



The Interest of Dentists in Continuing Dental Education in the Process of Reprofessionalization of Dentistry in Bulgaria

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Abstract

Purpose: The purpose of this study was to demonstrate the willingness of dental practitioners in Bulgaria to invest in continuing dental education and the readiness of the dental schools and professional dental organization to provide them with appropriate forms of training and teaching.

Methods: This study is a part of a broader longitudinal study of the process of re-professionalization of dentists in Bulgaria during the period of transition. Data were collected using a series of self-administered questionnaires (1995 - 2009) reflecting the interest in, the preferences for, and the willingness to, invest money and time in continuing professional education.

Results: Showed that the portion of dentists attending short continuing education courses increased (from 48.50% in 1995 to 67.60% in 2009) while the number of postgraduate dental students for the same period decreased considerably. The portion of dentists ready to invest in continuing education forms changed from 22.20% in 1995 to 30.60% in 2009. For the majority of dentists, the average investment in postgraduate learning is between 1.00% and 3.00% of their income. The average time most of dentists devoted annually is between 1 and 2 weeks. The rate of frequently attended courses in the domains of dental materials, implantology, and periodontology changed from 18.50% in 1995 to 38.00% in 2009. The dentists in Bulgaria showed relatively good level of confidence in their professional organization system of continuing education. Most of dentists scored as "good" the quality of continuing education courses organized by the BgDA (from 36.40% in 1995 to 39.80% in 2009).

Conclusion: Dentists in Bulgaria consider the necessity for updating their professional competences as a core philosophy of the professionalism. Continuing education demonstrates a growing dynamic: The preferred forms and areas of continuing education include mainly new methods to be applied in general dental practice. The dentists' interest gradually changed from lecturing courses into hands on practical training. The readiness of dental practitioners to allocate resources for their professional up to day qualification changed toward reducing the duration of time at the expense of increasing the amount of funds. Licensing power of professional bodies based on continuing education system has strengthened while the role of dental schools has been comparatively limited.

Keywords: *Continuing Dental Education; Continuing Professional Education; Continuing Education in Dental Schools; Long Life Learning*

Introduction

Why is continuing education so important for dental practitioners? Among the core values relevant to the set of professional features, professional competence, apart professional autonomy, is on first place. Dental practitioners, are expected not only to reach but also to maintain a high level of knowledge, technical skills, and

professional behavior. As far as the professional knowledge gives a special privileged position to dentists and the nonprofessional people, as patients are, could not make proper judgment, the obligation or more precisely, the self-obligation of dentists to keep appropriate professional standard, represents also a moral category. Therefore, it is substantial part of the Code of Professional ethics and the dental associations keep the control on issuing and keeping

valid dentists' professional license [1,2]. On the other hand, continuous improvement is a privilege for the profession because the high standard of proficiency is a fundamental pillar of professional autonomy as far as it justifies the respect of the community. As a result, be competent up to day, becomes a condition for the members of the profession to achieve and keep prestige and material well-being [2,3].

Why do we qualify the dental profession in Bulgaria "reprofessionalized"? The process of reprofessionalization of dentists in Bulgaria represents a natural result of the fundamental reforms in the organization of provision of healthcare and the structure of the national health service [4]. It consists of the restoration of the professional autonomy, the restoration of the market of dental services, the harmonization of dental education with EU competences' system.

Why is continuing education so important for the dental schools? Although the main priority of the Schools of Dental Medicine is the undergraduate dental education, most leading dental schools (mainly in North America) develop flexible forms of continuing education. There are evidences that dental schools demonstrating success in continuing education programs' provision are also reknown in undergraduate dental student' training. The development of continuing education programs predisposes

renovation of the learning and treatment environment and fosters research. On the other hand, keeping in touch with the dental practitioners, as well as the evolving social reality, is the most important source of motivation for reshaping the teaching in an appropriate and adequate competitive way [3,4].

The competition between providers of medical/dental services and the fast developing market of health products imposed the need for new knowledge, respectively new forms of continuing education. On the other hand, the practically unlimited sources and forms of long life learning for professional dentists challenged both the standards' stating organization (dental associations) and the primary providers of professional knowledge (medical and dental schools). Given how many sources of knowledge there are in today's society, maintaining continuing educational relationship with graduate dentists is a sign of the prosperity of the dental school both in material and moral aspects.

