PERSPECTIVE



The recent ethics boom in dentistry—moral fig leaf, fleeting trend or professional awakening?

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Abstract

Objectives "Ethics in dentistry" seems to be gaining importance as more and more dental institutions, professional associations and dental schools are addressing ethical issues. The aim of this paper is to highlight this ongoing development and to analyze and evaluate its relevance for future dentistry and the dental profession.

Materials and methods A qualitative analysis of literature and Internet sources served as the methodological basis. Recent trends were first illustrated using striking examples and then compared with the status quo in medicine and the medical profession, where ethics have a long professional tradition. It is discussed to what extent it seems worthwhile to transfer existing structures and initiatives in medicine to dentistry.

Results There is a broad variety of ethical announcements and initiatives in international dentistry (e.g., dental codes of ethics, adjustments to dental licensure regulations, professional publications, textbooks, awards, podcasts). It should be noted that ethical issues arise not only in life-threatening situations, but also in everyday dental practice. Existing ethical structures in medicine can be adapted or provide guidance for education, clinical practice and research.

Conclusions Teaching ethical competence in dental education, clinical practice and research can make an important contribution to the professionalization of dentists—quite similar to medicine. Furthermore, a broad integration of ethics in dentistry strengthens the public image of dentists.

Clinical relevance Dealing confidently with ethical issues is a key competence for successful work as a dentist—both in practice and in science.

Keywords Dental ethics · Bioethics · Professional ethics · Dental trends · Dental care

Introduction

Recently, "ethics in dentistry" seems to be gaining in importance. More and more dental institutions or professional societies are formulating codes of ethics or are establishing ethics commissions and working groups to address normative issues. Ethics is also playing an increasing role in dental education and training. Our paper takes this development as an opportunity to analyze and evaluate the relationship between dentistry and ethics. The

methodological basis of the article is a qualitative literature and internet search analysis. The paper proceeds in two steps. First, the current development is shown and clarified by means of characteristic examples. In a second step, a deeper comparative look is taken at the medical profession, where the relationship between medicine and ethics has a long tradition and certain structures and contents have developed over time. Subsequently, it will be discussed to what extent it is possible and useful to transfer these structures and initiatives to dentistry. The aim of the analysis is to show what role ethics should and could play in dentistry in relation to (1) education and training, (2) clinical practice, and (3) research. Brief conclusions are drawn at the end.

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Material and methods

This paper is based on a qualitative analysis of the international literature as well as on a global internet search on the topics of "ethics in dentistry" and "ethics in medicine". In terms of time, the search was narrowed down to articles published in the last six years (2017-2023). For journal articles, the PubMed search engine was used; for book articles, the international search engine of the Karlsruhe Virtual Catalog (KVK) was also consulted. Internet searches were performed using the Google search engine with the aid of eight relevant keywords (ethics, code, norms, values, medicine, dentistry, physicians, dentists).

Results

Signs of a new emphasis on ethics in dentistry

Those concerned with ethical content in dentistry have recently been confronted with a plethora of new ethical codes and professional publications, structures and initiatives about ethics. This can be illustrated by a few striking examples:

The American Dental Association (ADA) went public with revised 23-page "Principles of Ethics and Code of Professional Conduct" in 2023 [1] and the German Society of Dental and Oral Medicine (DGZMK) published a "Code of Ethics" in 2022, which is currently being expanded [2]. Also the Council of European Dentists (CED) decided in 2017 to revise its "Code of Ethics for Dentists in the European Union" [3], and in 2018 the FDI World Dental Federation presented the more than 120-page "Dental Ethics Manual 2", which illustrates key ethical principles [4].

It should also be noted that many textbooks on the subject of ethics in dentistry have been published in recent years. In 2022, Alexander Mersel published "Treatment Dilemmas for Vulnerable Patients in Oral Health. Clinical and Ethical Issues" [5] in which he highlights ethical issues related to neglected and vulnerable patients in dental practice. David T. Ozar et al. have published an expanded edition of their seminal work "Dental Ethics at Chairside: Professional Obligations and Practical Applications" [6] and Kristin Minihan-Anderson has recently presented "Ethics and Law in Dental Hygiene" [7]. Mahesh Verma et al. published in India the book "Contemporary Dental Ethics and Professionalism" [8]. In addition to English, there is a trend towards other languages in books on ethics in dentistry—for example, works are available in Spanish [9], French [10] or German [11, 12]. A similar diversity can be observed in scientific journal articles.

