

**Curriculum guidelines for orofacial pain and
temporomandibular disorders.**

European Academy of Craniomandibular Disorders

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The Council of the European Academy of Craniomandibular Disorders (EACD) established an Educational Committee to recommend guidelines for the undergraduate and postgraduate programmes in stomatognathic physiology, orofacial pain and temporomandibular disorders (TMD) at dental schools in Europe. The Council appointed the following members to this Committee: Riccardo Ciancaglini, Jan A De Boever, Mauno Könönen, Maria Nilner, Jean-Daniel Orthlieb and Michel Steenks. Their report was adopted by the EACD on 28th October 1999. The report recommends the following curriculum guidelines:

UNDERGRADUATE PROGRAMME

NORMAL FUNCTION — ORTHOFUNCTION

Introduction

A basic description of the anatomy, histology, physiology and function of the normal stomatognathic system. The courses should be taught by the skilled professionals available in the dental school, preferably leading to an integrated course. The following attainment, competence and attitude goals were formulated, based on the goals in the course plans for the undergraduate programme in dentistry at the Faculty of Odontology, Malmö:

Attainment Goals

The student shall:

- * be oriented about the normal appearance, anatomy (macro and micro) and function of the stomatognathic system and the facial region;
- * be able to explain the relationship between the anatomy and function including neurophysiology;
- * have a good knowledge of the growth, development and aging of the stomatognathic system;

- * understand the importance of oral functions including mastication, deglutition, speech, swallowing and paraphysiological function;
- * have a good knowledge of different methods of evaluating the structures and function of the stomatognathic system;
- * understand the principles and importance of analysis of the occlusion;
- * have a good knowledge of the relationship between psyche and soma with regard to oral function.

Competence Goals

The student shall

- * be able to create occlusion in relation to static centric and eccentric jaw relations as it relates to temporomandibular function;
- * be able to perform an examination of the oral structures and function of the stomatognathic system.

PATHOFUNCTION

Definition

Pathofunction is any evidence of trauma to and/or inflammation of the oral structures resulting in musculoskeletal disorders, orofacial pain and/or other oral structural changes.

Attainment Goals

The student shall

- * understand and be able to evaluate the etiology and reasons for acute and chronic orofacial pain;
- * understand mechanisms of orofacial pain;

- * have a good knowledge of the variation with time, age, sex, general health, social and geographical factors of temporomandibular disorders;
- * have a good knowledge of the different types of these disorders and their prevalence;
- * understand the development and importance of occlusal disturbances;
- * have a good knowledge of the diagnosis, treatment and management and prognosis of these disorders;
- * have a good knowledge of TMD, the treatment need and demand and resources for treatment;
- * have a good knowledge of the influence of behaviour, personality and psychological factors on the initiation, course and perpetuation of these disorders;
- * be informed about the relevant laws, rules for handling of records and administrative routines for insurance and ethical aspects, including proper patient information, decisions concerning treatment and referrals.

Competence Goals

The student shall

- * be able to interpret information from epidemiological studies;
- * be able to obtain information on the general health of the patients with special regard to functional disturbances;
- * be able to record an intermaxillary relation and mount casts;
- * be able to fabricate and adjust an occlusal splint in a laboratory setting;
- * in the clinical setting, be able to take the history and physically examine, diagnose and treat patients.

Attitude Goals

The student shall

- * have concern for the patients' general health and feel responsible for their oral health;
- * feel responsible for and have respect for patients with recurrent, continuing or long-lasting pain symptoms;
- * through his or her behaviour, strengthen the patient's feeling of responsibility for his or her own oral health;
- * understand the importance of ethics in patient care;
- * have a willingness to use available care resources in an optimal way and develop care quality;
- * feel responsible for proper information of the patient on the limitations of the treatment outcome;
- * feel responsible for the development of his or her own competence and skills regarding diagnosis and treatment.

Sequencing

Sequencing of the didactic course and clinical teaching will depend partly upon the curricular structure of the institution, the availability of staff for teaching or supervision, and the individual interests of the students.

