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# Dental hygiene in Slovakia

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Abstract This article reports on the development of the dental hygiene profession in Slovakia from a global perspective. The aim is to inform about current developments and to examine, how access to qualified dental hygiene care might be improved and how professional challenges might be met. For an international study on dental hygiene, secondary source data were obtained from members of the House of Delegates of the International Federation of Dental Hygienists (IFDH) or by fax and e-mail from experts involved in the national professional and educational organization of dental hygiene in non-IFDH member countries, such as Slovakia. Responses were followed-up by interviews, e-mail correspondence, visits to international universities, and a review of supporting studies and reference literature. Results show that the introduction of dental hygiene in Slovakia in 1992 was inspired by the delivery of preventive care in Switzerland. Initiating local dentists and dental hygienists strive to attain a high educational level, equitable to that of countries in which dental hygiene has an established tradition of high quality care. Low access to qualified dental hygiene care may be a result of insufficient funding for preventive services, social and cultural lack of awareness of the benefits of preventive care, and of limitations inherent in the legal constraints preventing unsupervised dental hygiene practice. These may be a result of gender politics affecting a femaledominated profession and of a perception that dental hygiene is auxiliary to dental care. International comparison show that of all Eastern European countries, the dental hygiene profession appears most advanced in Slovakia. This is expressed in high evidence-based academic goals, in extensive work with international consultants from the Netherlands and Switzerland, in annual congresses of high professional quality, and in the establishment of a profession, which has not been introduced in all Western EU countries.

**Key words:** dental hygiene care; dental hygiene education; international; oral health; Slovakia

## Introduction

From a global perspective, the dental hygiene profession was introduced in Slovakia in 1992. Today, dental hygiene is practiced in over 30 countries worldwide. While the scope of practice is internationally similar, legal, educational, and organizational aspects that influence the delivery of dental hygiene care vary (1-4). Global comparisons show that dental hygiene is a paramedical profession, which is generally studied at institutions of higher education. The average duration of study is moving toward 3 years and academic diplomas, with the aim to qualify students for clinical, teaching, administrative and scientific tasks and also for public health service. In Eastern Europe, there is a lack of access to dental hygiene services. Reasons range from insufficient funding for preventive services to a social and cultural lack of awareness of the benefits of preventive care (5, 6). The image of the female-dominated dental hygiene profession may be affected by gender politics (7) and by a perception that dental hygiene is auxiliary to dental care. In some European countries, such as the Netherlands, Switzerland, and especially in Sweden, dental hygienists increasingly work as highly regarded academics, and engaged public health specialists. Supervision requirements have lessened to the point of facilitating independent practice. On the other hand, in Eastern Europe, dental hygienists more often work as rigidly controlled and supervised auxiliaries who frequently perform dental assisting functions (6, 7). Overall, in an effort to increase access to care and on the recognition that dental hygiene education qualifies for safe and effective professional conduct there is a global trend toward a decrease in supervision, in some countries in correlation with an increase in educational requirements. The following article examines the current practice of dental hygiene in Slovakia as it compares to global trends for the profession.

## Method

The information presented was gathered for a study about global dental hygiene education which was commissioned by the Austrian Federal Ministry of Education, Science and Culture (3). As Austrian delegate of the IFDH and as a member of the education committee, the first author is involved in on-going communication with representatives of the dental hygiene profession worldwide. These contacts facilitate a global comparative analysis of the trends for practice and education of the dental hygiene profession. Information incorporated in this report consists of secondary source data obtained from IFDH delegates at a Symposium in Sydney, Australia. Survey results were followed-up by interviews, e-mail correspondence, visits to international universities, supporting studies and reference literature. In some countries experts not affiliated with the IFDH but instrumental in the professional and educational organization of dental hygiene or of dental public health initiatives were consulted. Results are subject to risks inherent in the use of secondary source data. The second author of this article is a main initiator of professional dental hygiene in Slovakia and presents first hand data on the profession.

## Results

#### Introduction of dental hygiene in Slovakia

The idea to introduce the dental hygiene profession in Slovakia was triggered, when Slovak dentist Dr Eva Kovalova spent several months working in Switzerland. There she gained experience with the delivery of dental hygiene care. Dental hygiene was implemented in Slovakia in the years from 1992 to 1993 on the initiative of the Chamber of Dentists, which received support from the physicians of the Czecho-Slovak-Swiss Medical Association in cooperation with Dr Kovalova. She continues to be the leading person in the development of educational programmes and pursues the highest educational standard for dental hygiene care.

The first educational institutions were established in 1992 in Trnava and Zvolen. The same year, the Association of Dental Hygienists of Slovakia (ADHS) was formed to support professional and personal growth for the benefit of dental and health care of the Slovak population.