The number and thematic breadth of articles on ethics in dentistry have increased [13–19]; some journals have even established their own series of ethics-related articles (e.g., "Ethical Moment" by the Journal of the ADA for brief case vignettes on ethical issues faced by dentists [20]). In this regard, recent technological developments, such as the much-discussed potential of artificial intelligence, appear to be further stimulating publications in the field of dental ethics [21–26].

There have also been organizational developments: For example, the ADA has established a "Council on Ethics, Bylaws and Judicial Affairs" (CEBJA). The Council is "dedicated to enhancing the ethical conscience of dentists by promoting the highest moral, ethical and professional standards in the provision of dental care to the public" [27]. Comparable developments can be found in the British Dental Association (BDA), under whose auspices a working group entitled "Education, Ethics and the Dental Team (EE&DT)" [28] has been initiated, and in the DGZMK, where the working group "Arbeitskreis Ethik" has been set up [29].

In addition, new specific formats have been established to raise ethical awareness among dentists: The ADA recently launched a podcast series called "Dental Dilemmas" [30]. The association also regularly announces a "Student Ethics Video Contest", an annual competition designed to encourage dental students to apply the ADA Principles of Ethics and Code of Professional Conduct [31]. The DGZMK has initiated a "Dental Ethics Award" to honor authors who have made a contribution to the field of ethics in dentistry by raising awareness of ethical issues in dental practice or who have contributed to the sustainable improvement of ethical problems in this field [32]. Furthermore, there have been developments in dental education. In Germany, for example, the subject of "dental ethics" was introduced into dental education in 2020 and is prescribed in the current dental licensing regulations [33]: Ethics is now both a teaching and an examination subject, which is a novelty in Germany [11, 34].

So, it seems that ethics has found its way into the dental profession. There is an amazing variety of ethics-related elements in international dentistry. However, the individual initiatives do not yet appear to have been brought together or systematized—but is this to be expected? Do the developments so far indicate that a new era of growing awareness of ethical issues among the dental profession has begun, or is this more a passing trend? At this point, it is not possible to make a conclusive prognosis, but the question of what a comprehensive and systematic embedding of ethics in dentistry and the dental profession would bring seems all the more important. To answer this question, it is useful to take a look at the medical profession, where ethics has traditionally been considered and *lived* as an integral part—not least due to historical normative guidelines (e.g., Hippocratic Oath, Nuremberg Code, Declaration of Helsinki).



Thinking outside the box: ethics in medicine

Traditionally, medicine and ethics have been considered together, and work at the intersection of the two has led to the emergence of professional medical ethicists or bioethicists. Indeed, a systematic integration of ethics can be found in all areas of the medical profession: (1) in education and training, (2) in clinical practice and (3) in medical research. The close connection between medicine and ethics is not only rooted in the history and tradition of the Hippocratic Oath. The fact that medical treatment regularly involves serious illness and life-and-death issues also forces physicians to consider ethical principles and values. In dental practice, however, these issues play a rather subordinate role. With this in mind, does it make any sense to compare the state of ethics in dentistry and medicine?

It is undoubtedly true that some of the much-discussed problems of medical ethics (also in society) hardly play a role in dental practice: For example, the numerous issues at the end of life (e.g., physician-assisted suicide, killing on demand, brain death and criteria for death) or at the beginning of life (e.g., ethics of embryonic stem cell research, prenatal diagnosis, late abortion, extreme prematurity). The same applies to "classical" medical ethics issues, such as the handling of organ transplants (organ donation and distribution), the question of triage in the event of a shortage of (intensive) medical care, or the handling of pharmacological neuroenhancement ("brain doping"), just to mention a few examples.

