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ABSTRACT. Veracity (or truth-telling) in healthcare ethics is defined as a comprehensive, accurate, and objective transmission of information, and also as the way the professional augments the understanding of the patient (in clinical/ dental practice) or subject (in biomedical research). Veracity, as a moral principle guiding medical (and dental practice) has a long and complicated history; only recently the principle became stable and received a proper definition and differentiation from informed consent. The purposes of this article is to present a short history of veracity in clinical practice, followed by a normative and descriptive analysis of the principle, and finally, to offer some practical applications of the principle in dentistry.

Keywords: veracity; dentistry; normative ethics; amalgams; commercialization.

REZUMAT. Veracitatea ca unul din principiile fundamentale ale eticii în stomatologie. Veracitatea (sau spunerea adevărului) este definită în etica medicală ca un mod de transmisie exhaustivă, obiectivă și corect științifică, dar reprezintă totodată și un mod prin care profesioniștii din domeniul sanitar augmentează capacitatatea de înțelegere a pacientului (în practica medicală/ stomatologică) sau a subiectului (în cercetarea biomedicală). Veracitatea, ca principiu moral al practicii medicale, are o istorie lungă și complicată;doar recent acest principiu s-a stabilizat normativ și a fost clar diferențiat de consimțământul informat. Scopurile acestui articol sunt: de a prezenta o scurtă istorie a veracității în practica medicală, de a realiza o analiză normativă și descriptivă a acestuia și în final de a prezenta câteva aplicații practice ale veracității în medicina dentară.

Cuvinte cheie: veractitate; medicină dentară; etică normativă; amalgam; comercializare

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1. Introduction

Veracity (or truth-telling) in healthcare is defined as the "comprehensive, accurate, and objective transmission of information, as well as to the way the professional fosters the patient's or subject's understanding" (Beauchamp and Childress, 2005). According to the American Dental Association "The dentist has a duty to communicate truthfully. This principle expresses the concept the professionals have a duty to be honest and trustworthy in their dealing with people. Under this principle, the dentist's primary obligations include respecting the position of trust inherent in the dentist-patient relationship, communicating truthfully and without deception, and maintaining intellectual integrity" (2017). Veracity is considered, by the ADA, as one of the main five ethical principles governing dental practice, together with autonomy, nonmaleficence, justice, and beneficence(2017), and the approach is distinct from general medicine, where the main principles of biomedical ethics are only four, namely autonomy, non-maleficence, justice, and beneficence. This distinction warrants a question regarding why the need of individualizing veracity as a fundamental, distinct ethical principle in dental medicine.

2. A short history of veracity

Veracity, as a moral principle guiding medical (and dental practice), has a long and complicated history. According to Beaucham and Childress, traditionally, Codes of Ethics tended to ignore this virtue. It is not identifiable in fundamental documents, such as the Declaration of Geneva of the World Medical Association (until the 1980s), nor in the Hippocrates Oath(Beauchamp and Childress, 2005). Books of medical ethics have debated the issue, but often, at least until the second half of the 20th century, veracity was often seen as something good to be present, but not mandatory. For example, Thomas Percival, in the book that coined the term "medical ethics", considered that truth-telling was a duty, while beneficence was a virtue. When duties and virtues are in conflict, virtues should prevail:

"In the first (duty to the patient, n.n.), it is a relative duty, constituting a branch of justice; and may be properly regulated by the divine rule of equity prescribed by our Saviour, to do unto others, as we would, all circumstances duly weighted they should do unto us. In the second, it is a personal duty, regarding solely the sincerity, the purity, and the probity of the physician himself. To a patient, therefore, perhaps the father of a numerous family, or one whose life is of the highest

importance to the community, who makes enquiries which, if faithfully answered, might prove fatal to him, it would be a gross and unfeeling wrong to reveal the truth. His right to it is suspended, and even annihilated, because its beneficial nature being reverse, it would be deeply injurious to himself, to his family, and to the public; and he has the strongest claim, from the trust reposed in his physician, as well as from the common principles of humanity, to be guarded against whatever would be detrimental to him. In such a situation, therefore, the only point at issue is, whether the practitioner shall sacrifice that delicate sense of veracity, which is so ornamental to, and indeed forms a characteristic excellence of the virtuous man, to this claim of professional justice and social duty. Under such a painful conflict of obligations, a wise and good man must be governed by those which are the most imperious; and will therefore generously relinquish every consideration, referable only to himself.(Percival, 1803)

