An Ethical Critique of the AAO Principles of Ethics and Code of Professional Conduct

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ABSTRACT

The American Association of Orthodontists(AAO) adopted its Code of Ethics and Code of Professional Conduct in May of 1994. This document is meant to provide guidelines for ethical behavior amongst orthodontic professionals. Its main purpose is to protect the public from ethically unsound actions that could be committed by members of the AAO. All members of the AAO agree to abide by the Code, as stated within its preamble:

"By accepting membership, all members assume an obligation of self-discipline above and beyond the requirements of laws and regulations, in accordance with these Principles."

This study represents a critique of the AAO Code. As the field of medical ethics evolves, so must the documents that govern ethical behavior. The last revision took place in May of 2009 and the wording of the current document can be misinterpreted or abused. The current code leans heavily towards an Agent/Commerical model of practice, where the Orthodontist's role is influenced greatly by patient request and business ambitions. The purpose of this study was to utilize accepted schools of thought in ethical literature to do the following: (1) Point out ethical flaws and weak points in the AAO Code. (2) Present corrections for the Code in order to clarify potential

points of contention. These corrections will articulate rules that promote a partnership between practitioner and patient.

To accomplish these goals, the Code will be analyzed, line by line, for redundancies, faults, or potential misinterpretations. Principles and Advisory Opinions which can be improved upon will be labeled as "weak." All weak statements will be reformed in a manner where the weak aspects no longer play a role in the Code. The reformed statements will promote the Partnership model of practice in favor of Agent and Commercial models.

The Conclusions of the study are as follows:

(1) Principle I can be improved by changing it to the following phrase: *Members shall be dedicated to providing the highest possible quality orthodontic care to his/her patients within standards commensurate with the accepted science and techniques of orthodontics, the clinical aspects of the patient's condition, and with due consideration being given to the needs and desires of the doctor and patient within a relationship based on partnership.*

(2)Advisory Opinion IE. should be changed to the following:

A second opinion should include a diagnosis and treatment plan recommended to the patient. It must be honest and focus on the facts presented. It is unethical to propound a specific technique, philosophy, training or ability as superior without presenting scientific literature, at

least summarized or simplified, to the patient to support claims made. A second opinion must disclose to the patient any conflict of interest of the member providing the opinion.

(3) The phrasing of Advisory Opinion IF. is made stronger with the following wording:

Patients should be informed of their oral health status without disparaging comments about the patient's prior treatment.

(4) The phrasing of Advisory Opinion IG. is made stronger with the following wording:

Members should inform their patients of their prognosis, any proposed treatment, and any reasonable alternatives, so that the patient understands their treatment decisions.

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TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Orthodontics occupies a unique niche in the world of the dental arts, and along with this position comes important ethical challenges. Business models, bracket systems, and materials are in a constant state of flux. Theories of patient treatment and ethical behavior are no different. Concepts such as informed consent, patient autonomy, beneficence, and nonmaleficence are brought up in arguments about the constantly evolving health care field. Because these concepts are cited to affect the courtroom, adequate knowledge of ethical behavior must be studied, at the very least, to minimize the chances of serious litigation.

The field of medical ethics tends to place little emphasis on dentistry as a whole, let alone in the specialty of Orthodontics. Since fewer deaths occur in the dental office, fewer ethicists wrestle over the decisions made by dental practitioners. Apart from a few scattered papers by orthodontists such as Ackerman and Gottlieb, serious thought on the ethical quandaries of orthodontics are few and far between.

The aim of the following pages is twofold: (1) To provide a major comprehensive review of medical ethics for the Orthodontist, and (2) To provide a reasoned critique of the current AAO Principles of Ethics and Code

of Professional Conduct, which was last revised in May of 2009. The language of the May 2009 revision fails to account for a great deal of ethical nuance. The language of the current Code shows a distinct trend towards consumer-controlled Orthodontics that closely resembles the Agent and Commercial models of the doctor/patient relationship. This paper will attempt to rectify this.

CHAPTER 2

REVIEW OF LITERATURE

2.1 The Foundations of Medical Ethics

The American Board of Orthodontics' Principles of Ethics and Code of Professional Conduct is a document meant to govern the ethical decisions of its members. The document was first published in May of 1994 and has been continually updated through May 2009. The rules adopted by the code have their foundations in modern bioethics with reference to concepts such as autonomy, nonmaleficence, beneficence, veracity, and justice.

Healthcare providers did not always embrace the ethical concepts that are held in high regard today. Informed consent, for example, gained prominence in the mid-1900s. Prior to the Nüremberg trials in 1945, informed consent was not an ethical or legal consideration in private health care offices. Today, informed consent and autonomy are major concerns in every aspect of the patient-doctor relationship, from treatment planning to malpractice. If a practitioner fails to consider these concepts in their patient relations, they can leave themselves open to legal penalties. Thus, "doing the right thing" greatly depends on paradigm shifts in ethical study; by studying the history of bioethics, the practitioner can more appropriately evaluate his or her beliefs and make the proper decision in morally vague situations.

The following pages will contain an overview of major ethical theories and principles. It will illustrate their importance in the evolution of ethical thought. It goes without saying that this field is very complex and far reaching, so the theories will need to be condensed and simplified for the purposes of this paper. It is important that the reader is clear on the theories, as they inflect on the meaning of all principles within medical ethics. The first set of theories to be reviewed are consequentialist.

2.1.1. Hippocrates and Greek Philosophy.

The earliest foundations of medical ethics were laid down by ancient Greek philosophy, most notably by Hippocrates of Cos. Hippocrates was a physician who lived from circa 460-370 BC, and is commonly known as the western "father of medicine[1]," due to his contributions in founding the Hippocratic School of Medicine. His work established medicine as a discipline unique from other comparable professions of the time, such as theurgy (the practice of ritual) and philosophy. He is credited as the first historical figure to reject superstitions and divine forces in the treatment of illness.