Lifelong learning, including continuing professional education can be a profitable strategic response of autonomous learning institutions to the changing conditions in the world. As the tremendous development of the service economy was a sustainable trend for the last three decades, the knowledge economy is evolving all over the world. This reality evidently impacted on individuals to become more active in managing their lives in all areas of the economy and social relations [5,6].

¹The professions consist of a complex of components: vocation, job occupation, social status. Professionalization is a social process of differentiation of an occupational group into a social group, characterized by a number of features: specific professional higher education, autonomy, authority, and social mission. The loss of an essential feature (autonomy for example) results in deprofessionalization.

²Professional autonomy: An important role of professional organization is the adoption of a Code of Ethics, which is the basis of the "social contract" between the profession and the society. The profession accepts to respect the public interest while it has the exceptional right of self direction.

³Market of dental services represents the provision of dental care upon liberal practice

⁴Harmonization of the dental curricula in the EU is the process of mutual recognition of diploma based on the reforming the dental education in accordance of common basic criteria (competences) to be achieved by dental graduates all over EU.

⁵Lifelong learning is: An educational process that lasts throughout life, in all areas and in all forms. It is based on the personality, which accumulates knowledge on personal and professional motives. Knowledge of the profession helps the individual to better realize, to socialise at a higher level, and to exhibit civic activity. It also helps to increase competitiveness and employment in society as a whole. The learning process is not limited in time with childhood and adolescence, not only with a stay in an educational institution, but it takes place everywhere and at different times of life, with different means and methods. Learning can no longer be perceived as two independent divided processes of gaining knowledge in one place - school and applying knowledge to another place - work [5].

⁶Continuing education by definition means: A training programme that leads participants to a refresher of knowledge in a specific area of knowledge or skills; Short-term training courses developed specifically for adult students; Postgraduate or non-accredited courses offered by higher education institutions; Cognitive work that involves professional development and training in the workplace; An individual training place involving self-directed study, using different sources and means, including in the network [5].

⁷Professional continuing education is defined as: Part of continuing education; Specific educational activity leading to the issuance of a certificate or recognition of permanent education units in order to document the presence of certain seminars and training courses; Licensing authorities in a large number of areas impose mandatory requirements for the maintenance of the license on the members of professional organizations; These requirements oblige professionals to broaden the horizons of knowledge and to develop in accordance with modernity.

Postgraduate education for physicians and dental practitioners in Bulgaria is legally regulated. The requirements for admission in postgraduate programs, the forms of training and the procedures for recognition of qualification (specialty), the list of the accredited training centers and the role of the dental schools are stated in relevant regulations [7]. The faculties of dental medicine provide undergraduate, graduate, postgraduate and PhD programs. The dental professional organization in Bulgaria (BgDA), alike the professional organizations in other EU countries, is committed to organize various forms for maintenance of professional qualification.

Purpose of the Study

The purpose of this study was to demonstrate the willingness of dental practitioners in Bulgaria to invest in continuing dental education, their preferences for the forms of postgraduate education

to maintain their professional qualification and their evaluation of the system of postgraduate education organized by the BgDA during the period of socio-economic transition.

Materials and Methods

As part of a broader longitudinal study of the processes of re-professionalization of dentists in Bulgaria (1995 - 2009) a series of self-administered questionnaire studies were carried out reflecting the interest in, the preferences for, and the willingness to invest money and time in continuing education. The structure of the samples in the inquiry corresponded largely to the structure of the general population of dentists. The response rate was 80.0%. Relative distribution metrics were calculated in each sample (1995, 2000, 2005, and 2009). The validity of the differences was statistically supported (Table 1).

