

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Lietuvos sveikatos mokslų universiteto

BURNOS HIGIENOS STUDIJŲ PROGRAMOS (61208B101, 612A51001) VERTINIMO IŠVADOS

EVALUATION REPORT OF *DENTAL HYGIENE* (61208B101, 612A51001) STUDY PROGRAMME

at Lithuanian University of Health Sciences

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Išvados parengtos anglų kalba Report language - English

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Burnos higiena	
Valstybiniai kodai	61208B101, 612A51001	
Studijų sritis	biomedicinos mokslai	
Studijų kryptis	burnos priežiūra	
Studijų programos rūšis	universitetinės studijos	
Studijų pakopa	pirmoji	
Studijų forma (trukmė metais)	nuolatinė (4)	
Studijų programos apimtis kreditais	240	
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	burnos higienistas, odontologijos bakalauras, burnos priežiūros bakalauras	
Studijų programos įregistravimo data	2004-05-12	

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	Dental Hygiene
State code	61208B101, 612A51001
Study area	Biomedical Sciences
Study field	Oral Care
Kind of the study programme	University Studies
Study Cycle	first
Study mode (length in years)	full-time (4)
Volume of the study programme in credits	240
Degree and (or) professional qualifications awarded	Bachelor of Oral Care, Hygienist, Dental Hygienist, Bachelor of Dentistry
Date of registration of the study programme	2004-05-12

The Centre for Quality Assessment in Higher Education

Studijų kokybės vertinimo centras

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I. INTRODUCTION

The Lithuanian University of Health Sciences (LUHS) is the largest institution of health specialists' education and training in Lithuania. It is a public legal entity operating as a public institution with long history. The Faculty of Odontology was established in 1968 and has been a part of Kaunas Medical Institute until it was reorganized into Kaunas Medical Academy in 1989 which was renamed to Kaunas University of Medicine later. LUHS is a merger of the Kaunas University of Medicine and Lithuanian Veterinary Academy in 2010.

The following report is based on the structured Self-Evaluation Report (SER) provided to the panel well in advance by the LUHS for individual review and on the members' experiences and observations gathered during the site visit on 4th October, 2012. The guidelines for the review have been the Centre for Quality Assessment in Higher Education (SKVC) in Lithuania template for report. All of the expert team's comments and recommendations are offered with the intention of ensuring that the programme achieves the highest level of quality consistent with its high aspirations and facilitates the Committee of the Study Programmes in its work for passing the accreditation resolution. The expert team feels that the provided documentations were sufficient and as thorough as could be expected. Overall, more emphasis could have been placed on the internationalisation of this Dental Hygienist (DH) programme.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

The objectives of the Faculty of Odontology are well defined in the SER. However, the mission is not formally expressed as a mission statement rather than in different tasks placed on the faculty and its graduates as indicated. A mission statement could be described with greater clarity. It is somewhat surprising that the mission and the aims of the DH programme in the SER are worded exactly the same. Considering the different roles of dental hygienist and dentists in provision of dental services this is not justified.

There have been several attempts to define the demand for the programme based on the existing data. In the SER, it is stated that unsatisfactory dental hygiene is very common in the country. Despite great improvements in oral health globally, many countries still encounter oral diseases, particularly in disadvantaged segments of the population. Major oral diseases, dental caries and periodontal disease are to large extent preventable by simple oral hygiene practices and early minor clinical intervention. Better understanding of aetiology and determinants of oral health together with increasing health care expenditures facilitate oral health promotion activities and delegation of clinical duties in dentistry. The team acknowledges the Faculty of Odontology's attempt to enhance oral health of Lithuanians through this programme.

The programme seems to essentially be similar to those found in other European countries. The competences for the graduating dental hygienist are adopted from the recommendation of the Association of Dental Education in Europe (ADEE) document of 2009 for the graduating dentist. This is not justified because dental hygienists just do not perform the same duties of dentists but do have a work profile of their own. In particular their role and competences in oral health promotion and prevention of dental diseases should be emphasized. The ADEE anticipates the competence statements could facilitate the educational institutions in defining the learning outcomes. Learning outcomes should support defined competences of the dental hygienist but at

a greater level of detail and form the basis of learning and assessment. The content of learning outcomes presented in the SER does not meet this requirement.