The approach Percival presented in his book was seen as a moral obligation by the Code of Ethics of the American Medical Association until the 20th century. For example, in the 1903 version of the Code was stated that: "The physician should be a minister of hope and comfort to the sick, since life may be lengthened or shortened not only by act but by the words or manner of the physician, whose solemn duty is to avoid all utterances and actions having a tendency to discourage and depress the patient". Therefore the word of the physicians should be chosen wisely, not to inform the patient, but rather to minimize his/her pain. A similar approach was identifiable in Europe. For example, in France, Amedee Dechambre considered truth-telling to be permissible, but only when the physician was sure that by telling the truth he would not do more harm to the patient: "Je le reconnais volontiers encore il se rencontre des malades qu'un stoïcisme extraordinaire ou des espérances supérieurs à celles dont nous disposons permettent de mettre face à face avec l'avenir qui les attend. Ce sont là des exceptions rares"(Dechambre, 1881). A different approach was identifiable at the same time in Germany. Carl Stooß strongly argued for the need of a correct information before the patient gives his consent, and linked it to trust - frankness will increase the confidence of the patient in his physician, while a soothing, dubious behavior would cause mistrust:

Ich finde sogar, der Arzt, der ein Kind durch einen operativen Eingriff aus unmittelbarer und nicht anders ableitbarer Lebensoder Gesundheitsgefahr errettet, nehme dem Wesen nach eine Notstandshandlung vor. Es lassen sich allerdings Fälle eigenmächtiger

Behandlung denken, die schwere und strafwürdige Eingriffe in die persönliche Freiheit enthalten, so namentlich, wenn die Meinungen der Fachmänner darüber, ob eine operative Behandlung angezeigt sei, geteilt sind, und die Operation lebensgefährlich und nicht sehr aussichtsvoll ist. Ein Arzt, der unter solchen Umständen gegen den Willen des Berechtigten zur Operation schreitet, muss bestraft werden, wenn die Patienten nicht der Willkür des Chirurgen preisgegeben werden sollen. In der Privatpraxis kommen Übergriffe des Arztes in dieser schroffen Form gewiss höchst selten vor. Denn die Natur des Dienstvertrages, der zwischen dem Patienten und dem Arzt besteht, wird auch von dem Rechtsunkundigen instinktiv erkannt und praktisch gewürdigt. Doch wird mancher Arzt dem Patienten eine Behandlung, die er einzuleiten wünscht, weniger bedenklich darstellen, als sie wirklich ist.

Kritisch scheint der Fall zu sein, wenn der Arzt befürchten muss, eine offene Darlegung des Zustandes, in dem sich der Patient befindet, und der Behandlung, die der Zustand erfordert, könnte das Befinden des Patienten ungünstig beeinflussen. Allein rechtlich ist die Lösung dieses Falles klar. Da die Einwilligung des Patienten zu der Behandlung, die der Arzt vorschlägt, nur dann rechtlich wirksam ist, wenn sie auf Grund eines wahrheitsgemäßen Berichtes des Arztes erteilt wird, und da die Einwilligung des Patienten zu der Behandlung wertlos ist, wenn der Patient durch den Arzt über seinen Zustand und Ober die Aussichten der Behandlung getäuscht worden ist, so ist es Pflicht des Arztes, dem Patienten, dessen Zustimmung zu der Behandlung er verlangt, rückhaltlos, wenn auch gewiss in schonender Form, die Wahrheit zu sagen. Die Wahrheit hat übrigens selbst in einem solchen Falle trotz aller Bitterkeit eine gesunde Kraft; sie wird den Patienten nicht stärker angreifen als die halbe Wahrheit, die zur andern Hälfte Unwahrheit ist. Der entschiedene Freimut des Arztes wird das Vertrauen des Patienten in seinen Arzt befestigen, während ein zweideutiges, beschönigendes Verhalten des Arztes das Misstrauen des Kranken erregen muss (Stooß, 1898).