Year of investigation	1995		2000		2005		2009	
Sample/ respondents/respondent rate	1551/1117/72%		93/78/84%		235/193/82%		135/108/80%	
Answers distribution in %/SE	% SE		%	SE	%	SE	%	SE
1. Do you practice as general practitioner? / yes	71.2	0.203	63.5	0.054	57.4	0.036	75.9	0.041
2. Do you work in private practice?/yes	50.3	0.529	77.4	0.048	88.2	0.023	92.6	0.024
3.1. Do you have an implantology set?/yes	4.1	0.191	6.4	0.026	12.6	0.024	1.00	0.028
3.2. Do you have a photopolymerizing lamp?/yes	57.6	0.412	62.8	0.054	92.3	0.019	97.	0.026
3.3. Do you have a computer?/yes	8.6	0.247	21.8	0.047	45.6	0.036	67.6	0.045
4.Do you have auxiliary staff?/yes	36.2	0.275	33.3	0.053	28.1	0.032	54.60	0.048
5. Do you consider to provide your dental assistant with additional training? /no	26.6	0.084	17.9	0.044	12.8	0.024	54.6	0.048
6. Do you have a speciality diploma?no	35.6	0.135	23.9	0.048	40.5	0.035	41.10	0.047
7. Do you like to obtain a speciality diploma?/no	39.9	0.143	35.9	0.054	39.5	0.035	51.80	0.048
9.1. What continuing education courses did you attend for last 5 years? /none	51.5	0.157	14.1	0.039	12.2	0.023	32.4	0.045
9.2. What continuing education courses did you attend for last 5 years? /periodontology	10.6	0.089	20.5	0.045	27.3	0.032	26.80	0.043
9.3. What continuing education courses did you attend for last 5 years?/implantology	11	0.165	20.5	0.045	27.3	0.032	21.30	0.039
9.4. What continuing education courses did you attend for last 5 years?/fixed prostheses	15.2	0.183	17.9	0.044	31.4	0.033	35.2	0.046
9.5. What continuing education courses did you attend for last 5 years?/dental materials	18.5	0.152	28.2	0.051	44.6	0.036	38.0	0.047
10.1. What continuing education courses do you wish to attend?/none	15.9	0.109	3.8	0.022	7.5	0.02	15.70	0.035

10.2. What continuing education courses do you wish to attend?/periodontology	26.1	0.097	24.4	0.048	43.5	0.036	38.0	0.047
10.3. What continuing education courses do you wish to attend?/implantology	26.6	0.097	14.1	0.039	31.7	0.034	22.00	0.04
10.4. What continuing education courses do you wish to attend? fixed prostheses	34.4	0.097	37.2	0.055	50.5	0.036	79.6	0.038
10.5. What continuing education courses do you wish to attend?/dental materials	36.2	0.097	35.9	0.054	37.6	0.035	58.3	0.047
11.1. What time an year can you afford to attend continuing education courses?/not interested in	7		5.3	0.025	9.5	0.022	19.40	0.038
11.2. What time an year can you afford to attend continuing education courses?/1 week	16.8		24	0.048	29.1	0.033	36.1	0.046
11.3. What time an year can you afford to attend continuing education courses?/2 weeks	26.3		34.7	0.054	29.1	0.033	32.4	0.045
11.4. What time an year can you afford to attend continuing education courses?/1 month	33	0.199	28	0.051	19	0.028	11, 12	0.03
12.1. What amount of money can you afford for paying the courses? None	45.4	0.237	22.7	0.048	28.7	0.033	22.20	0.04
12.2. What amount of money can you afford for paying the courses? 1% of the income	17.5		5.3	0.025	20.7	0.029	21.30	0.039
12.3. What amount of money can you afford for paying the courses? 1%-3% of the income	22.2		41.3	0.057	23.4	0.03	30.60	0.044
12.4. What amount of money can you afford for paying the courses? 3-5% of the income	9.9		22.7	0.048	17.9	0.028	20.40	0.038
13.1. How do you appraise the quality of postgraduate dental education?	8.4		8.1	0.031	12.4	0.023	1.00	0.025
13.2. How do you appraise the quality of postgraduate dental education?	16.5		24.3	0.048	19.8	0.029	25.90	0.042
13.3. How do you appraise the quality of postgraduate dental education?	36.4		32.4	0.053	27.7	0.032	39.8	0.047
13.4. How do you appraise the quality of postgraduate dental education?	18.6		9.5	0.034	22	0.03	11.00	0.03
13.5. How do you appraise the quality of postgraduate dental education?	20.2	0	25.7	0.051	18.1	0.028	12.00	0.031

Table 1: Sample, response rate, standard error.

Results

The portion of dentists attending short continuing education courses increased (from 48.50% in 1995 to 67.60% in 2009) while the number of postgraduate dental students for the same period decreased considerably. In 1995, only half of the dentists (48.50%) visited at least one form of study/training, whereas this percent-

age almost doubled in just 5 years (85.90%). It is interesting that for the year 2009 a certain decline of the interest in courses' attendance was observed (20% reduction compared to 2005), (Figure 1). It can be assumed with great probability that the hard core of the "learners" is around 2/3 of the professional community, despite attempts to enforce the compulsory nature of the training [8].