Assessment of learning outcomes - the theoretical knowledge and practical skills - is an obligatory part of the examinations in relevant subjects. The final examination of the programme consists of two parts: during the practical examination the student performs complex treatment of the patient and during the theoretical examination answers 100 MCQ questions. The first defending of the Final Theses will be only in spring 2013. The expert team would like to recommend, that students should be encouraged to undertake more research activity during their study process to prepare for the Final Theses.

2. Curriculum design

The DH study programme is designed in accordance with the laws and directives applicable in Lithuania and European Union (EU) and it formally meets these requirements. The curriculum consists of the general university education subjects, speciality subjects, electives, out-reached clinical training, and research work. However, the structure of the curriculum is very traditional lacking both vertical and horizontal integration. The basic science subjects are taught separately with little connection to speciality subjects. The actual study load of the first two years is excessive, what is agreed by the present students, in comparison to later years. There is a large amount of course content of low relevance to the dental hygiene students and strong emphasis mainly on general medical courses on this DH programme.

There is a strong reliance on traditional teaching methods for teaching the DH curriculum hampering the use of modern more appropriate active learning methods. However, the present situation caused by the limited number of clinical units also may undermine effective learning processes of the DH students.

To enhance effective learning not only general subjects but the whole curriculum could be organized in modules for this DH programme which are defined by the ADEE as learning units, independent from discipline or departmental structure. The expert team was informed of the practice of the teachers to include learning outcomes, learning materials, contact hours (e.g., lectures, seminars, working groups) and assessment procedures in their course syllabus, which is acknowledged by the expert team. However, most of this is done within the individual dental disciplines and great opportunity for integrated learning contents seems to remain underutilized. Basic courses like Dental Anatomy, Dental Terminology, Basic Oral Biology, Prevention and Public Health, and others could be arranged simultaneously to Dentistry and DH students in modules. Modular organization of learning content also helps to avoid overlapping and unnecessary repetition of teaching often prevalent where discipline based approach is applied.

3. Staff

The qualification of the teachers working in this DH programme seems sufficient for its successful implementation. It also corresponds with the requirements indicated in legal acts. There is a multitude of teachers (109) involved in the programme which places great challenges for coordination of the teaching content. The staff involved is the same in the Dentistry programme. However, the individual output of the teachers and role in both programmes remains unclear in the SER. The changes in the academic staff have been minor supporting the continuity of the programme without any major negative impact on it. However, overcoming the difficulties accounted in many other European countries in recruiting new staff members in the future should

be appropriately addressed. Dental staff in universities is expected to perform three major roles: research, teaching and clinical service which places a very heavy work load on the dental academicians. The personal (internal) promotion of dental academics should also be address in order to retain the qualified DH professionals in the institution. This notion is highly appreciated by the expert team.

The student-teacher ratio of 1-4 in clinical teaching is excellent according to international standards. The teachers have opportunities for professional improvement. The data to what extent this is utilized is not shown in the SER as well as the actual participation of the staff in pedagogic training though this does occur. It was mentioned that, there is a Centre of Teachers` Educational Competences to improve teachers` pedagogical qualification and in a five-year-period each teacher should take a 40-hour course. There has been some international exchange activity among the staff members, taking advantages of the Erasmus Exchange Programmes. Contracts are signed with 12 universities, but during the five year period only five foreign university teachers have come to read the lectures and eight teachers went to other universities. The team encourages the teachers to continue and significantly expand these activities to further facilitate the recommendations of Bologna Declaration. To assist with international exchanges, the DH teaching staff needs to improve its English language abilities and have much greater confidence in using English. The expert team notes that since this evaluation LUHS has, according to the response from LUHS on this report, signed an agreement with NORDPLUS to help its international knowledge in DH programmes.

4. Facilities and learning resources

The premises for studies are adequate both in their size and quality. General university infrastructure is distributed for the study programme implementation by the Study Centre, which seeks to use efficiently 14 classrooms and seminar classes shared with other university departments. There are two faculty classrooms (80-110 places). The rooms for practical training are situated in every department involved in the programme, for practical training the DH programme has a separate room with four dental units.

The clinical training is executed in several different locations within the hospital campus area. The present physical situation challenges natural interaction and communication among teaching staff. The staff members have the vision of the new facility providing better environment for training high quality dentists and dental hygienists in Kaunas. The expert team strongly supports the quick realisation of their vision. The dental units necessary for clinical training are functional for their purpose, the teaching and learning equipment (laboratory and computer equipment, consumables) are adequate both in size and quality.