The structure of the programmes may vary from one institution to another. Some institutions may choose to concentrate initially on didactic and preclinical components with little or no direct patient care. As the programme progresses, more attention is given to direct patient care. Other programmes may offer a balance of didactic and patient care activities during various stages of the programme, but achieve the same overall goal. The sequence of clinical instruction should accommodate long-term follow-up treatment.

POSTGRADUATE PROGRAMME

Introduction

The Committee is convinced that in all European countries there is a need for postgraduate training and education in the field of craniomandibular disorders (CMD). This need for a postgraduate programme can be motivated by the following factors:

1. The complexity of the TMD and of the interrelationships with psychosocial and general health problems;
2. The need for scientifically-based knowledge for improvement of dentists' understanding of the diagnosis and management of these disorders;
3. The large number of patients needing treatment and lack of diagnosis and treatment for this patient category.

The committee wishes to stress the need for specialist knowledge rather than specialists per se. The guidelines for this knowledge should be based on scientific evidence.

INTERRELATIONSHIPS

The field of TMD is multidisciplinary. People working in many fields of medicine, dentistry and psychology see individuals with disorders causing dysfunction and/or acute and chronic pain in the orofacial and associated region.

The specialist knowledge presupposes co-operation with health professionals in the area of otolaryngology, neurology, rheumatology, physiotherapy, psychology and psychiatry.

Because of the different predisposing and etiological factors, there is a need for co-operation in diagnosing and managing the condition with specialists in other dental fields, such as radiology, oral surgery, endodontics, prosthodontics and orthodontics.

Attainment Goals

The graduate dentist¹ shall:

- * be able to understand and evaluate the epidemiological characteristics of TMD;
- * be able to understand and have a good knowledge of the basic mechanisms of normal and pathological processes involving pain and/or dysfunction in the head and orofacial region, including patients with generalised diseases that may affect the stomatognathic system;
- * be able to understand how the field of TMD relates to the various dental and other health sciences;
- * have a good knowledge of diagnoses, diagnostic methods, clinical decision-making and treatment options;
- * be able to understand the physiological, pathological, structural, social, psychological and behavioural factors contributing to TMD;
- * be able to evaluate the prognosis, treatment and management outcomes in patients suffering from TMD;
- * have a good knowledge of research and research methodology in TMD and related areas;
- * have a good knowledge and understanding of sleeping disorders related to stomatognathic function, such as snoring and sleep apnea.

Competence goals

The graduate dentist shall:

- * be able to conduct an evaluation of patients presenting with TMD, collect and analyse the history and clinical data to establish a differential diagnosis, identify contributing factors, formulate an appropriate treatment plan and predict the prognosis;
- * be able to recognise certain pathological conditions in the neck and shoulder region;

¹ A dentist is a person who is authorised to practice dentistry in different European countries (European Union)

- * be able to refer patients to relevant health professionals;
- * be able to recognise the indications for temporomandibular joint surgical procedures such as lavage, discectomy, disc repair etc.;
- * be able to apply the principles of clinical pharmacology;
- * be able to execute the following treatment procedures: patient information, counselling, occlusal stabilisation, relaxation therapy and stress management, jaw exercises, physiotherapy etc.;
- * have the necessary organisational skills for coordination, teamwork and departmental organisation;
- * have the didactic ability to distribute knowledge on the subject of TMD to the dental profession;
- * be able to critically evaluate the scientific literature;
- * be able to serve as a consultant on functional aspects in more complex rehabilitation cases if for some reason restorative dentistry, orthodontics or orthognathic surgery is indicated;
- * be able, in co-operation with the medical profession, to contribute to the management of snoring problems including sleep apnea.

Depending on the length of the programme, the postgraduate students should take part in the ongoing departmental research.

Given the content of the proposed postgraduate programme, the committee believes that 2-3 years' full-time education will be necessary.

As in the undergraduate programme, attitude goals should be reinforced during the postgraduate training.