That dentistry is generally not a matter of life and death may have led to the persistent assumption that this discipline is devoid of, or only marginally concerned with, ethical issues. However, normative problems are not only found in cases of vital threat. Some issues in dentistry are of particular ethical significance: The responsible treatment of anxious and phobic patients, who play a major role in dental practices (dental phobia) and often request treatment under general anesthesia. Questions of distributive justice are also relevant: In dentistry, private co-payments by patients are comparatively widespread, and certain services (e.g., implant restorations) are only available to patients with the ability to pay. There is also a concrete need for clarification in dealing with patient requests that are not medically indicated ("wish-fulfilling dentistry"). The high expectations of dentists as "health guides" also have ethical implications: Dentists are regularly consulted from infancy to old age; therefore, dentists are ideally expected to provide early indications of possible child welfare risks, but also early diagnosis of oral manifestations of serious diseases (e.g., bulimia, certain forms of leukemia, diabetes). Dentists do not always meet these expectations. Another characteristic of the dental profession is its widespread self-employment: While most physicians are employed as salaried or civil servants—primarily in hospitals and clinics, but also in medical care centers—dentists in many countries work predominantly in private practices. Both occupational groups face very different working realities and economic conditions, which in turn pose different ethical challenges.

These few examples make clear that ethics plays a different but similarly important role in the dental profession as it does in the medical profession. It is therefore worthwhile to take a closer look at the interfaces between medicine and ethics. For this purpose, it is useful to consider the areas of – education and training, clinical practice, and research—separately. The following is a brief overview of the content and methods of ethics in medicine.

Ethics in medical education and training [35, 36]

Ethics is an integral part of the medical curriculum. Ethical questions at the end of life have their place there, as do questions at the beginning of life. Equitable access to health care, responsible use of scarce resources in the health care system, dealing with the shortage of organ donations, issues of gender equity in medicine, attention to vulnerable patients and those at risk of stigmatization, issues of patient autonomy and surrogate decision making are also core topics in medical ethics. Teaching is usually the responsibility of professional ethicists—alternatively, physicians or health care professionals with advanced training in ethics.

Ethics in clinical practice [37, 38]

Dealing with clinical ethics is also practiced in medical school and at postgraduate work sites. These include structured discussions of dilemmatic clinical cases and practice in communicative skills, such as breaking bad news to patients. Medical societies also help to maintain a high level of sensitivity to medical ethics, whether through codes of ethics or ethics-related initiatives and incentives. Even experienced physicians usually stay in touch with ethics. Most hospitals, for example, have "clinical ethics committees" to advice on ethical cases: Its members are ethics-trained staff who are consulted when therapeutic decisions are dilemmatic (e.g., when a patient is incapable of making decisions and there is no advance directive). Clinical ethics committees also provide training in clinical ethics, write ethical guidelines, and offer ethics visits to inpatients in critical situations (e.g., intensive care patients, palliative care patients). Ethical issues are also increasingly discussed in clinical case conferences, (e.g., patients on the borderline between curative and palliative treatment). Finally, the handling of treatment errors is also a task of clinical ethics.



Ethics in medical science [39, 40]

Medical science also needs ethical knowledge and normative guidelines, because research always means assuming responsibility. The basic goal is to teach researching physicians "good scientific practice." Physicians working on scientific publications need to know which contributions entitle them to scientific authorship, how to cite accurately, and how to avoid plagiarism. They need to know that conducting a clinical trial requires a positive vote from a research ethics board, and what it takes to write an ethics application for a trial. But also physicians who are not doing research, or who are working on their doctoral thesis need to know how to recognize a good (or bad) clinical study (e.g., when reading a research paper). For this reason, all (future) physicians usually receive at least basic training in research ethics.

Discussion: on the potential benefits of ethics in dentistry

What can dentistry and its representatives learn from medicine and physicians in terms of ethics? What content and structures already exist in dentistry that are worth emulating, and where should new paths be taken? And the key question: Do we really need ethics in dentistry in the areas of education and training, clinical practice, and research?

The simplest answer is in the context of research, because research in dentistry is subject to the same standards as research in medicine, so the same rules and frameworks should apply. In other words, dentists need a basic understanding of good scientific practice. They also need to know what ethical and legal standards should be applied to clinical trials and how to distinguish good quality trials from poor ones. Where this knowledge is not yet being taught, it should be changed.