#### **Dental hygiene education**

The first educational programme of dental hygiene was presented by Dr Michal Čierny from Zurich, Switzerland. In 1991, it was accepted by the Slovak Chamber of Dentists, presided at that time by Dr Juraj Petrík, who authorized the preparation of a curriculum. In 1992, graduates from dental hygiene programmes in Switzerland and Holland prepared the first curriculum. The Departments of Education and of Health Care approved the study of dental hygiene as higher professional study to be taught at the secondary medical schools after having passed entry examination. Initially and up to 2003, study entry also required a completed diploma in nursing and at least three years of practice in a dental ambulance as a dental assistant. At first, only graduates in dental assisting of the secondary medical schools were admitted to the programme.

The first dental hygiene programmes started in 1992 in Zvolen and in Trnava. Initial study duration was two semesters. Later it was recognized that study duration should be extended but the Department of Education only permitted a prolongation by one semester. The programme was then introduced to secondary medical schools in 1993 in Prešov and in 1995 in Bratislava. It took another year before the educational programme was extended by another semester, creating current study duration of 2 years.

The curriculum of the dental hygiene educational programme has been upgraded and accredited each year. Condition for graduation is to pass a final paper and a practical clinical exam. Graduates receive a diploma and are awarded a title of a 'diplomated dental hygienist' (DDH), following the Swiss example.

At present, there is high interest of graduates from secondary schools to study dental hygiene. Starting in 2003, entry requirements no longer require that students are nurses with practice in dental assisting. A further need to extend study duration in order to increase the quality of the educational process has been recognized. For this reason, a curriculum is being prepared at the Faculty of Health Care for a 3-year Bachelor programme in Prešov, expected to commence in 2004. The preparation of this programme is actively assisted and supervised by the dental hygiene faculty of Amsterdam and Utrecht. Some parts of the programme are inspired by the dental hygiene programme in Zurich.

#### Legislation and regulation governing dental hygiene practice

Dental hygiene education and permissible scope of practice are regulated by the Department of Education and the Department of Health Care. Graduates carry the protected title of a DDH. By definition a dental hygienist is a qualified autonomous professional working under the general supervision of dentists. The scope includes taking a dental anamnesis, diagnostic procedures relating to caries, pathologies of the oral soft tissues, and to periodontal disease, prophylactic measures and non-surgical periodontal treatment (supra- and sub-gingival debridement), patient education and motivation, exposure of dental radiographs, fluoridation, and the placement of pit and fissure sealants. Dental hygienists work autonomously under the general supervision of dentists. However, dental hygienists make autonomous decisions about the treatment they render. Dentists must not be on the location of treatment at all times and are not required to reevaluate the patient after dental hygiene care.

In Slovakia, there are also prophylaxis assistants allowed to treat patients. Only one dentist has official permission to pro-

vide this training and award diplomas in Presov. Supervised training lasts approximately three months. Prophylactic assistants only are permitted to educate and instruct patients, to remove deposits above the gumline, to fluoridate and to polish teeth under the direct supervision of dentists (the dentist or a dental hygienists - if part of the dental team must examine the patient before and after treatment).

#### Professional issues and future challenges

The first dental hygiene practice was established by Dr Marta Murgašová in 1993 in Trenčín. The same year the ADHS was founded, having celebrated its 10th anniversary last year. The president at that time and until now, is Mrs Marta Križanová. The main objective of the Association is to promote the profession and to enhance the professional level of dental hygienists, by promoting a system of 'life-time education'. Another goal is to promote awareness about the importance of prevention among both the general public and among health and dental professionals. Effort is directed at building conditions for the efficient implementation of current evidence-based research and development in dental hygiene care, and at bringing this knowledge to those dentists, who do not know or are not fully aware of the role of dental hygienists in the progress of dental prevention in Slovakia. Another goal of the association is to promote a standard of care and education compatible with programmes in Holland and other Northern European countries, which have an established high standard for the profession (5). To further promote this goal, ADHS in 2004 is planning to join the EDHF and the IFDH in order to engage in additional international networking.

At the time there are 270 diplomated dental hygienists registered in Slovakia. Most Slovak dental hygienists work in private dental offices. Only 10 work in a dual role as dental hygienist and nurse in some university clinics or large hospitals.

Because of a lack of awareness of the benefits of dental hygiene care and because of economic conditions many dental hygienists still work in a dual role as dental assistants and dental hygienists. However, some members of the Chamber of Dentists in Slovakia support the dental hygiene profession and want to promote its more efficient implementation. Others still fear the introduction of another specialty in dentistry at a professional level. The reconstruction of the health care system and the insurance system in Slovakia is in progress and according to professional forecasts, the future of this profession is very promising.