It is most regretful yet understandable that the works of Hippocrates and those of his students are often intermingled. Indeed, it is difficult to determine what words and thoughts belonged exactly to Hippocrates himself.

Nevertheless, Hippocrates is known for being the quintessential ancient physician, and for authoring the Hippocratic oath.

The Hippocratic Oath is a pledge historically taken by doctors swearing to practice medicine. The most enduring and well-known concept present within this oath is the "do no harm" motif. This motif is the basis for nonmaleficence, an essential concept in modern bioethics. In the oath, it is articulated as follows:

"I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone.[2]"

The oath also highlights other medical responsibilities, such as the requirement to practice within the physician's area of specialization:

"I will not cut for stone, even for patients in whom the disease is manifest; I will leave this operation to be performed by practitioners, specialists in this art.[2]"

2.2. Consequentialism

Greek ethics are predominantly consequentialist in nature. Consequentialist theories hold the consequences of a particular action to be the primary basis for any moral judgement about that action. From a consequentialist standpoint, the morally correct action is the one that produces a good outcome. Indeed, the ethical thought of Plato and Aristotle, albeit in

different ways, is generally conceived with the realization of happiness(Greek: "eudaimonia") as an ultimate aim.

Consequentialist theories greatly differ amongst themselves. To understand and usefully classify them, it is imperative that one needs to examine 3 major factors: 1. The Subject of Moral Judgement. 2. The benefit. 3. The beneficiary.

To illustrate these variables, the following example will be used:

Dr. Greene is performing pro-bono work in his local community. Three times a month, he works in a clinic treating uninsured patients who would probably not be receiving orthodontic care otherwise.

In the above case, the *subject of judgement* is the decision to perform pro-bono work. The *benefit* is the oral health and subsequent amount of pleasure derived from the treatment. The *beneficiary* is the underserved community that Dr. Greene volunteers in. These variables are useful when analyzing any theory from a Consequentialist perspective.

2.2.1. St. Thomas Aquinas and Natural Law

Thomas Aquino was an Italian priest of the Roman Catholic Church who lived during 1225-1274 A.D. He was an influential philosopher and the founder of the Thomistic school of thought. An ethical philosophy known as natural law draws direct influence from his writings. His influence on the field

of bioethics is considerable, as much of modern moral philosophy was invented either as agreement or reaction against his ideas. He was canonized as St. Thomas Aquinas 50 years after his death.

The concept of Natural Law posits the existence of a law or laws that are embedded in nature, have validity everywhere and in all situations. In its Thomistic version, such natural law is instituded by God. Aquinas reasoned that any action or state of affairs is determined to be good or bad depending on whether it promotes institutions that lead to "the good life." Examples of these types of institutions are marriage, the family unit, and government.[*]

Aquinas states that God has implanted reason into humans in order to know what decisions will support or detract from the institutions that promote "the good life." Our ability to reason and conceive of moral judgement predisposes us to knowing what God's intentions for proper moral action are. Within natural law, The *Subject of Judgement* can be defined by the actions, state of affairs, or rules in question. The *Benefit* is the outcome of the choice and how it pertains to relevant institutions. The *Beneficiary* is the person or group that will gain from the action.

[*] For the sake of historical accuracy, it should be noted that according to Aquinas, Natural Law conforms to moral precepts contained in revealed religion(ie. The Bible).

To illustrate this concept, the following chart will be used with the extremely simple example of infidelity within a marriage:

Table 1. The use of Fidelity to illustrate Natural Law

Subject of Judgement	Outcome Benefit	Beneficiary
Fidelity	Promotion of the institution of marriage => Promotion of "the good life"	All Society
Infidelity	Weakening of the institution of marriage =>degradation of "the good life"	Individual pleasure of those involved in the affair.

The moral reasoning against infidelity, therefore, is not so much an argument against hurting someone's feelings, but is more in line with preserving the sanctity of marriage as an institution. Furthermore, any institution is good to the extent that it promotes "the good life." When an individual makes decisions that support or detract from any institution, the resulting consequences must be judged in respect of their impact on "the good life."

The following is an example of Thomistic thought being applied to the field of Orthodontics.:

Dr. Greene is an orthodontist in a very competitive, urban environment. Though he screens many patients in the mixed dentition, many of them do not start treatment because they are not ready. These patients who are told to come back for re-evaluation frequently lose touch with his office and start treatment with another provider in the area. To compensate, Dr. Greene begins implementing space maintenance(LLHAs and TPAs in the mixed dentition) more aggressively as a means to ensure that the patients begin treatment.

Natural Law doctrine would argue that Dr. Greene's major violation is against the institution of Orthodontics and, to a more general extent, the field of health care. By enacting treatment to lock the patient in, Dr. Greene undermines the trust that has been given to his profession. Health care, as an institution, is built on principles of trust between the patient and the doctor. If a doctor can enact a procedure to improve business without definitive benefit to the patient, it undermines the trust that has been earned through generations of honest doctors. Since dentistry, as an institution, may be deemed to contribute to "the good life," Dr. Greene's actions are morally improper.

Thomistic theories regarding the ethical defense of institutions have been a strong part of medical ethics since the time of Aquinas. In fact, the official position of the modern day Catholic church on ethical dilemmas

belongs to the Thomistic school of thought. Post-Aquinas, the next major ethical debate rested in the conflict between consequentialist and deontological theories.

2.2.2. Utilitarianism: The Felicific Calculus

Utilitarianism is an important consequentialist variation that has gained considerable traction in the last 200 years. The clearest early formation of the theory was articulated by the philosopher, Jeremy Bentham. Jeremy Bentham was an English philosopher who lived from 1748 to 1832. He is best known for his prominent role in utilitarian thought, animal rights, and the development of a panopticon. The panopticon was a revolutionary concept where prisons would be reconstructed in a way that prevented inmates from knowing when they are being watched. In many respects, Bentham was ahead of his time. His writings argued for the abolition of slavery, equal rights for women, and an abolition of the death penalty[3]. However, concepts such as human rights were dismissed by Bentham as "nonsense upon stilts"[4].