A slightly different approach had Alber Moll, maybe the most wellknown ethicist in Germany at the beginning of the 20th century. In the book Ärztliche Ethik: Die Pflichten des Arztes in allen Beziehungen seiner Thätigkeit [en. Medical Ethics: The Duties of the Physicians in All Relations of His Work], he rejected the opinion of Immanuel Kant about the need for truthfulness in any

circumstances, arguing that is not applicable in medical practice(Moll, 1902, Maehle, 2012). He differentiated two main instances: physicians as experts, and physicians as clinicians. As experts, the physicians had to tell the truth to their patients, except when there was a significant risk of suicide. As clinicians, beneficence had to prevail - so, if the well-being of the patient was better served by deception, it was allowed. In incurable patients, Moll believed that truth-telling was usually needed, as the patients had to do various acts based on the sincere prognosis, such as writing a will or getting the last rites. However, he was uncertain whether the patient had to be informed by the physician, arguing that, at least occasionally, it would be better for the patient if the bearer of bad news was a third party(Moll, 1902).

In Romania, before World War 2, the approach to truth-telling was not regulated, and there were a lot of nuances, depending on the authors. For example, Minovici and Stănescu, considered that patients should be informed truthfully about their medical status, but only if, by doing so, they were not hurt even more: "The physician treats humans and has to face susceptibilities that he must know how to spare; he will tell the whole truth, and if the case requires it, will hide the whole truth." (Minovici and Stănescu, 1939-1940) Similarly, Kerbach recommended truth-telling whenever it was beneficial for the patient, but only if it is useful; otherwise, he advised discretion:

When telling the diagnosis, we have two ways: (1) to tell the truth, whole or in part, (2) to hide the truth, complete or in part. (...) As a general principle, the physician owes the whole truth to the sick or family, especially when knowing the truth favors the application of the treatment and the recovery. Our duty is to decisively prevent a young tuberculosis man or woman, when this disease menaces the patients, by recommending them to follow strictly the adequate rules of true hygiene (...) Any warning of this type we would give, we should not forget that some sick can be discouraged, a fact that must be avoided by any means. This is the limit to truth-telling. Once his knowledge causes prejudice to the patient, we are obliged to lie. When the disease is lethal, by lying, we will plant in the soul of the patient – against our provisions, the trust and hope of recovery" (Kernbach and Nicolae, 1935).

If truth-telling was not possible, the physician was obliged not to lie to the patient, as this would be contrary to the moral status of the physician(Minovici and Stănescu, 1939-1940). Wexler argued that truth-telling should be the rule, based on the patient's right to self-determination; however, he believed that the information should only contain relevant information regarding potential risks, not about every inherent risk of the intervention: "In principle, everybody had the right to dispose of his own body. A treatment, or a surgery, which has risks, should be performed only after the consent of the sick. But the physician should not scare the diseases with possible, but rare risks. The sick has to be prepared to endure the surgery by making him confident of the result, and not by raising any moral resort." (Wexler, 1938).

From the 1950s onward, truth-telling was usually associated with informed consent. For a physician to obtain the consent of the patient for a medical procedure, he/she had to inform him properly about the proposed intervention (diagnosis, prognosis, risks, benefits, alternatives, and so on). The information given to the patient had to be scientifically correct, as otherwise the decision would not have been taken based on medically relevant criteria, and subsequently, the informed consent would have been null and void. For example, in the Nuremberg Code is stated: "Required is the voluntary, well-informed, understanding consent of the human subject in a full legal capacity" (Code, 1949). The "well-informed consent" was implicitly based on accurate information, as this was the only way for the consent to be given voluntarily.

Only recently, veracity became an explicit norm in medical ethics. In the Oviedo Convention is noted that "Everyone is entitled to know any information collected about his or her health. However, the wishes of individuals not to be so informed shall be observed"(1997). This right to information is the legal enunciation of the principle of veracity – if patients have the right to their medical information, physicians are morally obliged to provide them truthfully. The World Medical Association Declaration of Geneva, as amended by the 68th General Assembly (Chicago, 2017), stated that "I WILL SHARE my medical knowledge for the benefit of the patient and the advancement of healthcare." Sharing medical knowledge implies veracity and, as seen in this paragraph, it is aimed at both the patient and advancement of healthcare.

