academic and Faculty Councils, where the students have two representatives in each.

The amount of factual information students are exposed to is too extensive. They have little time for personal development outside the academic field – time for reflections and thought, sports and other hobbies. The concept of tutoring seems to be not understood here.

Students do have their own student association - Bulgarian Dental Student organization. The contact with colleagues from outside of Bulgaria, however, seems to be limited since there are no possibilities of student exchange at the moment. Nevertheless, there is the possibility of collaborating with the fellow students from European Dental Student Association (EDSA), where students are welcomed and encouraged to develop dialogue, exchange of ideas with their colleagues in other parts of Europe.

SECTION 20: RESEARCH AND PUBLICATIONS (For the past 36 months)

20.1 Publications in Refereed Journals

1. Mikhaylova, Chr., V. Nikolov. Osteoblastoclastoma of the jaw bones - clinical and radiological assessment. Reng. radiol., 2001, No 1, 18-23.
2. Spiridonov, Y., V. Chakarsky, A. Bobeva. Salivary gland tuberculosis - a case report. Reng. radiol., 2001, No 2, 138-140.
3. Sharkov, N., P.C. Phillips. Fortification of 2.5 and 5 ppm Fluoridated milk with Iron, Cooper and Zinc: Effect on Fluoride availability and activity. Caries Res., 2000, Vol. 34, 357-358.
4. Ketley, C.E., N.I. Sharkov. The Effect of Acid-base changes on urinary fluoride excretion. Caries Res., 2000, Vol. 34, p. 353.

20.2 Textbooks and Handbooks

1. Ivanov, St. Local anaesthesia. Extraction of teeth and teeth roots. Sofia, 1998. 71 p.
2. Katrova, L. Stomatological profession : State and perspectives. Sofia, 1998. 257 p.
3. Uzunov, Tz. Handbook of diagnostic-therapeutic complex "Scorpion -0-405-7A". Sofia, 1998.
4. Dzemileva, T. Periodontal diseases. Sofia, Azer, 1999. 367 p.
5. Popov, N. Clinics of prosthetic dentistry. Sofia, Medicine and physical culture, 1999. 262 p.
6. Popov, N. Tooth implantology. /Towards dentistry in XXI century/. Sofia, 1999. 391 p.
7. Social medicine and social stomatological health: Textbook for students in stomatology. Ed. Tz. Jolov. Sofia, Medicine and physical culture, 1999. 104 p.
8. Textbook of Pre-clinics of oral and maxillofacial surgery. Ed. N. Polychronov. Sofia, 1999. 223 p.
9. Jordanov, B., I. Jontcheva. Handbook of practical exercises in Pre-clinics of prosthetic dentistry. Sofia, Medicine and physical culture, 2000. 116 p.
10. Ralev, P., A. Filtchev. Pre-clinics of prosthetic dentistry: Textbook for students in stomatology. Sofia, 2000. 391 p.
11. Textbook of clinics of oral and maxillofacial surgery. Ed. N. Polychronov. Sofia, 2000. 328 p.
12. Kamenova, J. Methodical handbook of practical application of laser therapy. Sofia, 2001. 68 p.
13. Dzemileva, T. HIV-infection and AIDS - oral manifestations, treatment directions. Sofia, Acer, 1999. 74 p.
14. Dzemileva, T. Xerostomia. Sofia, Acer, 1998. 63 p.
15. Uzunov, Tz. Helium-neon lasers in anti-inflammatory therapy of periodontal diseases. Sofia, 2001. 47 p.

20.3 Chapters in Books

1. Dzemileva, T. In: Modern therapy' 98: Chapter six. Treatment of periodontal diseases. Stara Zagora, Znanie, 1999. p. 171-178.
2. Uzunov, Tz. In: Electronic methods in stomatology. Sofia, 2001. p. 33-37.
- 3/4. Uzunov, Tz. In: Handbook of instructions for application of "Scorpion-D" in stomatology. Sofia, 2000. 2 chapters. /p. 43-45; 68-95/.
- 5/6. Uzunov, Tz. In: Diagnostics and physiotherapy in stomatology by "Scorpion D". 2 chapters. /p. 41-43; 62-84/.

20.5 An Invited Presentation

1. Moutaftchiev, V. Plaque linguale - une realite utile. Les Journees d` Orthodontie, 13.11.2000, Paris.

Visitors comments

The information provided in the self-study report concerning research is limited. In section 20.1. only four original research publications are given which have been published in international refereed journals. We have also taken notice of abstracts presented at the annual conference of the Bulgarian Scientific Dental Association. Besides this there are also publications in Bulgarian dental journals.

The contributions in textbooks and handbooks are original contributions from Faculty of the dental school, but also translations by Faculty members of first class international textbooks. These contributions are mainly for teaching purposes. The research output of the school is limited.

The type of research is mainly related to clinical reports.