Bentham's major goal was to create a complete code of law based on utilitarian foundations. He argued for "the greatest good for the greatest number," also known as "the greatest happiness principle." Bentham is frequently considered a hedonist, as he considered pain and pleasure to be the

two most important governing factors when considering one's actions. In his work, "The Principles of Morals and Legislation," he writes:

"Nature has placed mankind under the governance of two sovereign masters, pain and pleasure. It is for them alone to point out what we ought to do, as well as to determine what we shall do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne. They govern us in all we do, in all we say, in all we think..."[5]

Utilitarianism can be distinguished from Natural Law theory in the following way:

Table 2. Contrast between Natural Law and Utilitarianism

	Subject	Benefit	Beneficiary
Utilitarianism	Action, state of affairs, legislation, etc.	Increase of Pleasure or decrease of pain	Individual interests affected by action
Natural Law	Action, state of affairs, legislation, etc.	Promotion and maintenance of institutions, practices conducive to "the good life"	All society

While Utilitarianism and Natural law both focus on outcome of actions, the benefit and beneficiaries are judged differently.

Through his analysis of pain and pleasure, Bentham proposed the idea of a felicific calculus. This system analyzed 12 pains and 14 pleasures by which one can judge the "happiness factor" of any given outcome[5]. The calculus then assigns a positive or negative value to all people involved(Here we will refer to individuals directly or indirectly affected by the action under judgement as the "stakeholders").The moral agent adds up the scores of all stakeholders and comes, on balance, to a positive or negative value. The moral agent should take up the course of action yielding the highest value.

To illustrate the felicific index, an example will be used from Elie-Georges Noujain's *"Medical Ethics for the Profession of Dentistry,"* modified for simplicity and application to the field of orthodontics:

Suppose there is a choice of 3 alternative measures(e.g. actions, legislations, states of affairs) – A, B, and C. These measures affect 3 different stakeholhers – S1, S2, and S3. Suppose also that you could rate the interest satisfaction points of stakeholders on a scale from +10 to -10. -10 represents the measure of the most possible pain or unhappiness with +10 representing the most possible pleasure or happiness. 0 represents no effect. Now assume the following distribution of satisfaction points for measures A, B, and C:

Table 3. Example Felicific Calculus

	S1	S2	S3	Total Points
A	+3	+1	-8	-4
B	-3	-3	+10	+4
C	-4	-4	+9	+1

In this case, B is the preferred option for someone adhering to utilitarian theory. Option B gives modest negative points to S1 and S2 but it is compensated for by the large benefit given to S3. Option A gives a large deal of pain to S3 while only providing a minor level of pleasure to S1 and S2.

In order to bring these figures to life, an example from the dental field will be used. This sample is barebones and radically simplified for the purpose of brevity.

Dr. Greene(S1) is running behind schedule while trying to complete a crown preparation on a patient(S3). Due to the discovery of new decay, Dr. Greene is taking more time than usual to complete the preparation. A second patient(S2) has arrived in the waiting room and is becoming frustrated with the long wait. Dr. Greene must choose between options A, B, and C.

A – Complete the Preparation quickly and appease the patient in the waiting room.

B – Take the time to complete the preparation properly and force S2 to wait.

C – Seat patient S2 and alternate treating both at the same time.

With these revisions, the chart takes on this appearance.

Table 4. Felicific Calculus Application

	Dr. Greene	Waiting Patient	Pt. in chair.	Total Points
A	+3	+1	-8	-5
B	-3	-3	+10	+4
C	-4	-4	+9	+1

Option A gives Dr. Greene benefit because he is able to continue running his office schedule smoothly. The Waiting Patient is also given a benefit by option A. because he/she is able to be seen on time. By contrast, the patient in the chair suffers because the preparation was not completed properly.

Option B gives the pt. in chair the maximum possible benefit in the situation, as their crown prep is done do the best of ability of the dentist. By contrast, option B. forces Dr. Greene to compromise his schedule and the schedule of the patient in the waiting room.

Option C ruins the schedules of both Dr. Greene and the waiting room patient, as he is now forced to take longer time with both procedures. The in-

chair patient is still given the benefit of a well-done crown at the expense of time. Option C does not cause significant harm to any parties, yet fails to have the same felicific balance of option B.

The major issue with Bentham's style of utilitarianism is that it can be used to justify actions, viewpoints, or states of affairs that, from a morally intuitive viewpoint, may appear to be repulsive. Slavery, for instance, can be justified by saying that the suffering of a few can be mathematically justified by the benefit to the majority. The weaknesses of Utilitarianism have given rise to a form of consequentialism known as rule-consequentialism.

2.2.3. Act-Consequentialism vs. Rule-Consequentialism.

Childress claims that proponents of act-consequentialism face no moral dilemmas because they recognize only the principle of utility as binding[6]. All other principles are merely rules of thumb that may be used to summarize experiences in the application of utility. The act-consequentialist judges each action on the basis of its individual results in that particular situation. The following example will help to elucidate an act-consequentialist line of thinking:

A man is driving through the countryside and notices a field ahead of him with a sign reading "do not drive on grass." He realizes that driving across this field will save him significant time and chooses to ignore the warning. As an act-utilitarian, he judges that the crossing the grass will result in negligible damage to the field while providing him with a great

savings of time. He believes his action is morally correct, as it has resulted, on balance, with a positive outcome.