3. A normative and descriptive analysis of veracity

Veracity is based on the principle of respect for autonomy – we cannot respect (except in very particular cases), the autonomy of our patients if we do not recognize their right to receive proper, relevant information regarding their medical status. As veracity was often equated with giving information to patients, which is a fundamental step before obtaining the informed consent(Hostiuc, 2012, Hostiuc et al., 2011), many authors considered them to be similar. However, according to Beauchamp and Childress, there are three main differences. The first one is that veracity is based on the respect owed to

others, while within informed consent is mainly based on the respect for the autonomy of the patient(Beauchamp and Childress, 2005). The distinction is essentially twofold. First, veracity extends and outside the realm of the physician-patient interaction, a concept also implied by the last version of the WMA Declaration of Geneva. Secondly, veracity is not applicable only when there is a legal and moral duty to disclose information, as is the case with informed consent, but instead it is applied irrespective of it. For example, persons without decisional capacity, and who do not have to be informed about the procedure for the consent (which could be given by a legal representative, such as a tutor, or by a family member), are still ought veracity. They still need to be informed correctly about their medical status. The second one is that veracity is connected with other moral obligations of physicians, such as fidelity, promise-keeping, or contract(Ross, 2002). The physician-patient relationship is contractual; in any contract, irrespective of its type, both parties have the duties - physicians have the moral and medical responsibilities associated with the profession, while patients – duties such respecting the physicians, disclosing relevant information about them/their diseases, and so on. The third distinction is the relation between veracity and trust(Beauchamp and Childress, 2005). Informed consent, in its nature, tends to counterbalance the paternalistic attitude of the physicians, which is inherently based on trust - physicians act paternalistically because the patients trust them, trust that they would do whatever is needed for their medical good, and do not feel the need to be highly involved in the decision process. Informed consent (or more precisely the informative model of the physician-patient relationship), needs trust on a much more limited nature- the patients need to trust that physicians informed them correctly, and have to believe the fact that they will act according to their recognized wishes, stated through the informed consent form. Veracity, as seen before, extends beyond the arbitrary limits of informed consent, and was shown as essential to foster trust within the physician-patient relationship, irrespective of its type.

Veracity is mandatory from a Kantian moral perspective, as otherwise the patient would no longer be an end in itself (the end-results would become the medical wellbeing of the patient), but rather a means through which the physician tried to obtain the end-results, by manipulating the medical information. From a strictly utilitarian perspective, in particular circumstances veracity could be breached, as there are specific cases in which patients would be made worse by telling them the truth about their medical status. There are three main instances in which veracity could be breached, in a limited fashion: by using placebo, therapeutic privilege, and hiding the truth in clinical trials (e.g. in blind studies, in which the subject does not know if the will receive the active substance or the control) (Hostiuc, 2014).

Breaches of veracity can be of two main types: commisive (namely actively lying to the patient), and ommisive (avoiding to tell the truth, with variants such as using medical jargon to block patients in understanding the true nature of their medical status). There are many negative consequences of veracity breaches, such as: (1) decreases the trust in their physicians, which, if found out by the patient, could lead to lying, or hiding of relevant information; (2) could alter the decision making process of the patient, therefore nullifying the consent, (3) decreases the overall trust of the patients in the medical profession, (4) decreases therapeutic compliance, (3) decreases the chances of healing (Hostiuc, 2014).

Veracity breaches are usually generated by hiding information about the diagnosis (e.g., in cancer patients), or about the risks of the medical procedure (if it is associated with high mortality). Hiding data about the diagnosis could create a misappropriated view regarding the real healthcare status of the patient(Hostiuc, 2014). Often, physicians use as an excuse the fact that patients do not want to know their real medical status, a view that was shown to be significantly overrated. Physicians have a moral duty to tell the truth to their patients and hide it only if in particular circumstances (see above), or when the patients (not their family members), explicitly request it. Hiding the magnitude of the risks associated with an intervention is also often justified by physicians for non-maleficence-related reasons – they sometimes argue that patients would refuse to undergo a specific medical procedure due to its high risks. However, this approach breaches the principle of respect for autonomy; moreover, it generates a lack of legal protection for the physicians if the risk materializes(Aluas and Gherman, 2016, Hostiuc, 2014).

