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Letter to the Editor

Ethical and Legal Aspects of Professionalization of Dentists. AI Versus Traditional Value Approach, or there is No Contradiction

Lydia Katrova*

Free Lancer Expert and Professor in Public Health, Sofia, Bulgaria

***Corresponding Author:** Lydia Katrova, Free Lancer Expert and Professor in Public Health, Sofia, Bulgaria.

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Professionalization is the process of obtaining a social position by individuals in a group exercising a given occupation operating under a social contract based on self-obligation to follow moral, legal, and practical commitments stated in a code of ethics, established upon professional standards, system of licensing and registration regimes. Professional autonomy is the key pillar of the social status of professional people.

Professionalization of dentistry dated about the second half of the 19th century when, thanks to the starting of academic dental education and the foundation of dental professional societies, achieved social and legal recognition. Professional standards of dentistry, regulated by the dental professional body, include a set of competencies in providing oral healthcare services, acquired during a formal course of higher education and continuing education and a set of ethical norms of relationship with patients and society and within the professional community.

Autonomy in decision-making gives to dentists social authority while requiring from them to take responsibility for diagnostic, planning and treatment, follow up and prevention of autonomous individuals at different stage of physical and social vulnerability in a fast changing social, political, and technological environment.

Dentistry today is still characteristic by autonomous professional regulation, evolving global market of services, and inclusion in the National Health Systems. What changed for the profession and the professionals now? The profound social impact of technologies on the people relationship is visible. There is unlimited choice and boundless freedom to reach information by oneself.

What is the problem with the easy access and the autonomous use of information? There is a paradox: The decision making process seems to become more individually based as the professional and the patient have their autonomy to make individual choices, while in reality the dentists' and the patients' decisions are based on a multitude of experts' experience and evolving theoretical and technical knowledge shared through AI tools. Are we thinking about? Are we able to verify all the sources and take reasonable choice? What about the traditional ethical foundation of the dentist/patient relationship? What about the responsibility of the healer for the healing of the patient? All these questions and many more can arise in the context of the professionalization process.

Therefore, the traditional paradigm of the professionalization of dentists requires a new reading. The paradox of "collective individual decision" should be addressed by the paradox of the "individual collective responsibility". Rethinking the social contract between the profession and the society based on enhanced regulations in regards of AI assisted clinical decision and responsibilities of oral healthcare providers on one hand and going beyond the normative ethics and foster the conceptualization of the patient focused professional conduct considering social and cultural diversity of AI competent patients on the other.

Observing the features of the dental profession and the elements of the professionalization of dentists shaped by the implementation of AI in oral healthcare and overall social life we can see that human values and technologies can be perceived as the two faces of the same phenomenon. The perspectives of the professional identity and professional status of individual dentists are bright if considering AI as a tool to build adequate professional standards and develop adequate human relationship. Keeping balance between technical performance and human touch requires deep philosophical and sociological knowledge as well as effective communication [1-12].

Bibliography

1. Faulconbridge JR and Muzio D. "The rescaling of the professions: towards a transnational sociology of the professions". *International Sociology* 27.1 (2012): 109-125.
2. Blouin D. "Health professions education as a discipline: Evidence based on Krishnan's framework". *Medical Teacher* 44.4 (2022): 445-449.
3. Wu ZY., *et al*. "Comparison of dental education and professional development between Mainland China and North America". *European Journal of Dental Education* 14.2 (2010): 106-112.
4. A Viseu. "Integration of social science into research is crucial". *Nature* 525 (2015): 291-292.
5. Engelschalk Marcus. "Artificial Intelligence in dentistry: potential ethical considerations".
6. Jos VM and Welie J. "Is dentistry a profession? Part 1. Professionalism defined". *Canadian Dental Association* 70.8 (2004): 529-532.
7. Katja van Vliet., *et al*. "Education for future health care: A radical shift in perception, learning and action". *International Journal of Healthcare* 4.1 (2018): 1.
8. Patricia l Rosenfield. "The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences". *Social Science and Medicine* 35.11 (1992): 1343-1357.
9. Yung-Kai Huang., *et al*. "Artificial intelligence in clinical dentistry: The potentially negative impacts and future actions". *Journal of Dental Sciences* 17.4 (2022): 1817-1818.
10. Katrova L. "Essentials of Social medicine and Medical Ethics". Editor: "Leading Technologies in Dentistry" Sofia (2016): 125.
11. Lydia G Katrova. "Essentials of public health and healthcare management". © Sofia Editor: Lydia Katrova-Leading Technologies in Dentistry company ISBN:978-954-90363-7-4 (2017).
12. Lydia G Katrova. "Essentials of dental health and dental practice management". ©Sofia Editor: Lydia Katrova - Leading Technologies in Dentistry company ISBN: 978-954-90363-4-3 (2017).

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