In the most simplified sense, rule-consequentialism takes the "greatest good for the greatest number" but adds on an addendum – what if each individual act became the universal rule? If a person's action were to be repeated by all agents facing a similar choice, what, on balance, would be the outcome in terms of happiness? Brad Hooker, a prominent modern proponent of rule-consequentialism, argues that this is more easily defended than act-consequentialism because the moral agent aims to create rules which, when complied with uniformity, would be happiness maximizing, rather than a simple maximization of good[7]. Using the rules of our recurring chart, it can be said that rule-utilitarianism amends act-utilitarianism by requiring that the *Subject of Judgement* be not an individual action, but the rule resulting from generalizing the action. To illustrate, the previous example will modified as follow:

A man is driving through the countryside and notices a field ahead of him with a sign reading "do not drive on grass." He realizes that driving across this field will save him significant time, however he chooses to drive around the field, staying on the roads. As a rule-consequentialist, he envisions a scenario where his action does not stay isolated to himself at the present time. Instead, he thinks "what if my action became the rule?" If this were the case, then every traveler on this route would choose to cut through the field. As many, many

more people make the same decision that he did, the field would experience significant damage, resulting in a net loss of utility for all stakeholders.

Nevertheless, there are many cases where act-consequentialists and rule-consequentialists would act alike. Assisting someone when one has the power to do so, kindness to others, and honesty are examples where these two viewpoints commonly intersect

2.3. Consequentialist vs. Deontological Theories

The debate between Consequentialism and Deontological theories is a powerful force that warrants exploration in any extensive work on medical ethics. Though there are many situations where both theories call for identical actions, the rifts between the two are the subject of intense debate. Deontology promotes a system where the moral value of an action is determined purely by duty or the following of certain rules while consequentialism says that the morality of an action is dependent on the results of the action.

There are scenarios where both systems agree, but for different reasons. When a thief is analyzed by a deontologist, he or she will be castigated for breaking the moral rules that dictate not to steal. The consequentialist will also

condemn the actions of the thief, but rather on the basis of harm caused by the removal of another's property and not for any imposed moral rules.

2.3.1. Divine Command Theory

Divine Command is the most basic, well-known deontological theory. It essentially boils down to believing that morality is based on nothing more than God's whim. It implies that humans are morally blind and need the will of God to guide moral action. The Ten Commandments, for example, are the quintessential example of this theory.

2.3.2. Deontology and Kantian Ethics

Deontological theories involve concepts of "pure duty." A deontologist believes that his or her actions are obligatory or forbidden because of the actions themselves, irrespective of their effects. Within a deontological theory, there are qualities of actions other than their consequences which determine moral right or wrong. For example, most deontological theories would claim that deception is always wrong, regardless of its consequences. The most extreme example used to criticize this mindset is the refusal to lie to a murderer when they are being asked where the location of the next victim is. To a deontological mind, the adherence to a moral code of "performing honest acts"

is more important than the potential consequences of the action of honesty. In fact, consequence is not even considered when a decision is being made.

Immanuel Kant, an 18th century German philosopher, is regarded as the most influential writer on the subject of deontological ethics. Kant theorized the existence of a single "categorical imperative" that could be used to test all maxims of action. To illustrate this point, we will use the following example:

A man desperately needs money and knows that he will not be able to borrow unless he promises to repay it after a certain amount of time. He knows that he will not be able to repay the money and decides to make a promise that he knows will have to be broken."

Kant would examine the maxim of his decision – "When I find that I need money, I will borrow it and promise to pay it back, despite the fact that I cannot pay it back." Kant would then try to see if the maxim is universalizable. To be universalizable, the maxim must conceived and willed into action without contradiction as a universal law. The maxim demonstrated in this example would not be conceived as a universal law, as it would become a contradiction. The words of Kant himself illustrate this point:

"*How would things stand if my maxim became a universal law?" I then see straight away that this maxim can never rank as a universal law of nature and be self-consistent, but must necessarily contradict itself. For the universality of a law that everyone believing himself to be in need can make any promise he pleases with the intention not to keep it would make*

promising, and the very purpose of promising itself impossible, since no one would believe he was being promised anything, but would laugh at utterances of this kind as empty shams[8].

Hence, according to Kant, the single, fundamental moral principle is the "categorical imperative." This states that one should "always act in such a way that you may will the maxim of your action into universal law."

2.3.3. Pluralistic Dentology and John Rawls

While Kant believed in the idea of a single guiding categorical imperative, pluralistic deontology claims that multiple maxims must be weighed when judging each action. W.D. Ross, in a 1930 paper, claimed that there are several, irreducible moral principles such as fidelity, justice, and beneficence[9]. He recognized that the world is full of complex scenarios and claims that various moral maxims may come into conflict. To illustrate, we will utilize this example:

Dr. Greene is seeing Linda, a 25 year old patient, for orthodontic treatment. One day, Linda presents with a severe bruise on her lower lip. When questioned, Linda agrees to tell Dr. Greene what happened so long as he promises not to mention the story to anyone else. Dr. Greene agrees to keep her secret and she informs him that her husband has become physically abusive.

It is at this point that two potential maxims come into play – 1. "Promises should not be broken." and 2. "People being physically abused by

their partners should be brought to justice." The former maxim is supported by the principle of veracity and the latter is supported by the principle of beneficence. Dr. Greene must weigh one principal against the other when he decides which course of action to take. If he alerts social services or law enforcement, he has broken a promise to his patient. His broken promise weakens the concept of patient/doctor trust. On the other hand, his decision to keep the secret may permit further abuse.

The philosopher John Rawls was a prominent philosophical figure in the mid-to-late 1900s, attempted to overcome the challenges of pluralistic deontology. He proposed that the various principles of justice could be arranged in a weighted order. If definitive structure could be placed upon the principles, then the pluralistic deontologist would no longer need to balance all principles against all others. Instead, rational agents of moral thought would accept the following principles within a fair bargaining situation: I. Equal Liberty. IIa. The difference principle (a concept which permits inequality in distribution of social and economic goods). IIb. The principle of fair equality of opportunity. In this case, the concept of equal liberty would trump any conflicting decision if the ethical dilemma came from subjects encompassed in IIa. or IIb[10]. Though Rawls' concept of ordered principles is logical, gaining agreement on weighing these factors in the field of health care is not something that he attempted

2.4. Virtue Ethics

Virtue Ethics has arisen as an alternative to consequentialist theories and rule-based approaches. The proponents of virtue ethics argue that principle-based and case-based methods tend to neglect important factors such as character, virtues, motivation, emotions, intentions, relations, etc. Virtue ethics strives to uphold these ideals and focuses on the agent rather than the act. Proponents of virtue ethics muse upon what kind of people we should become rather than what sorts of things we should do[6]. The most recently developed system deriving influence from virtue ethics is known as Ethics of Care.