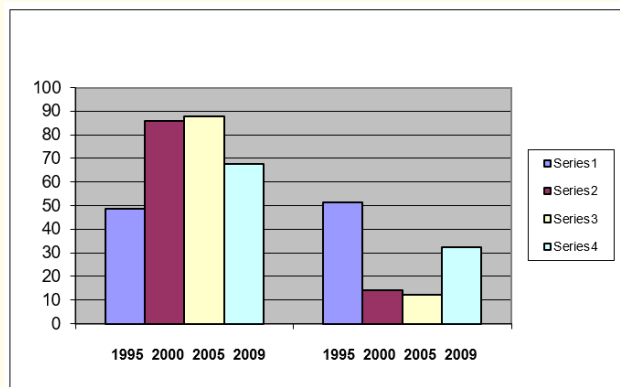


Figure 1: Attendance in continuing education courses (CEC) (%).

The most preferred areas, according to the rate of attendance and the trend of increase of frequency of attendance, are: periodontology, implantology, fixed prosthetics and dental materials. The change is very significant - 18.50% of dentists attended some of continuing education courses in these fields in 1995 while 38.0% of them did in 2009. The trend is towards a steady increase of the interest in all of the mentioned above domains of dentistry. Specifically, implantology and periodontology, after a sharp increase and retention of levels of interest between 1995 and 2005, showed a certain reduction for the last studied period (2005 - 2009). Crowns and bridges prostheses' oriented courses marked a continuous upward trend (Figure 2).

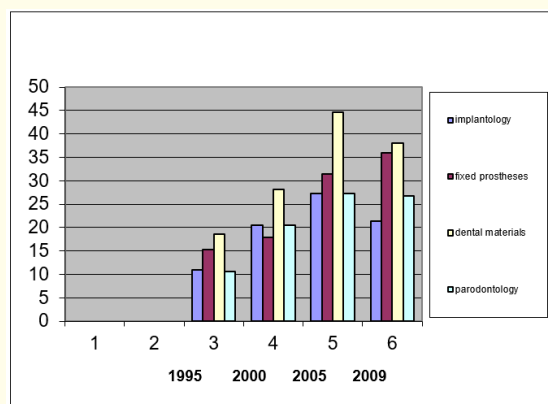


Figure 2: Preferred continuing education courses.

Contrary to the sustainable increase of the interest towards short thematic courses for maintenance of qualification, a sharp decline of the number of entries of postgraduate students was registered (Figure 3). This trend correlates with the increase of

registered general dental practices while the absolute number of specialists decreased almost twice for ten years. This fact is the result of mostly two major causes: On one hand, the average age of the specialists is higher than the average age of dentists in the list, therefore the decline in their number is more tangible. On the other hand, the number of places for specialization, respectively the number of newly recruited specialists was limited for many years [9].

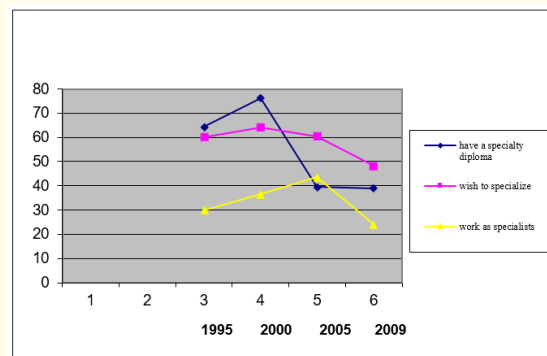


Figure 3: Type of dental practice and plans of dental practitioners to specialize.

The readiness to invest time and money had been chosen as objective indicators of the interest of dental practitioners in their professional development. The average time devoted annually by majority of dentists was 1-2 weeks. The trend is showing smooth reduction according the time indicator (change from 93.0% in 1995 to 80.6% in 2009), while the trend is towards a gradual increase (change from 56.4% in 1995 to 77.6% in 2009) according to the money indicator. In 1995, 33.0% of respondents would spend up to 1 month for training, while in 2009, 39.0% of respondents would spend only 1 week for training (Figure 4).

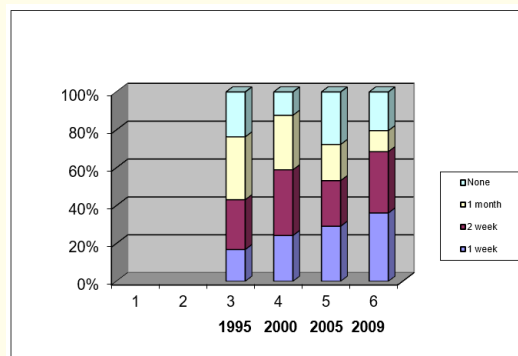


Figure 4: Willingness of dentists to devote time to CEC (%).

