Maryam Jessri and Seyyed Ahmad Fatemitabar

Medical Ethics and History of Medicine Research Center, Medical Sciences/ University of Tehran, Iran

ABSTRACT

The dentists are completely aware of the growth of ethical standards in their profession. The recent growth of ethical literature has been significant in this profession but it is far behind the medical profession in the term of ethical analysis of dental problems. Fortunately, as a consequence of increasing attention to ethical standards, the patients are paid attention better and receive better services. The profession also makes a commitment to society that its members will adhere to high ethical standards of conduct. This paper has reviewed ethical principles in dentistry in order to enlighten preferred practical values.

We have reviewed the literature from the past 20 years that had been recovered through a PubMed, Embase and Cochrane search, with the keywords of "dental ethics", ("ethical principles" And "dentistry") and ("ethical principles" And "dental practice"), included in professional guidelines and ethical codes, conference proceedings and suggested by experts. Experts on dental and medical ethics were also consulted.

The dentists have a duty to conduct their professional life, in accordance with the four fundamental principles of ethics, but despite their reasonability, the principles have a prima facie standing and the dentist is to decide which principles are to be applied in accordance with the cultural, social, religious and regional considerations.

Key words: Dental ethics; Ethical principles; Ethics

INTRODUCTION

Throughout recorded history, the deep - rooted cultural tradition relegated those engaged in the dental art to a class deemed socially inferior to that of the physicians and dentists were frequently accused ethically. Organizational developments and public and professional attentions to the area of medical ethics, engendered the emergence of dentistry from a virtual trade to a recognized specialty of medicine which the principles of medical ethics should be respected and practiced in it.

As dentistry moves into the twenty - first century

Corresponding Author: Seyyed Ahmad Fatemitabar, DDS; Medical Ethics and History of Medicine Research Center, Medical Sciences/University of Tehran, 16 Azar St., Keshavarz blvd, Tehran, Iran, Tel: (+9821) 6641 9661, E-mail:fatemisa@tums.ac.ir the attention to ethics will have to be even greater. Nowadays ethical standards in modern dentistry are in a tempo of rapid advance. However despite the significant growth of ethics in dental literature, dental ethics as a field of study and as a sub discipline within the study of moral theories and principles of professional ethics, is underdeveloped and analysis of dentally related ethical problems and application of ethical theories to them, is still a young field.¹

Medical ethics is conformed to illuminate the physicians' duty prospectively by asking them to consider and reconsider their ordinary actions, judgments and justification. It is the application of general ethical theories, principles and rules to solve the problems of therapeutic practice, health care delivery and research.

Medical ethics' foot prints could be found in all schools of classic medicine. Amongst Greek physicians Hippocrates (460-370 BC) ,² Galen (129-200AD)³ amongst Roman physicians and Razi (865-925 AD) and Avicenna (980-1037 AD)⁴ amongst Iranian physicians stand out as the ones commending moral assessments of human soul and body and exhorted their colleagues to strive to do their best for both.

General Normative ethics is the field of inquiry that is concerned about why an individual action is right or wrong or establishing the criteria for judging why a person is good or bad. Attempts to apply this action, lead to a different area that can be labeled "Applied normative ethics".⁵

In addition to normative ethics, either general or applied, there are at least two non-normative approaches to morality. First "Descriptive Ethics" which is the factual investigation of moral behavior and beliefs. Anthropologists, sociologists, psychologists and historians determine whether and in what ways, moral attitudes and codes of conduct differ from one society to another society. They observe and study different practices and beliefs regarding professional codes of ethics, the treatment of dying, and the nature of consent obtained from the patients, and the likes. Second there is the field of "metaethics" approaches to morality involving analysis of the meanings of crucial ethical terms such as "right", "virtue", "obligation" and "responsibility". In this area also the logic of moral justification is analyzed.⁶

Ethical principles are the moral rules and foundations of justification source to be applied in order to exercise an ethical practice. They are the goals to be aspired by every single member and are grounded in the classic characteristics of the profession. These four principles are:

- -respect for autonomy
- -beneficence
- -nonmaleficence
- -Justice

They are not prioritized but weighed different for each circumstance. W.D. Ross the English philosopher, introduced the term "prima facie" which means that each principle is binding unless it conflicts with another moral principle, and in that case we are to choose between them.⁷ Nowadays the above term is generally used to refer to four principles of medical ethics.