2.4.1. Ethics of Care

The feminist writer Carol Gilligan wrote that women focus on context, narrative, and relations of care. Males, on the other hand, emphasize the importance of tiers of principles and a logic of hierarchical justification. She claimed that many classical approaches to bioethics were focused on male perspectives while they drowned out the voices of female experience. From the care point-of-view, every acting agent is relational and interdependent with others. Even autonomy itself is considered "relational autonomy[11]."

2.5 Ethical Principles

As the dialogue of medical ethics evolved, certain principles have become so commonplace that they are now held up as standards. These principles are autonomy, beneficence, nonmaleficence, veracity, and justice.

2.5.1. The Principle of Autonomy

Autonomy is a word taken from the Greek auto, meaning "self", and nomos, meaning "rule/governance/law." The idea was first used in the context of the self-governance practiced by Greek city-states. The idea of autonomy to the individual is not far off from this original perception of the word. An autonomous individual acts on their own, without the constraints of another entity. The autonomous person is expected to be able to deliberate and choose a plan of actions based on internal decision-making. Individuals with low levels of autonomy find themselves controlled by other individuals or institutions. Examples of persons with weak autonomy are mentally disabled individuals or children. The mentally disabled have their mental capacity in question while children are unable to reason in the same way that adults do. Both of these situations involve persons of depleted autonomy[12]. All individuals are entitled to autonomy, its just that the extent of it varies depending on the person's mental capacity, or more precisely, rationality.

The two figures who have most shaped our understanding of autonomy are Immanuel Kant and John Stuart Mill, a strong figure in utilitarianism. Kant argued that people must be treated as autonomous individuals and never as a means to an end[8]. This demonstrates Kant's view on autonomy's inherent value. He claims that autonomy grants a person unconditional worth and they may never be treated merely as objects incapable of choosing for themselves. Kant contrasts autonomy with heteronomy, a system in which rule is dictated by other persons or conditions[13]. He notes that actions committed out of fear or coercion are heteronomous, as are desire and habits. Kant's autonomy stems from an individual's logical reasoning without respect for potential outcomes of autonomous decisions.

While Kant focused on moral autonomy of an individual's will, Mill was concerned about the autonomy of actions, the exercise of self-determination. Mill claimed that social and political control over individuals is justifiable if it is necessary to prevent harm to others[13]. He believed that the autonomous nature of a person allows them to develop their full potential according to their priorities, as long as they do not affect a similar exercise of autonomous behavior by another person. By operating on this level, Mill claimed that society can maximize the benefit of all concerned. Mill argued against Kant by stating that conformity to established patterns will restrict individual productivity and creativity. The writing of Mill posits that a person with "true

character" demonstrates full individuality while a person "without character" is constantly under control by outside forces such as religion, government, or family. In summary, Kant's theory of autonomy is based on self-legislation while Mill's theory is based on maximizing the common good. It may therefore be said that autonomy, as a principle, may be justified on either deontological or utilitarian grounds.

It is important to note that the exercise of the right to autonomy must not be interpreted too broadly. Autonomy can never apply to a person or group of persons who are incapable of acting in an autonomous matter. Such individuals are may be coerced, mentally incapacitated, or too immature to properly weigh in the logical deliberation necessary to come to an autonomous conclusion. Infants, suicidal individuals, and drug-dependent patients are the standard examples of these types of people[6]. The behavior of such persons can be controlled without ethical violation as long as the control is meant to protect them from harms.

Autonomy is a particularly important subject in the field of clinical and research ethics. Persons with compromised autonomy need protection, ethically and legally, in order to insure their safety. The 1953 Nüremburg code of Ethics, for example, has specific wording meant to protect the autonomy of medical patients involved in human experimentation.

2.5.2. The Role of Authority vs. Autonomy

Autonomy is not meant to be pitted directly against the authority of institutions such as church, state, and social groups. To make a claim that autonomy and authority cannot coexist also makes a claim that legitimate government action of restrictive public policies intended to protect or promote health are unethical. Furthermore, a complete rejection of authority also implies that a medical practitioner cannot validly intervene during a life-threatening situation involving an autonomous patient[12]. Robert Paul Wolff, an advocate of this rejection of authority, claimed that the autonomous person determines his or her action through internal moral debate that is 100% unhindered by any authority's influence. His thesis criticized the roles of physicians, the state, and divine command as authorities which reduce autonomy of any individual affected by them[14].

Moral principles cannot be so binary that they invalidate the coexistence of authority and autonomy. This depiction offers an estranged view of ethical theory in which the constructs of society fall apart. The argument against this idea lies in the understanding that "morality" emerges from shared experiences and social arrangements[12]. Though human beings share principles, there is nothing that prevents an individual from developing their own personal principles. Moral qualities such as charity and respect, for instance, can be

individually conceptualized, but more frequently stem from established cultural norms.

2.5.3. Autonomy and Informed Consent

The right to informed consent is directly entailed by the right to self-determination. In the USA, all medical and research codes of ethics hold true that physicians must obtain informed consent of any patients who plans on undergoing therapeutic or research procedures. Alexander Capron has identified a variety of specific ethical functions of this[15]:

1. Protection of individual autonomy
2. Protection of patients and subjects.
3. Avoidance of fraud and duress.
4. Encouragement of self-scrutiny by medical professionals.
5. The promotion of rational decisions.
6. The involvement of the public in promoting autonomy as a general social value.