4. Sample applications of the veracity principle in dental medicine

4.1. Misrepresenting information about dental amalgams and other restorative materials

In the last decades, there have been published a lot of materials suggesting a possible correlation between the use of dental amalgams, or other restorative materials, and diseases such as Alzheimer's (Saxe et al., 1999), Parkinson's (Ngim and Devathasan, 1989), kidney disease, or multiple sclerosis (Bates et al., 2004)). Based on this information, many dental professionals began to recommend removal of the dental amalgams, and their replacement with more modern materials. Later studies refuted, however, these associations. For example, a study commissioned by the European Commission to the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR)

(Rodríguez-Farre et al., 2016). This study identified a series of issues that limited the previously shown correlations. For example, it was difficult to find an association between dental amalgams and diseases, as mercury exposure is usually expressed as the total amount of mercury in body fluids, without a clear differentiation between organic and inorganic derivates (Rodríguez-Farre et al., 2016). Fish consumption, which is the main cause of mercury accumulation in the human body, is associated with increases in organic mercury (methylmercury); amalgams are associated with increases in elemental mercury or other inorganic forms. The accumulation of inorganic mercury in the adult brain is associated with the number of amalgam fillings; in unborn children, mercury concentration in the kidney (but not the brain), is associated with the number of amalgam fillings of the mother. Therefore, in theory, at least, mercury fillings could cause neurotoxicity in adults, or toxic kidney diseases in children. However, there are no scientifically objective proofs of these associations, based on studies done on a proper scientific methodology (Rodríguez-Farre et al., 2016). Therefore, the removal of mercury-based amalgams should not be recommended, based on their potentially negative health-related consequences. Due to similar data, the American Dental Association gave the following recommendation: "based on current scientific data the ADA has determined that the removal of amalgam restorations from the non-allergic patient for the alleged purpose of removing toxic substances from the body, when such treatment is performed solely at the recommendation of the dentist, is improper and unethical. The same principle of veracity applies to the dentist's recommendation concerning the removal of any dental restorative material" (Association), 2017).

4.2. Disclosure of a conflict of interest

As seen above, veracity extends beyond the physician-patient relationship. One such extension is represented by the duty to disclose any relevant conflict of interest when presenting education or scientific information in articles, presentations, or other public forms of disseminations (Association), 2017). Potential conflicts of interest include monetary compensation for the participation to the meeting, monetary compensations for the development of the study, publication charges, contracts with pharmaceutical companies, and so on. Non-disclosure leads to a breach of the veracity principle.

4.3. Marketing or Sale of Products and Procedures

Physicians should not be involved in commercialization of other products and procedures; here are included selling non-procedure related dental tools (such as toothbrushes), or substances (such as toothpaste). This is also supported

by many Ethical Codes of National Professional Dental Associations. For example, in the Art 29 (2) from the Code of Ethics of the Romanian College of Dental Professionals, is stated that "The profession of medical dentist should not be practiced as a commercial activity" (2010). The underlying ethical principles of this statement are veracity and loyalty. Patients trust their physicians in seeking their medical benefit primarily within their professional relationship; commercialization of secondary products (even if they are potentially useful for the patient) generates a direct conflict of interests between these two parties. which should be solved, according to the principle of double loyalty, in favor of the patient (except in very particular circumstances). If dental physicians believe that the patient would benefit from a product or procedure that is not directly needed for the treatment of the disease for which he/she is treated and gave the unambiguous informed consent, they should recommend the most generic form of the product (e.g. a mouthwash with chlorhexidine to prevent plaque formation, not a particular commercial product such as Listerine®). Moreover, the recommendation should not include a particular commercial agent that sells that product, but rather to give a generic prescription, leaving the decision of where to buy to the patient. A similar approach is identifiable in the American Dental Association Code of Ethics and associated recommendations, in which is stated: "Dentists who, in the regular conduct of their practices, engage in or employ auxiliaries in the marketing or sale of products or procedures to their patients must take care not to exploit the trust inherent in the dentist-patient relationship for their own financial gain. Dentists should not induce their patients to purchase products or undergo procedures by misrepresenting the product's value, the necessity of the procedure or the dentist's professional expertise in recommending the product or procedure." (Association), 2017)

In conclusion, veracity has a wide applicability in dental practice, both within and outside the classical physician-patient relationship. It has to be correctly understood and applied in clinical practice, to minimize the risks of deontological breaches of this basic ethical principle.

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