Regarding ethics in education and training, there are both parallels and differences to medicine: decisions at the end and beginning of life are core ethical issues for (future) physicians. They are clearly not for dentists. Of course, dentists should be aware of the existence of these issues, as should all citizens. Of far greater importance, however, are issues of equitable access to dental care, dealing with vulnerable patients—especially those with limited decision-making capacity (e.g., minors, the very elderly, dementia patients). Special ethical competence is also required when dealing with patients with dental phobia. The same applies to dealing with the dilemma that all patients should be equally well cared for, but that certain services (e.g., implants, complex endodontic treatments) are only available to patients with financial means. "Wish-fulfilling dentistry" also plays an important role: dental bleaching, the serial provision of veneers, the application of gemstones to teeth or oral piercings are procedures that are usually not medically indicated, but which are financially lucrative for dentists. Here, too, ethical awareness needs to be raised through education and training.

Similar to the licensing regulations for physicians, the subject of ethics has also been included as a compulsory subject in the German licensing regulations for dentists [33]. Under the title "Ethics and History of Medicine and Dentistry", prospective dentists are to be trained in and sensitized to the subject. This requires a concrete elaboration of specific teaching content, which is currently being worked on [11]. Here, too, the subject of medicine offers points of reference and orientation for the design in terms of form and content.

But what about dental ethics in clinical practice? In dental practice, ethics often plays a secondary role. In clinical training, the main focus is on manual skills. There is no question that good treatment techniques are essential. However, ethical issues do arise in dental practice—and they can be addressed with appropriate knowledge of ethical principles and tools. The comparative perspective of medicine seems to be very helpful here: The long-established "structured discussions" of dilemmatic clinical cases there are equally suitable for dentists, only the case studies are different. The same applies to the practice of mindful, empathic communication: dentistry also needs to deliver difficult news—for example, when (multiple) tooth extractions become necessary or when an oral cancer is diagnosed. Clinical ethics committees could also be useful for dentists. They have traditionally been available primarily to inpatients and are often consulted regarding end-of-life decisions (e.g., withdrawal of therapy, interpretation of a patient's will). More recently, there have been increased efforts to provide ethics consultations to outpatients. It is conceivable and reasonable to extend this service to dentists and their patients—here, too, difficult issues arise, especially when it comes to vulnerable patients or those who lack decision-making capacity. The same applies to clinical case conferences in hospitals: up to now, tumor boards have mainly included cancer patients from the field of oral and maxillofacial surgery. Here, too, it may be helpful to include (some) dental patients. The same applies to handling of treatment, procedural or medication errors: they occur in dentists as well as in physicians and must therefore be treated with the same attention from an ethical point of view.

Conclusions

From the above, it can be concluded that "dental ethics" has considerable potential. Ethical issues arise not only in the event of a life-threatening situation, but also in every-day dental practice—some of them are specific, others are



problems that physicians face in very similar ways. Accordingly, the teaching of ethical competence in dental education and training, in clinical practice and in research can make an important contribution to the professionalization of dentists. It helps to raise awareness of ethical issues and can lead to better decisions and clinical outcomes.

In addition, there is another—extrinsic—benefit: the broad integration of ethics into dentistry not only improves competence, but is also perceived by patients and the public. It also enhances the external impact and thus the image of the dental profession.

For all these reasons, it is to be hoped that the "ethics boom" described is not just a flash in the pan or a moral fig leaf, but a sign of a new professional identity. So what is needed to sustain and promote this momentum? It will take dental curricula and continuing education initiatives that make ethical learning a standard. And it needs professional societies and journals to raise and reinforce ethical awareness among professionals through appropriate initiatives—such as codes of ethics, working groups, awards, podcasts, journal series—and to provide positive incentives for participation. Finally, there is a need for role models—respected professional politicians and university professors—to instill such ethical awareness and encourage emulation.

A la longue, it would be desirable for the fields of dentistry and bioethics to interpenetrate. There is still a long way to go: so far, many bioethicists have specialized in the field of medicine; dental ethics is still a marginal topic for most of them, partly because there have been few job opportunities for explicit "dental ethicists" and partly because there has been less demand for such ethical content from dentistry and its representatives. As interest in dental ethics grows, so will the supply of competent bioethicists in the field. Ideally, experts will eventually be recruited from both fields: philosophy or bioethics and dentistry. At that point, "dental ethics" will become a classic interface subject.

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Declarations

Ethics approval and consent to participate Not applicable.

Competing interests The authors declare no competing interests.

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