Capron argues that informed consent serves all of the above functions. It posits such that the primary purpose of informed consent is protection and promotion of individual autonomy. A health professional's communication with the patient should remove ignorance from the equation, allowing the

patient to make an autonomous choice. Informed consent also attempts to address the issue of comprehension, preventing "lack of comprehension" from being a factor weakening the patient's autonomy[15]. Thus, to be an ethical practitioner, full disclosure is necessary. Not only does the practitioner have the responsibility of full disclosure, he or she also must put forth time and effort into ensuring that the patient's comprehension level is adequate enough to make an autonomous decision.

Informed consent plays a vital role in medical law. Battery is defined by bodily invasion where no consent has been provided. Furthermore, the law of negligence places blame on researchers in cases where inadequate disclosure might lead to injury[16]. The health care practitioner can take steps to legally defend themselves against negligence and battery by insuring adequate disclosure. Autonomy also defends the patient's right to choose an option of increased risk. In cases such as these, informed consent prevents the doctor from assuming 100% liability in the case of a negative outcome.

2.5.4. The Principle of Nonmaleficence

The concept of nonmaleficence, ingrained into the medical profession by the Hippocratic oath, has great weight in debating the responsibilities of health care practitioners. Nonmaleficence is a duty recognized by most rule-deontological and rule-utilitarian philosophies.

Primarily, nonmaleficence must be separated from nonmalevolance, which illustrates an attitude rather than a specific moral action. Secondly, nonmaleficence is often described in vague terms such as "harm" or "injury." Depending on an individual's definition of "harm," they may be referring to insults to a person's property, liberty, or dignity. According to Joel Feinberg, any item of interest can be an object of harm[17]. He would say that any violation to property, domestic relations, and privacy is just as much a violation of nonmaleficence as a physical assault.

As there are interpretations of the concept of harm, nonmaleficence can be invoked when studying many moral rules. When making a decision, a human being must weigh nonmaleficence against various individuals in order to come to a morally justifiable decision. For example, a soldier can justifiably shoot an enemy if he is protecting the enemy's perceived victims or hostages. In this case, the soldier is choosing to waive his adherence to nonmaleficence towards one in order to save others from damage.

Nonmaleficence must be considered not only in cases of actual harms, but also in cases where risk of harm is present. Risk varies depending on probability and degree of perceived harm. People commonly take risks not that effect not only themselves, but many people around them. Only when situations are out of the ordinary must a moral quandary be raised. After all, serious ethical internal debate every time one starts his or her car to go out on

the road is hardly necessary. Though driving an automobile brings about risk to driver, other drivers, and bystanders, the procedure is so routine that considerations of nonmaleficence are moot.

It is important to note that nonmaleficence requires individuals act properly and thoughtfully. Just because a harm or risk is unintentional does not mean it will not violate the duty of nonmaleficence. Negligence is as powerful an insult to nonmaleficence as any other. Ignorance is not a refuge from ethical malfeasance or law. Ethicist Eric D'Arcy points out that "the moral requirement to be thoughtful and careful is not separate from other moral rules and principles, such as the duty of nonmaleficence"[12].

2.5.5. The Rule of Double Effect

The principle of double effect becomes relevant when an act having a harmful effect does not always fall under moral prohibition. In these cases, the harmful effect is unintentional, indirect, or merely foreseen. One of the classic examples of this moral concept is the Roman Catholic church's prohibition on abortion[12]. The Catholic church opposes abortion based on the conviction that human life begins at conception and innocent human beings may never be killed. They mix a claim about the beginning of life along with a moral principle. The Catholic church admits there are two situations in which an abortion is morally justified. These situations are a cancerous uterus and

ectopic pregnancy, both of which are situations which may be dangerous or fatal to the mother. Double effect is observed because the death of the fetus is upheld as an indirect and unintended consequence of saving the mother's life through a medical procedure. The Catholic church does not acknowledge the death of the fetus in these cases to be an abortion because it is indirect and unintended[18].

According to Beauchamp and Childress, the principle of double effect has four conditions:

1. The action must be good or at least morally indifferent.
2. The agent of the action must intend only the good effect and not the evil effect.
3. The evil effect cannot be a means to the good effect.
4. There must be a proportionality or balance between good and evil effects of the action[12].

Double effect is used by military to justify death of civilians in attacks on legitimate military targets. It is also used in situations where an individual accepts the risk of death for a good cause. As long as the conditions are met, the first is not murder and the second is not suicide.

2.5.6. The Justice Principle

John Rawls argued that justice is explained in terms of fairness. The terms justice and fairness are definitely linked, but also very distinct. Rawls claims that justice is given to a person when they are given what is properly owed to them. Justice is the manifestation of what a person deserves and thus, has a legitimate claim to. For example, if a person deserves to be awarded a PhD for years of hard work in their field, justice is done when their degree is awarded to them. Inversely, it is unjust to reward someone with a similar PhD if they have gone through their education by cheating and cutting corners. The concept of fairness forms the foundation of our society's sense of justice.

To understand justice, the ethical mind must also comprehend "distributive justice." This idea addresses the distribution of pleasures and pains in society in accordance to who deserves them. The rules governing such distribution are put together by unique rules that are dependent on specific cultural rules. Depending on the level of cooperation accepted by a given society, the rules governing justice will change[12]. Why would a person or group of people expect cooperation from others if only one person benefits? Is it fair for some to have more opportunities than others? Is it justified to allow one person to gain financial advantages over others? These questions are addressed within the rules of each structured society.

Distributive justice is a difficult concept to keep control over. Despite the nearly universal claim by civilized cultures that all persons have equal worth, disparities exist everywhere. Unfair economic and social distribution run rampant in the modern world, making this type of justice very difficult to imagine.