For the majority of dentists, the average investment in continuing education is between 1.0% and 3.0% of their income. The portion of people ready to invest in continuing education forms changed from 22.2% in 1995 to 30.6% in 2009 (Figure 5).

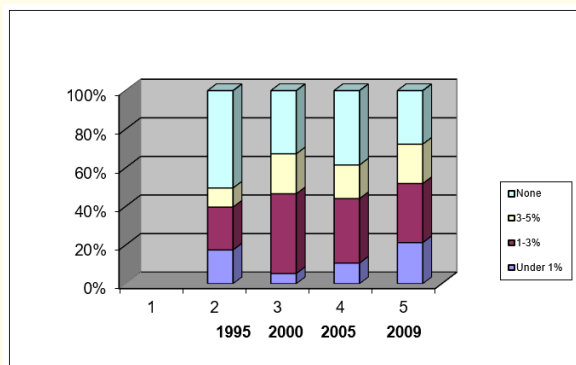


Figure 5: Willingness of dentists to devote money to CEC (%).

Mandatory continuing education for dentists in Bulgaria starts up from the moment of registration before the regional collegium of the BgDA and consists of accumulating of 30 credit points for the period of 3 years. The list of accreditable events comprises participation or attendance in congresses, symposia, seminars, courses, conferences at home and abroad as well as publication of research articles and lecturing. The system is organized and monitored at regional level. There is a commission on continuing education within the Board of the BgDA.

Most of dentists (about 1/3 of respondents) score as “good” the quality of continuing education courses organized by the BgDA. The percentage varied relatively slightly over the years (36.40% for 1995, 32.40% for 2000, 27.70% for 2005, 39.80% for 2009). Only one third give a higher rating (5 or 6) and about one third rate the system of continuing education as mediocre and weak (Figure 6).

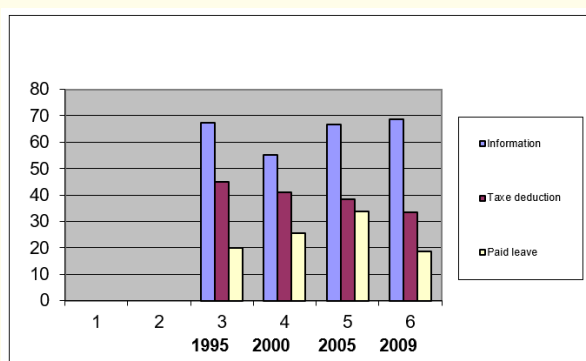


Figure 6: Expectations of dentists from the professional organization (%).

There is a converse correlation between the decreasing number of specializing dentists (Figure 7) and the increased number of specialties holders working as general dental practitioners (38.9%). The expressed desire to complete a specially postgraduate education decreased from 60.1% to 48.2% [8-10].

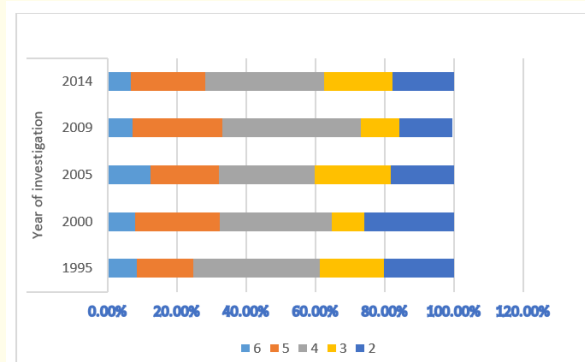


Figure 7: Evaluation of the system of continuing education.

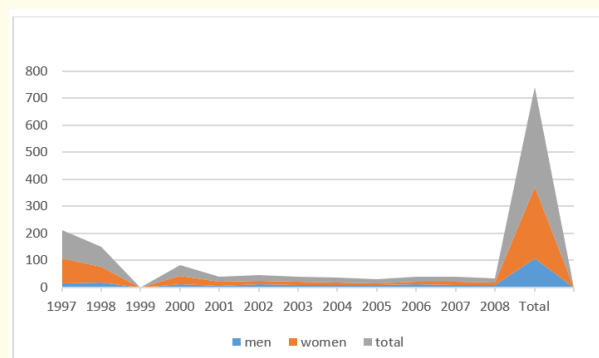


Figure 8: Dentists diplomated with specialties per year.