In the SER there was no information about the students outside practice organization. During the experts team meeting with the students it was found out that they have external practice only in kindergartens. The expert team would like to recommend having much greater variety of patients during the students' practice, including more geriatric patients and those with special needs. Greater clarity is also required in the management of the practices and the assessment of the students. There was vagueness with the processes apparent to the expert team during the site visit.

The new library building at the campus provides an excellent state-of-the-art learning environment for the students. The library is very modern with 76 computerized workstations, with free access to internet and virtual learning materials-also from home computer using University's Virtual Network (VLE). It is well equipped with related textbooks and a smaller

amount of dental discipline-related scientific journals. The opening hours of the library are adequate and much superior to others in Lithuanian higher education institutions. It should be noted that in other counties, libraries are now open 24/7 and this should be a future consideration.

5. Study process and student assessment

The admission is organized according to the rules for general admission to undergraduate and integrated studies at Lithuanian higher education institutions (LAMA BPO). Requirements of the admission are clearly formulated and accessible on the internet webpage of LUHS (http://www.lsmuni.lt). Candidates having at least secondary or equivalent education can participate in the competition. The main admission criterion is a competitive score calculated from secondary school final examinations (Biology, Mathematics or Chemistry, Lithuanian language) or grades (Chemistry or Mathematics) in the disciplines, which are adequate to the studies in DH. Only entrants whose competition score is not less than 35% of the highest possible score are admitted. There are no special requirements of admission to the programme.

The study programme is introduced during various events (e.g., open doors days or higher education markets) and the future entrants are motivated by methods of academic stimulation, financial support (e.g., student grants), and possible participation in student exchange programme.

The programme is carried out in several buildings. The teaching and training facilities are to be rather far from each other. Timetables seem sophisticated as some subjects are throughout the semester while others are implemented in cycles. The schedule is flexible and workload per week is distributed expediently from Monday to Friday. However, some lectures are also on Saturdays according to the timetables at LUHS webpage (http://www.lsmuni.lt). There seems to be enough time for students to get from one lecture to another. There is a possibility to study according an individual programme, but it is stated in SER that the implementation of such programmes are indeed complicated.

Information on how practice and clinical training is organized and implemented is scarce. The scope of the studies per one semester is 30 ECTS credits. The evaluation of most of the subjects is based on accumulation principle. Not more than five exams are taken at the end of the semester, however, the dates of the examination session are nowhere mentioned in the study schedule per semester. The wastage of the students has decreased steadily during recent years. The second year of studies seems to be most concerning.

There is little mentioned about research and applied activities of the students. The first defending of the Final Theses will be in spring 2013. The expert team would like to recommend, that students should be encouraged to undertake more research activity during their study process to prepare for the Final Theses and also skills in the foreign languages (particularly English) should be improved. The expert team notes that the summary page is to be written in English. This should be encouraged and expanded upon to improve linguistic ability.

The mobility of both students and teachers is administered by the LUHS International Relations and Study Centre. The numbers of outgoing/incoming teachers are very low. The full information of student mobility is not provided. The Erasmus Exchange Programme seems to be the only financial source for the possible exchanges. Furthermore, as it is stated in SER, the lack of knowledge in foreign languages is again another limitation of the mobility. Particular measures are being taken to improve students' mobility.

The academic support throughout the study process is ensured by various means. In the first semester of the studies the students have The Introduction into the Studies, which aims to familiarize the students with the specifics and aims of the programme and the evaluation system. Essential information is available on LUHS website, both in Lithuanian and English, and is also provided by the LUHS Student Association. The important development at LUHS is the Career Center which aims at informing students about career prospects. Information about employment possibilities is also obtained during meetings with potential employers.

Allocation of stipends and grants is regulated by the documents approved by LUHS Senate. Social support includes psychological support from professionals and volunteers. The needs for harmonic development of the personality and self-expression of students are met by several cultural activities (e.g., choir "Neris"). Furthermore, students can participate in various kinds of activities in sports club "Medikas". Students can live in University hostels.