#### Gender distribution and impact on professional opportunities

All except for one dental hygienist in Slovakia are female. It is therefore of interest, to examine how the role of women in this country may affect this female-dominated profession in comparison to for instance, the Netherlands and Scandinavia and what challenges may be awaiting this profession in light of the EU directive of gender mainstreaming.

In the countries of the former Soviet Bloc, women in politics have faced major setbacks. The transition to a post-Communist Eastern Europe in the 1990s adversely affected the position and political representation of women, which had been largely maintained through quotas within the Communist Party. The number of women in European parliaments dropped from 19.1% in January 1988 to 13.6% in 1990 (8), which leads to less decision making impact of women in national affairs.

Interestingly, the gender gap in higher (third level) education is greater in Western Europe than in Eastern Europe, where enrolment ratios have been higher for women than for men (9). However, better education has not led to marked improvements in the labour market for Eastern European women. In the past years, an increasing gender segregation in the labour market has been observed. Male and female workers are concentrating in different sectors and industries. New jobs, such as dental hygiene, often require new training and skills. Women workers have only benefited in a marginal fashion from the privatization of property and services. The underlying assumption that women are secondary workers and have others to provide for them is not supported by evidence. The result is increased disadvantage and financial hardship for women (8).

In Scandinavia and in the Netherlands, there appears to be a correlation between policies promoting gender-mainstreaming and equality in politics and in the labour force and educational attainment and professional autonomy in the field of dental hygiene (7). In the Netherlands and in Finland, entry into dental hygiene practice requires bachelor level education. Post-graduate opportunities ensure that dental hygienists increasingly have the option to participate in academia and in research.

As a result of the legal regulation allowing autonomous practice, dental hygienists may become self-employed business owners and operators who take on responsibility and accountability for their professional actions (5). This correlates with other achievements in the work force in Scandinavia, where the gender gap continues to narrow.

In Eastern Europe, lower educational and professional opportunities in dental hygiene correlate with greater gender-disparities found in other work-related areas (7). In Slovakia, dental hygienists still find it difficult to be integrated into the

labour force. Rigid supervision requirements tie them to dental offices and work opportunities in private business are still scarce. Work conditions are reported to be governed by authoritarian structures, forcing dental hygienists to frequently accept work as low-salaried dental assistants (6, 7). Even when providing dental hygiene care, their percentage of the patient fee tends to much lower than in Western countries. For the near future, it is the goal of the EDHF that dental hygiene will become a regulated profession within the EU. Initiatives must be taken to remove the gender-bias in the delivery of preventive care and to promote equal access to educational attainment and to professional development. As a Candidate Country, Slovakia should benefit from a standardization of dental hygiene care within the EU. As of today, developments in Slovakia are exemplary and by far surpass current developments in dental hygiene found in some Western countries, such as Austria, Germany and France, countries in which the profession still has not been established because of opposition from organized dentistry (5). International comparisons show that of all Eastern European countries, the dental hygiene profession appears to most advanced in Slovakia (5). This is expressed in high evidence-based academic goals, in extensive work with international consultants from the Netherlands and Switzerland, in extensive national support of the ADHS, in annual congresses of high professional quality, and in the outreach to international professional organizations.

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## References

- Johnson PM. International Profiles of Dental Hygiene 1987 to 1998:
   A 19-Nation Comparative Study. *Internat Dent J* 2001; 51: 313–24.
- 2 Luciak-Donsberger C. Origins and benefits of dental hygiene practice in Europe. *Int J Dent Hygiene* 2003; 1: 29–42.
- 3 Luciak-Donsberger C. The Study of dental hygiene at Institutions of Higher Education: international perspectives. Vienna, Austria: Federal Ministry of Education, Science and Culture, 2002.
- 4 Nathe C. Dental Public Health: Contemporary Practice for the Dental Hygienist. Indianapolis: Prentice Hall, 2001.
- 5 Luciak-Donsberger C. The Study of Dental Hygiene in Europe: Education and Legal Regulation in Eight Additional Countries. Current

- Developments in Six Countries. Vienna, Austria: Federal Ministry of Education, Science and Culture, 2003.
- 6 Jańczuk, Z. Dental hygienists as a new element in the oral health service in Poland. Community Dent Oral Epidemiol 1987; 15: 117-8.
- 7 Luciak-Donsberger, C. The effects of gender disparities on dental hygiene education and practice in Europe. Int J Dent Hyg 2003; 1: 195-212.
- 8 Englund K. The Gender Perspective in Sweden's Cooperation, with Central and Eastern Europe. Stockholm: Ministry for Foreign Affairs, 1997.
- 9 United Nations The World's Women 2000. Trends and Statistics. United Nations, NY: Department of Economic and Social Affairs, 2000.

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