The reasons for the limited research output are many. On one hand there is personal willingness and interest needs. But there are also financial and infrastructural constrains. Language can also be a major barrier and unfair disadvantage.

We recommend that the school develop a research policy including Ph.D. programmes The Visitors would hope that the School would be able to develop a stimulating research environment at an international level. This will give the school its prestige not only within Bulgaria but also internationally. Thereby Faculty members as well as students will be stimulated in creativity and critical thinking.

The Visitors were very conscious of the conditions and competing demands on the members of the Faculty in Sofia but nevertheless the future of any academic institution will be strongly influenced by the quality and quantity of publications in refereed scientific journals. This will take time but an emphasis is necessary on establishing a coherent strategic plan of development and investing in sending young talented staff to have training in scientific methods in order to compliment existing efforts which are to be commended.

Executive Summary of Visitors Findings

The Visitors wish to express their gratitude for the warm reception and gracious hospitality given to them by the Dean and Staff of the Stomatological Faculty. They were particularly honoured by the visit of the Rector of the University and a strong team of senior colleagues to hear some of the Visitors views.

The achievements in the Stomatological Faculty are impressive particularly when one recognises the circumstances that had previously prevailed, economic upheaval in Bulgaria and a rapidly changing set of influences additional to the explosion in knowledge that affects all universities and stomatology faculties throughout the World.

There are detailed comments in each section of the Report. In a five day visit it is not possible to review all elements of the curriculum, least of all get involved in the detail of individual departments and their range of individual programmes. Inevitably there will be some misunderstandings and we apologise in advance for our shortcomings. It was not the Visitors intention to attempt to compare the Faculty in Sofia with other dental or stomatological schools but inevitably Visitors views are influenced by their own background and special areas of interest.

Throughout the visit the Visitors were at pains to explain that they had no legal status, were not inspecting the Stomatological Faculty nor was there any element of an accreditation process involved. Visitors were there to comment on the self-assessment, debate issues as equals and make recommendations that were entirely for the school.

If there is one comment that would summarise the Visitors opinion it is that the curriculum is too crowded with excessive detail and too little emphasis on learning and acquiring the skills to become life long learners. In other words there was a perception that some of the educators in Sofia believed they could teach the students everything they needed to know in the five and a half year programme and the Visitors considered this unrealistic.

The Visitors were of the view that the differences in emphasis regarding stomatology or odontology would be best overcome if there was a greater emphasis and clarity on the outcomes sought in the education and training of its students. They commended the guidelines on student competences set out by the Advisory Committee on the Training of Dental Practitioners as a useful set of educational objectives. It was apparent from the aims and objectives that there would be merit in revising some of the educational aims and objectives of other schools visited whose reports are available at www.dented.org.

The Visitors stressed that on completion of a stomatological training the new stomatologists were only at the beginning of a lifetime of learning and this needs to be impressed not alone upon the students. Stomatologists were likely to spend their time in the care of patients' oral and dental tissues in the context of comprehensive patient care. It was desirable that they should also have a broadly based medical understanding. However, realistically a five and a half year training programme would not allow those general medical competences that are gained by the medical students. The Visitors were concerned that theoretical training in the medical sciences would not confer the essential competence required of a stomatologist in life support despite all of the time devoted to the medical sciences. Also the point was made that skills gained, unless frequently used in day to day practice, will not necessarily be retained.

A balance needs to be struck and agreed by Faculty and students as to what can and should be learned by students and what specific competences need to be acquired and then reliably, consistently and validly assessed. The Visitors noted that there had been ongoing change and while this is commended such change might be implemented on a five-year basis without it being perceived that the curriculum was taking different directions every year or two.

If the curriculum were to be adapted to become similar to those based on stomatology in the European Union it would require further emphasis on dental clinical competences as set out by EU advisory Committee.

A Powerpoint presentation delivered on behalf of the Visitors presented by Professor Rolf Attstrom summarises the main findings and this will be available from dhanley@dental.tcd.ie. The headings for this presentation in word format is appended to this document as Appendix 1

Appendix 1

Powerpoint Summary of the Visitors Verbal Report

(The following series of slides are direct "copy and pastes" of the slides presented on behalf of the Visitors by Prof. Rolf Attstrom as the preliminary verbal report on completion of the DentEd visit in Sofia. These are headings only used by Prof. Attstrom to present the preliminary version of the visitors comments. The detailed comments will be found under Visitors Comments at the end of each section of the self-assessment document. The full Powerpoint presentation can be sent to you as an email attachment if you need it: <mailto:mgiles@dental.tcd.ie>)

**DentEd Visit
to the
Stomatological Faculty
Sofia
24th October 2001**

1. General

**The Stomatological Faculty has a strong medically oriented education.
The introduction of patient treatment is late in comparison with present trends in oral health education**