Discussion

Modern society is a “knowledge society.” The dynamics of the labor market and the rapidly changing social environment requires much more diverse and up to day knowledge than acquired during the formal education courses. In some cases, this knowledge is out of date, in other cases the knowledge stopped being applicable in practice. The concept of lifelong learning provides individuals and businesses with tool to meet the current requirements of the market and to integrate into the changing social and technological environment. It is now clear that compulsory education, obtained at a young age, is not enough to serve the individual throughout his life. In October 2006, the European Commission published the communiqué “Adult education: It’s never too late to learn”. This document offers continuous learning to become the basis of the ambitious Lisbon process 2010, “Europe of knowledge”. In December 2007, the Committee on Culture and Education of the European Parlia-

ment published an adult education report, which urged Governments to work towards establishing their countries a culture of lifelong learning. In 2008 the OECD published an article "recognition of optional and non-formal education in OECD: A very good idea at risk?" [14,15].

In addition to general lifelong learning, there are some specific professional requirements for continuing education to reinforce core values defining the professional competence. Maintaining an adequate level of professional competence is the duty and privilege of the professional organizations. After conclusion of the undergraduate dental education doctors of dental medicine must continue to attend courses to maintain their professional standing. In order to be validated, the licensee is expected to accumulate a certain amount of training hours over a specified period of time [7,13].

Dentistry today is a modern educational discipline, autonomous professional occupation, evolving global market of services, and integrated part of National Health Systems. The second half of the 19th century was the time of building public health systems and professional societies. The organization of the professions represents an important moment in their social differentiation. Professional societies (associations) embody the holders of a given profession in society and to public institutions. It affirms professional autonomy, negotiates the price and quality of professional services, regulates access to professional practice, and indicates participation in continuing education and training of graduate dentists [4,16].

In Bulgaria, the period between 1991 and 2000 is a period of radical social reforms resulting in transition from the totalitarian regime to a market democracy. Radical reforms started in health care too (mostly in the outpatient care sector). It consisted of the switch from State to public organization and management of the Health service. The autonomy of the profession was restored and the relationship between the state and the autonomous professional organizations, providing health services for the population was regulated by a Code of Ethics and legalized partnership. Professional organizations were authorized to participate in dental education and postgraduate education, planning and monitoring. Reforms in education and postgraduate education began to harmonize with European directives. At the end of 2007, it becomes a full member of the EU. European integration became part of the national agenda, including policies relevant to the domain of public health,

health professions and health education. First changes consisted of mutual recognition of diplomas, free movement of patients and doctors of dental medicine within the EU. Stomatologists became doctors of dental medicine [3,4,16].

Against the backdrop of the normal reduction of over-specialization at the expense of the development of polyvalent activity, the number of specialists is sharply reduced, without sufficient clarity for the needs and strategies for the future in the context of private practice. Interest in technological innovations and forms of continuing training among practitioners is constantly increasing, without clearly noticing the role and place of the faculties of dentistry, respectively the academic community in satisfying the needs of the profession.

What is the reality in some dental faculties in Bulgaria now? In the last 5 years decrease to complete lack of activity in the faculty was noted. Even more serious is the lack of a strategy to support the initiative of teachers, the full use of material resources and the authority of the institution. There may be obvious signs of lack of interest of the authorities for the development and potentiation of activities. This lack of interest is inexplicable and unacceptable.

Possible solutions: A strategic program to develop a continuous process of up skilling after graduation. Encouraging educators to develop similar programmes in their fields. A long-term perspective of cooperation with the BgDA and other partner agencies. Last, but not least develop on-line continuing education courses following the current world trends [11-13].

Conclusion

Dentists in Bulgaria consider the necessity for updating their professional competences as a core philosophy of the professionalism. Continuing education demonstrates a growing dynamic: The preferred forms and areas of continuing education include mainly new methods to be applied in general dental practice. The dentists' interest gradually changed from lecturing courses into hands on practical training. The readiness of dental practitioners to allocate resources for their professional up to day qualification changed toward reducing the duration of time at the expense of increasing the amount of funds. Licensing power of professional bodies based on continuing education system has strengthened while the role of dental schools has been comparatively limited.

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