The assessment principles and criteria are adequate. They are defined in LUHS study regulations and presented in the descriptions of the subjects. All relevant information regarding study issues could be easily found on the webpage of LUHS. Various methods, depending on the didactic aims, are used for assessing the achievements (tests, case analysis, project tasks, discussions, etc.) Requirements of the final papers and assessment criteria are confirmed by the Faculty council and available at the website. Students are directly informed about their assessment in the internet database. The summary page in English should be included in the Final Theses.

Graduates are employed at public health institutions, private dental clinics or continue their professional activities of the graduates (although licenced).

6. Programme management

The main element of the programme management is the Faculty Council (13 members and 2 of them students). The Council (consisting of studies and science commissions) is responsible to update the dental hygiene study programme, assure and improve its quality. The expert team finds this unusual and recommends the more active role of the programme committee in the programme management. The Dean of the Faculty coordinates Dentistry programme as well as the DH programmes. To facilitate these activities the expert team recommends allocation of coordination duties by appointing individual coordinators for each programme to insure proper quality management. The expert team finds it justified that students are represented in programme coordination. However, their input could be further utilized for the benefit of programme development.

The principals of the internal quality are regulated by the university statutes, study regulations and legal acts of LUHS. The quality assurance is functioning on several levels: Faculty (certification of the teaching staff and activities of the Faculty Council); university (evaluation of subjects); national (programme accreditation).

Information and data about programme's implementation is regularly collected, analysed and reported each year at the departments by the Dean's Office. As to the quality development it is recommended by the expert team, as indicated before, that the study programme committee would take an active role. This arrangement would allow direct and immediate improvement actions. As an internal quality assurance measure it was stated in SER that the Dean meets with

the students not less than once a year seeking feedback on the study quality assurance. This method of collecting feedback should be further developed and standardised.

The quality of the programme and subjects is assessed by surveys carried out both orally and in a written form. External social stakeholders (social partners and employers) stated that they are involved in producing of recommendations on organisation of studies, establishment of students' evaluation criteria and development of students' competences. It was clear to the expert team from the site visit that further structuring and clarity is significantly needed. The benefits of the graduates in terms of quality development remain minimal.

In the SER it was mentioned that there are relationships with social partners through the activities of Alumni society. During the experts meeting with the social partners no activities were mentioned regarding Alumni society. In the future this cooperation should be encouraged and further developed to get advice about the curriculum, working opportunities and mentoring students.

III. RECOMMENDATIONS

After careful consideration the expert team recommends the following:

- **3.1.** Staff needs to design more specific learning outcomes directly related to this DH programme and its graduates. The aims should also include direct reference to the internationalization of the programme.
- **3.2.** The experts strongly recommend the integration of the early years of this programme with the Dentistry programme. This includes joint teaching of common subjects. Furthermore, both vertical and horizontal integration throughout the whole programme should be considered.
- **3.3.** There should be much more international mobility and exchanges with teaching staff of foreign universities in Europe and other countries. Much more confidence is needed in the use of English by the DH teaching staff. There is a need to benchmark against the best DH programmes in Europe and possibly America in order to guarantee that DH teaching staff allocation and teaching requirements are appropriate internationally for this DH programme at LUHS.
- **3.4.** A much greater variety of patients is needed for student practice, including with more geriatric patients and those with special care needs. Greater clarity is also required in the management of the practices and the assessments of the students; currently, there is a vagueness about the processes so evident to the expert team during the site visit meetings.
- **3.5** Expert team recommends more DH students' mobility for international exchanges with other European institutions and possibly other counties too. This would bring prestige and international acceptance for this DH programme at LUHS. It would also assist with benchmarking this programme against other programmes abroad.
- **3.6.** Students should be encouraged to undertake more research activity throughout the four years of their DH programme in addition to the preparation of the Final Thesis. It is noted that a summary page in English is included in the Final Thesis; this should be encouraged.
- **3.7.** Social partners and employers should be brought together more regularly to discuss and share their experiences. This will help to guarantee that there is a common approach in the provision of a variety of the patients and in assessment of the students on practice. More

cooperation with Alumni society should be developed and further encouraged. Alumni can provide current market advice and student mentoring services.

IV. SUMMARY

1. Programme aims and learning outcomes

The DH study programme at LUHS is executed by the Faculty of Odontology. The curriculum is designed in accordance with national and international regulations and formally meets these requirements. Although the objectives of the faculty are well defined in the SER, the mission statement should be described with greater clarity placing appropriate focus on research as a fundamental element of all activities in the Faculty. As at the present moment the learning outcomes do not fully support the defined competences of DH graduates, the expert team also recommends considering rephrasing them in greater detail in order to form the solid basis for student learning and assessment. References to internationalisation of the programme need also to be included.