In dentistry, like other branches of medicine, a set of principles contribute in establishing codes of ethics. These codes which are based on ethical principles, religious beliefs and the social and cultural considerations guide the dental practitioners in their everyday practice and also establish expectations for dentists in fulfilling their ethical and professional duties to the patients, public and the profession itself.

MATERIALS AND METHODS

Search Strategies: A PubMed, Embase and Cochrane search was performed with no restriction for the date from 1987 to 2007. The keywords used for the search were "dental ethics", "ethical principles" And "dental practice". A separate search was performed for each set of keywords in the mentioned databases and the reference lists were checked manually by the authors.

Inclusion and Exclusion Criteria: Studies of any design, regional guidelines and ADA codes, in which the ethical principles were studied in dentistry or dental practice were included. Studies targeting a specific region, multifactorial studies of ethical approaches of dental practitioners, papers published in languages other than English and those with an ambiguous aim were excluded.

Data Extraction: Data were extracted on the basis of the key question "How ethical principles could be implicated in dentistry".

RESULTS

As health care professionals, dentists are quite aware of their responsibility to practice and respect ethical principles through different methods such as obtaining informed consent, respecting patients' autonomy by asking them to participate in their health care decision making, and to maintain and apply dental care with the highest possible quality, and to participate in public education and so on. Dental professionals assume publicly entrusted responsibilities founded on the principles of medical ethics. Despite the self-oriented views, there is a wide spectrum of questions which are considered ethically relevant in dentistry. Although the principles discussed here do not provide ordered rules, they can help dentists to make decisions

when confronting on moral issues that may arise at work.

Respect for Autonomy

Autonomy is a term derived from Greek Autos (self) and Nomos (rule, governance, or law)⁸. Based on the works of John Stuart Mill, and according to a liberal interpretation, individual liberty and personal self determination can not be separated.⁹ On the other hand many of the lawyers and ethicists prefer to subject autonomy to particular notions of reason and to contrast with freedom as the non-restriction of options.¹⁰

The application of autonomy definition in health care ethics could be traced back to the works of Immanuel Kant, the eighteenth century philosopher. According to his philosophy people could, only in the realm of the rationality be "truly free". 11, 12 This notion was first introduced to be used in order to refer to self rule or self governance, but despite its literal meaning, autonomy is probably preferred to be used as conscious self rule.

Today autonomy is commonly understood as the capacity for self-governance. 13, 14 Since ethics and morality necessitate autonomously made decisions, it has a place of great emphasis in all moral classes. Being autonomous however, is significantly different from being treated as an autonomous agent. To respect someone's autonomy implies that to acknowledge that person's right to make informed choices based on his or her own values and wishes and with no coercion or undue influence from others.¹⁵ According to this view, respect is not only abstaining from meddling in others choices, but also it necessitates providing them with the adequate opportunity for exercising autonomy. others are Moreover obligated confidentiality, respect privacy, and to tell the truth.

Although some authors found that patients prefer the decisions to be made principally by their physicians, not themselves, ¹⁶ it is one basic right of every individual to be informed of his or her condition and to make deliberate decisions.

Since modern dentistry has made it possible to treat cases that were not treatable previously the concern for informed consent and patients' autonomy becomes more evident. Dentists have a duty to inform the patients of their treatment options including the advantages and disadvantages; and whether it is

appropriate to consider a referral to specialists. The patient is the one who makes the final decisions on choice of treatment and on choice of practitioner to perform the treatment (generalist or specialist) or to follow-up after referral or second opinion.

There is an outstanding difference between the needs of the patients and his or her interests. On this account, issues such as obtaining informed consent and the need to put the patients' needs and interests first, when rationale and possible, are considered as very important. Informed consent to treatment implies a process in which the potential patient is provided with information about treatment needs and treatment alternatives sufficient for the individual to make an independent decision about treatment. According to the above definition, and because of the large number of different materials and different techniques available for the same or similar problems, obtaining a true informed consent is a very difficult but not impossible task for the dentists.