**Lectures and demonstrations are predominant in the curriculum.
Laboratory teaching occupies a significant portion of the education.**

2. General Comments on Clinical Subjects

All details will be found in Visitors' Report

Compliments to the faculty members

Working under difficult circumstances

A shared problem throughout Europe

3. Facilities

Considerable space

Great potential for developments

Educational

Research

Patient facilities

The visitors report will emphasis the importance of an appropriate clinical environment and the need for financial resources to achieve this

4. Equipment

Needs significant re-equipping

Analyse existing sterilization facilities

Create a strategy for long-term equipment maintenance and replacement

Visitors' Report will place a heavy emphasis on the need for funding in order to maintain the viability of the dental school

5. Library

Increase the number of reading spaces
Need of a wider range of current journal
Research
Independent learning
Information and communication technology ICT.
We recommend better reader support for information retrieval.
Current software is already available

6. Information and communication technology ICT

The future in ICT
Many barriers
Psychological
Financial
Identify those with relevant abilities and use those to stimulate others to become involved.
Investment
A strategic plan for development
Individual or group ?

7. Research facilities

Inadequate investment in research
Intellectual attitude
personel
Inadequate laboratory facilities
Equipment
Support staff
Develop a strategy for research activities
Visitors are unsure as how to advise the faculty at this time.

8. Organisation and administrative structures

The Stomatological Faculty has unique needs that may differ from other faculties (patient care, health need priorities and applied research developments)
Decision making structures are transparent and democratic but could be more efficient for the sake of the Stomatological Faculty.
Institute needs greater independence in order to manage its own financial circumstances and allow for innovative developments.
Consider examples from business

9. The Mission Statement

Primary functions

**Education
Research
Patient care**

Recommend a group-include young staff- to report to the Dean on a clear mission statement

Co-ownership between Ministries of Health and Education and the University, because a stomatological teaching institution is unique in the University

Allow influences from colleagues and society

This has budgetary implications

Refer to other European models.

10. Staff

Flexible student to teacher ratio

The most important resource is human intelligence

Critical thinking

Strategic use of Human Resources (HR)

Rewards for better motivated staff

Continue to rationalise duties on a long term constructive strategy

11. Curriculum

The curriculum is comprehensive

We recommend an overall educational philosophy

Lack of integration between departments

Excess of content

Excessive detail

Some irrelevant material?

12. Biological and Natural Sciences

A need to relate more to oral health issues

A problem oriented approach needs to be considered

Suggest a small working group

The level of details ought to be prioritised and reduced

13. Pre-clinical Sciences

Paraclinical Sciences

A need to relate these subjects more to oral health issues

A problem oriented approach should be considered

A more integrated approach

These sciences should be exploited in order to stimulate critical thinking and evidence based approach to patient care

The level of detail ought to be prioritised and reduced

14. Important note

Strive to promote a dental/oral problem orientated curriculum
This, inevitably, will lead to a reduction in the time devoted to the biological and medical subjects but not their elimination
Rather we recommend the use of a problem oriented approach to help students learn the relevant fundamental principles

15 Human Diseases

Must be in balance with the dental competences expected
Does not imply a lack of appreciation of their fundamental importance.
Need to specify what is expected of the students.
Remember the limitations of the mind
Life long learners

16. Curriculum Committee

Structure:

Faculty,
students,
administration

Responsibilities:

Review of curriculum,
Content
Sequencing
Scheduling
Quality assessment
Proposals for change

17. General Comments

Too much work and time in the laboratories
Strengthen emphasis and awareness of the importance of integrated holistic care
Concern about the discipline for application of universal cross-infection control principles
All clinical equipment urgently requires updating

17. General Comments

Consider the clinical competences in the EU
Greater emphasis on the development of clinical competences in every clinical discipline
Ask curriculum committee to devise methods of measuring student competences
www.dented.org see section on resources

18. Student affairs

Student-centred education
Emphasis on learning rather than teaching
Small group teaching/learning if possible.
More time for thought and reflection
Tutoring?
Isolation?
European Dental Student Association (EDSA)
University education implies independent and critical thinking

To disagree is not a sin-to question a teacher is positive, preferably based on science

19. Meeting with the Rector

(quotes from the Rector)

"We love our Faculty of Stomatology-as a parent loves their child"

"Concerning preclinical education we are ready to reconsider that part of the curriculum and the visitors' suggestions will be examined deeply".

"We will give bigger attention to developing the odontological approach in our education".

20. Thanks for your hospitality, generosity and attention

The following slides were not used

21. What needs to be emphasised

Process

Outcome

Stimulation to learn

Outcome assessment

Communicate outcome expectations to students and teachers

Measure outcome

Valid, reliable and consistent

22. Professional Behaviour

Ethical behaviour

Lifelong-learning

Evaluating new scientific information

Relevance

Priority

Patient rights

Medical legal considerations