The idea of comparative justice comes into play in order to counteract the weaknesses of distributive justice. Justice becomes comparative when balancing competing claims of one individual versus claims of another. For example, the condition of others in a society will affect how qualified a person is to receive a heart transplant. Factors such as need, chances of success, and family may play strong roles in the decision to give scarce resources to one person instead of another.

Distributive justice arises only in situations of scarcity and competition[12]. If mankind had developed a limitless, environmentally friendly source of energy, there would be no necessity for regulation of power use. However, when we worry about fuel scarcities, pollution, and other such real-world problems, regulation becomes a necessity. Trade-offs must be made in order to ensure ample energy reserves for the future while maintaining adequate sources for the present.

The philosopher David Hume writes that comparative justice has been invented in order to deal with problems of conflicting claims[19]. He claims

that the rules of justice have no point unless society is comprised of people who were capable of limited sympathy for others in a world of limited resources. A society where each individual gives limitless sympathy to those that he/she is in competition with is not one where justice would play a major role. Such a society is unrealistic in a world where limited material goods and resources need to be distributed.

2.5.6. The Beneficence Principle

Moral action demands not only autonomous treatment of all people and a refrain from harming them, but also a contribution to their well-being. These actions that promote the well-being of others are placed under the category of beneficence. It is a principle thought to be more far-reaching than nonmaleficence, as it requires positive steps to help others[12].

2.5.7. The Veracity Principle

The principle of *Veracity* upholds the ethical responsibility to tell the truth. Though the meaning of truth can be the subject of endless debate, this paper will define *Veracity* as "that which the doctor believes wholeheartedly to be true at the time that it is communicated to the patient." This principle is violated any time that someone knowingly tells a

lie. The principle is also violated when a person deliberately withholds a truthful statement in a manner that allows a deception to occur.

2.6. Models of Dentist/Patient Relationship

Each human interaction can be defined by a model that determines the moral rules and principles which apply to the situation. For example, appropriate moral behavior between two strangers constitutes very different ethical guidelines than appropriate behavior between a doctor and patient. Elie Noujain PhD, associate professor of ethics at the Kornberg School of Dentistry, puts this simply-

"The application of general ethical theories or principles does not occur in undifferentiated social contexts; rather, each kind of practice constitutes a particular model of social interaction that tends to "inflect" differently the general principles of morality by which we are supposed to conduct our lives."[19]

According to Noujain, the five possible models of dentist-patient relationship fall into the following categories: paternalist, agent, technological, contractual/commercial, and partnership models.

2.6.1. The Paternalist Model

The paternalistic model has been the longest-surviving model of the doctor-patient relationship, although it has lost a considerable deal of strength within the last century. This model emphasizes the superior knowledge and skill of the dentist in the face of the patient's lack of expertise. The patient is a passive recipient of care and will obey because the dentist "knows best" what is in the patient's best interest. This model has come under fire because the dentist has intellectual and moral authority over the patient[20].

The paternalistic model bears little regard for the *Principle of Autonomy* and gives extra emphasis to consequentialist ideals. A paternalistic practitioner believes that the dentist has the patient's best interests at heart and knows better than the patient what the best ways to realize them are. Within this model, disregarding the advice of the treating practitioner, seeking a second opinion, and questioning the dentist's judgement are all flagrant examples of insubordination.

2.6.2. The Agent Model

The Agent model is the antithesis of the paternalistic model. Where paternalism detracts from patient autonomy, the Agent model over-emphasizes its importance. The practitioner's role is simply to implement the choices of the patient, and to respond as efficiently as possible to fulfill the patient's

needs[20]. This model exaggerates autonomy, at the possible expense of beneficence and nonmaleficence.

2.6.3. The Contractual/Commercial Model

In this model, the dentist is presented as a purveyor of dental/oral/maxillofacial health or aesthetics, and the patient is nothing more than a consumer of the dentist's knowledge, skills, and experience. The ethical principles found in this model apply in the same way as any business transaction. Within this model, the "customer" receives the service that they choose as a result of salesmanship on the part of the dentist. The principle of veracity is of paramount importance within this model, as the buyer/customer cannot be deceived[20].

2.6.4. The Partnership Model

The partnership model is a system wherein the practitioner and patient view themselves as being part of a team, or partnership, whose objective is to succeed at mutually realized goals of the dentist and patient. This model implies an attitude of mutual trust and benevolence[20]. The partnership model is not merely a compromise between all of the other models. It is a system in which every principle of dental ethics is "inflected" differently within the partnership model.

2.7. Contemporary Applications of Medical Ethics to Orthodontics

Once the fundamental principles have been understood, application to orthodontics is the next logical step.

2.7.1. Informed Consent and Orthodontics

Historically, a patient who had been mistreated had no legal course of action unless fraud or battery had been committed[21]. An example of fraud would be if the patient was induced to undergo a procedure under the influence of false statements; while an example of battery would be where the practitioner extended the scope of treatment farther beyond what was agreed upon, even if the doctor's decision helped the patient. These stipulations were in place and functioned well for a nonlitigious, 1950s America in which doctors were revered. The negligence standard evolved as treatment alternatives expanded, risks became more apparent, and loss of life quality became more significant.

The contractual nature of the doctor/patient relationship is the important to the strength of informed consent. The bond between the lay person and the professional contains within it an implied contract protecting the patient from deception. Deception takes two major forms: (1) Commission, which is active lying; (2) Omission, which is failure to provide

information. The implication here is that the doctor must never mislead the patient/parent, either by speaking an inaccuracy or by failing to disclose an entire story[21].

Are patients or the parents of patients capable of sharing the responsibility of their treatment planning? Does the lay person have the mental faculties necessary to handle the complex biological issues necessary to provide a good orthodontic result? Even if the orthodontist answers "no" to these questions, the law answers "yes"[22-25]. Legally, the patient must be given ample information necessary to make a rational, informed decision.