Another example where autonomy is challenged in dental practice is rehabilitation for mental handicapped patients. Under such circumstances, how much information does the patient need to know to be able to make an informed consent or is the patient competent enough to be given the right of making the decision and if not who should make such decision about his health care delivery? Moreover in the aesthetics branch of dentistry, a matter of particular relevance to the patients' desire and will, the limits between treatments related to function and treatment related to aesthetics, aesthetics standards and so on are the subject of the challenge. However, treatment related to aesthetics takes the psychological suffering and wishes of the patients into account and is highly sensitive to social and psychological norms and values. 19, 20

American Dental Association has accepted the principle of respect for autonomy as a duty for dentists to treat their patients with no coercion, according to their wills, within the realm of accepted treatment, with due consideration being given to the patient's needs, desires and abilities, as well as safe guarding the patient's privacy.²¹

Although autonomy is given a central place or primary status in prevailing modern liberalism of contemporary societies, ^{22, 23} one must remember that it only has a prima facie standing and as it has been

discussed before, it can be overridden by competing moral considerations or even in some instances some authors believe paying too much attention to it is dangerous.²⁴ For instance, if an individual's choices endanger public health, which hurt or brings about potential harms for other or hurt even herself or himself -such as euthanasia-, or requiring a scarce resource, that individual's autonomy may justifiably be restricted. Thus, respect for autonomy, is one of the basic principles, but should not be constructed as an absolute and foundational value. It requires every individual to respect other individual's self - determination to an appropriate extent within the context of community.

Beneficence

Beneficence is traditionally taken as the "first principle" of morality and the dictum "does well and avoid evil" lends some moral content to this principle. 25 Beneficence denotes the practice of good deeds and it has a meaning of an obligation to benefit others or seek their good in itself. 26 Beneficence as a principle of medical ethics is a duty, distinguishable and distinct from mercy, kindness, or charity. 27, 28

According to ADA codes of professional conduct, beneficence as a principle mandates the concept that the dentists as health care professionals, have to practice to benefit their patients and have to consider this as a duty. According to this principle, the dentists have to provide the bests for the patients' interests. The most important aspect of this obligation is the competent delivery of dental care within the bounds of clinical circumstances, while considering patients needs, desires, values and interests, which may confuse the health care provider in choosing between respecting the patient's autonomy and exercising beneficence.²¹

Dental treatment shall expressly result in an improvement in the patient's oral health conditions. The ultimate goal of treatment shall be optimum oral function and/or appearance of the dental set for the patient. The achievement of this goal will be influenced by variables such as patient's age, general health, underlying anatomy and compliance with oral hygiene instruction.²⁹ Dentists have a responsibility to provide a high standard of professional services and they are accountable for the intended benefit and outcome of any treatment. This treatment could be applied for medical reasons, preventive cares, health promotion

purposes, or it could be structural, functional, or cosmetic / aesthetic in nature.

Whenever the dentists try to treat the patients, they accept the inevitable risk of probable hurt that maybe caused by their intervention. As health care providers who are committed to moral principles, dentists must consider the principle of beneficence and aim at producing a net benefit over harm. This necessitates the dentists to ensure that their education is rigorous and effective enough to enable them to benefit their patients. To achieve this, the dentists have to be well educated and trained, both before and during their clinical activities as dental professionals.

Since what constitutes benefit for one patient may be harm for another, the obligation to provide net benefit to the patient requires respect to the patient's autonomy. It also mandates the dentists to be lucid and clear about the risks and their probabilities. Ultimately, while balancing harms and benefits, the dentists' ought to seek minimizing harms and maximizing benefits for the patients.

Nonmal Eficence

The term "nonmaleficence" is derived from the ancient maxim "premium non nocere" which is translated from Latin. It means "first, do no harm". It is an obligation not to avoid harm intentionally and protect the patients from harm and it places a duty on the physicians to minimize the risks to their patients. Morality requires not only to treat individuals autonomously and contributing to their welfares, including their health, but also that refraining from harming them.

Professionals in the health science have a tradition of utilitarian approach, meaning that the greatest good should be accomplished through any health related action. Since nonmaleficence is often related to consideration in end-of-life decisions, dentists are not often involved in the actual decision -making about withdrawing or withholding treatment on patients. Yet, in the course of caring for patients, there are some situations in which some types of harm seems inevitable, and the dentists are often morally bound to choose the lesser of the two, although the lesser maybe determined by the circumstances.