2. Curriculum design

The structure of the DH curriculum is very traditional and discipline-based, thus it should have more vertical and horizontal integration. In addition, the departmental approach in teaching and the limited number of clinical units available for clinical training complicate curriculum design. There is a lack of connection between general and speciality subjects which are introduced later in the curriculum. To enhance effective learning not only general subjects but the whole curriculum could be organized in modules. Moreover, basic courses (e.g. Dental Anatomy) should be arranged simultaneously to both Dentistry and DH students to determine integration of the two programmes in early years. There is a definite need to benchmark this DH programme against the international standards in order to ensure the best and most appropriate programme for the 21st century.

3. Teaching staff

The present staff is well-qualified to ensure the set learning outcomes. Teachers were found enthusiastic, devoted and highly appreciated by their students. However, recruitment of new DH staff members, particularly for senior posts, seems to be a challenge, thus better incentives for academic career has to be developed. The workload of the staff in this DH programme is rather large due to multiple responsibilities and that is reflected in relatively low research output. The opportunities for professional improvement of the teachers are satisfactory; however, English skills of teachers should be improved. Much greater confidence is needed. Furthermore, the mobility of the staff, as well as the students, is low and needs to be significantly improved.

4. Facilities and learning resources

The students are well-motivated and active with high satisfaction of the programme and their teachers. The outstanding library at the campus provides an excellent state-of-the-art learning environment. The clinical training is implemented at various locations of the departments within the campus hampering natural interaction and communication. The expert team recommends that there should be more clinical practice also outside the Faculty, with a much greater variety of patients available to the DH students; there was no possibility to obtain graduates' opinions about it as no graduate students arrived for the meeting with the expert team. This was disappointing.

5. Study process and students assessment

Admission of the students is organized in accordance with the regulations and is clearly defined. The organization of the study process ensures the appropriate implementation of the

programme and achievements of the learning outcomes. During the final practical and theoretical examination the student demonstrates the competences acquired from the areas compulsory to the dental hygienist activity. Students should be encouraged to undertake more research activity throughout the four years of their programme in addition to the preparation of the Final Thesis. Students' international mobility is not sufficient because of different systems of education and training of dental hygienists in Europe but much more efforts need to be made to assist with international exchanges. Foreign language skills need to be much improved, particularly in English. Much greater confidence is needed. Students are counseled regularly by the programme administration on various matters like assessment, schedule, carrier possibilities, etc. Information concerning the studies and also changes in the programme are clearly published on the website of the LUHS. There were no details on how many of the graduates work within the profession they have acquired and how they evaluate their professional skills gained during the studies. No graduates attended the meeting with the expert team.

6. Programme management

Responsibilities for the decisions and monitoring of the implementation of the programme are clearly allocated. Various active measures are taken to ensure proper supervision of the DH programme's implementation. However, management of the DH programme would benefit from greater allocation of responsibilities among the staff. Moreover, bringing together social partners and employers much more regularly to discuss and share their experiences would guarantee a common approach both in provision of a variety of the patients and in students' assessment. Influence of participation of external social stakeholders on the quality of the studies is ensured by social stakeholders participation in the research of labour market needs and in building the programme. But futher structuring and clarity is needed as was evident to the expert team from meetings held during the site visit. The benefit of the graduates in terms of quality development remains minimal. The outcomes of internal and external evaluation of the programme are used for the improvement of the programme. More cooperation with Alumni society should be further developed and encouraged. The Alumni can provide valuable advice on appropriate programme development and contacts for the graduates to obtain work as well as mentoring students.

V. GENERAL ASSESSMENT

The study programme *Dental Hygiene* (state codes – 61208B101, 612A51001) at Lithuanian University of Health Sciences is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process, student support, achievement assessment)	2
6.	Programme management (programme administration, internal quality assurance)	3
	Total:	17

^{*1 (}unsatisfactory) - there are essential shortcomings that must be eliminated;

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^{2 (}satisfactory) - meets the established minimum requirements, needs improvement;

^{3 (}good) - the field develops systematically, has distinctive features;

^{4 (}very good) - the field is exceptionally good.