According to ADA guidelines, the principle expresses the idea that professionals have a duty to

protect the patients from harm. According to this principle, the dentists' primary duty is keeping up to date knowledge and skills. Knowing one's own limitations and when to refer to a specialist or other professionals and knowing when and under what circumstances delegation of patients care to auxiliaries is appropriate are other moral requisites of the dental profession. Dentists shall be obliged to seek consultation if possible, whenever the welfare of the patients need to be safeguarded or advanced by utilizing those who have special skills, knowledge or experience.²¹

Dental professionals are obliged not only to act in a way not to harm their patients but also they have to be intended not to leave the patient in a worse state than if no treatment had been performed. In situations where a dentist is not able to meet the patient's needs, referral to a practitioner capable of providing the needed care is indicated. Postponement or denial of care in the situations which patient's age, behavior, inability to cooperate, disability or medical status, complicate the providing of the best treatment. These may result in unnecessary pain, discomfort, increased treatment expenses, and diminished oral health outcomes, which is against non-maleficence principle.

Justice

The fourth moral principle is justice. Justice is usually characterized as being fair, but it demands consideration of broader social issues of equity and distribution of services. However one must consider that justice is not only about ensuring fairness but also about the compromises that are inevitably required when addressing dignity, veracity, and sustainability. The concept of justice must be expanded to include what is just for the community. As an instance, an individual or a business man may want to keep certain information private or confidential, but these may not be just for the community.

Some authors have subdivided obligations of justice into three categories:³¹

- fair distribution of scarce resources (distributive justice)
- respect for peoples rights (rights based justice)
- respect for morally acceptable laws (legal justice)

Some authors consider equity as the core of justice, but as Aristotle argued so long ago, justice is far beyond equity, and even in some cases different or against it. Sometimes, cases even if the patients are treated equally they may have been treated unjustly. 33, 34, 35 By the same token, some believe Justice can not be defined as straightforward fairness, but the person's duty to look after his or her own health should also be taken into considerations. Justice needs to be materialistic rather than formal though the formal and theoretic justice seems fairer than practical forms.

In the field of dental practice, like other health care providing branches, justice is often associated with fairness or giving to each patient, his or her own right such as who shall receive treatment first and to complex the question who shall receive treatment at all. The fair dentist must be aware of these complexities and should be able to balance the distribution of benefits and burdens in practice. ^{36, 37}

In order to act respecting the prima facie, justice, a dentist has the general obligation to provide care to the in need. A decision not to provide treatment to those someone because the individual has a specific situation or condition such as AIDS or is HIV seropositive, or treating patients with racial or sex discriminations is unethical.

Decision to the type of treatment provided or the referral made or suggested, in each instance, should be made on the same basis of beneficence and nonmaleficence for each case considering the patient's autonomy in order to treat patients with respect to the principle of justice.

The dentist is also responsible for taking part in planning, directing, and applying the preventive dental health program. The dental practitioners are obliged to instruct patients in oral health care and for administration of oral prophylaxis, and to develop various teaching aids and preventive methods for inmate population.³⁸

The dentist and health care professionals have the duty to instruct patients, individually and in groups, in proper oral hygiene care using materials such as teeth models, displays, disclosing solutions, toothbrushes, and floss. Ultimately, justice expresses that the dentist should deal fairly with patients, colleagues, and the public.

DISCUSSION

The application of ethical principles in dentistry is still in its infancy, whereas medical practitioners already have more than three decades of experience with medical ethics. The determination of what constitutes ethical and professional behavior is often a matter of personal decision. Dentists as individuals within the professional community have an obligation to attempt to apply and interpret general principles in their everyday practice. Dilemmas in provision of ethics to everyday practice of dentistry arise mainly in circumstances which the four principles enunciated above are conflicted.

Dentists, like other medical practitioners must keep in mind that the four principles of biomedical ethics, although antique and reasonable, are nowadays considered mid-level principles and each is only a prima facie binding. They are not absolute and as health care providers, the dentists are to consider each case in its particularities. These four principles are guidelines which only help us to focus our minds on the problem. We usually can not use these principles solely to solve ethical dilemmas because we would not always know which principles we should allow to surpass another.

In this paper authors tried to give practical examples of implication of ethical principles in dental practice however applying these principles means balancing them and specifying them to the particular cases. Well planned implementation strategies should be conducted involving, for example, continuing existing dental education activities such as study groups and national meetings.

On the contest of the socioeconomic influences on the application of the ethical principles in establishment of a guideline it seems necessary to remember that the cultural elements are so important and theses have to be taken into account. Life and ethics evolve in community and expresses manifest in the culture. Every community, large or small would be in great trouble if the members are not willing to be united to achieve their goals. Application of ethical principles may seem time consuming at the beginning but would help dental professionals exercise a safer and more ethically based practice.

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