Orthodontic treatment planning requires comprehensive inclusion of all factors derived from the diagnosis. These factors include, but are not limited to, health history, jaw relationship, esthetic needs, and psychosocial history. The view of the practitioner may differ from that of the patient. The goal of the responsible clinician is to bridge the differences in viewpoint in order to achieve a mutual understanding of treatment. This understanding can be best achieved through dialogue and treatment goals constructed to satisfy both patient and clinician. Through this understanding, respect for the patient is proven and chances of litigation are reduced.

The doctrine of informed consent has changed the way that orthodontists conduct their consultations with patients[21]. In earlier parts of the 20th century, the doctor was the sole decision-maker in the treatment planning

process. The doctor provided the treatment, as well as, its ethical justification. Now, the patient-doctor relationship is far more egalitarian, based on mutual understanding. Bioethicists and lawmakers alike have concluded that a doctor acting as a sole decision-maker is an abuse of professional authority[20].

In a 1995 paper, Ackerman and Proffit noted 3 competing ethical values. These competing values are: (1) The wish to be clear, concise, and direct; (2) the desire to be kind and not overly alarm the parents or patient; (3) the hope that they will accept treatment[26]. Conflict between the principles arises because patients and parents want the truth about their treatment, but also seek to reduce harm and achieve an acceptable outcome with minimum treatment. The most routine example of this occurs when the patient or parent rejects treatment that the practitioner truly believes is the best treatment plan. In cases where orthognathic surgery is indicated, the magnitude of the problem is made more severe if the patient is not prepared to accept treatment.

There are many different approaches that can be taken when trying to give bad news to the patient or parent. By using euphemisms, such as "deficient chin" instead of "weak chin," the practitioner increases the chances for patient acceptance. Supplemental literature should always be given to a patient who will need time to think about radical, aggressive treatments[26].

The orthodontist must preserve the dignity of the parents and the patient. This is done by the negotiations regarding treatment needs. If an

orthodontist is able to construct treatment goals with the patient or parent, the professional's point of view becomes comprehensible. In the process of jointly constructing treatment goals, consensus for a treatment plan is established[27].

Imaging software that predicts treatment outcome has become a powerful, reasonably accurate tool that allows a patient to compare potential outcomes for various treatment alternatives[28]. The orthodontist can now use pictures instead of explanations, reducing misconceptions that a patient can conjure up within their imaginations. Studies show that patients who have been shown digital predictions have higher esthetic expectations than patients who have not[29]. The patients who have been shown digital predictions also report to be equally or more satisfied with treatment outcome[30]. Though computer imaging is a boon to the patient-doctor relationship, it is no substitute for compassion and personal connection.

2.7.2. Informed Consent in Orthodontic Clinical Trials.

The Declaration of Helsinki code of ethics on human experimentation, makes it clear that the designing of and production of experimental procedures involving human subjects should be clearly dictated by experimental protocol[31]. This protocol must be submitted to a special review committee, independent of the investigator or the investigator's sponsors. Upon ensuring that the subject understands the information, the practitioner must obtain written consent,

preferably in writing. If the practitioner cannot gain written consent, then a non-written consent must be documented and witnessed.

If approval has been obtained for a trial and informed consent has been properly documented, then this should be clearly reported in any published form of the research.

A 2005 study by the Liverpool University Dental Hospital and School of Dentistry revealed dismal facts about orthodontic adherence to ethical principles. The paper concluded that most orthodontic clinical trial reports failed to state whether ethical approval and/or informed consent had been obtained. Out of 155 papers, of which 85 were randomized controlled trials and 70 were controlled clinical trials, only 25 had reports stating that ethical approval had been obtained and only 39 had indicated that informed consent had been obtained[32]. These papers were published from 1989-1998 from AJODO(American Journal of Orthodontics and Dentofacial Orthopedics), BJO(British Journal of Orthodontics), and EJO(European Journal of Orthodontics).

Compliance or noncompliance to ethical guidelines may not change the outcome of a clinical trial, but it may be an indication that the rights of the subjects have not been respected. Furthermore, if the researcher has not pursued ethical approval, one could question whether a trial would have received approval if it had been submitted for review. These issues can be put

to rest by following appropriate ethical guidelines and indicating the adherence to these guidelines in the text of a protocol.

2.8.3. Contemporary Ethical Complaints

In putting together this paper, emails were sent to the legal branch of the AAO in order to gain perspective on which ethical complaints turned up most prominently. Kathy DiPrimo, assistant to the general cousel, addressed the following issues as the most common cases where reports are filed: *1. False advertisement and misleading the public. 2. Advertisement implies exclusivity and superiority. 3. Will not release patient records. 4. Improperly dismissed patient. 5. Unprofessional and inappropriate behavior. 6. Technicians perform work without doctor supervision.*

The first two complaints are of particular interest to this study, as they are directly related to the field of Orthodontics being molded into a Commercial/Agent model. False advertisement and the implication of superiority are both addressed in the AAO Code, however the advisory opinions that govern these concepts are vague and potentially misinterpreted by orthodontists. The implication of exclusivity and superiority is a slight against the principle of *Justicce.*

CHAPTER 3

AIM OF THE INVESTIGATION

In 2010, the average graduating resident from a United States Orthodontic program is rarely given ample training in the ethical responsibilities of his or her profession. A review of online databases reveals scant literature regarding the ethical positions of complex situations found in the Orthodontic specialty. This lack of cohesive ethical study underlies a major problem in the ethical ramifications of Orthodontic treatment. The May, 2009 revision of the AAO Principles of Ethics and Code of Professional Conduct contains wording which leans heavily towards an Agent model. Most of the Principles and advisory opinions put extreme emphasis on autonomy at the expense of other principles such as nonmaleficence. The purpose of this paper is twofold: It is hoped that this paper will serve as a comprehensive overview of medical ethics for the orthodontist and point out weaknesses in the current AAO Principles of Ethics and Code of Professional Conduct, which has drastic leanings towards the Agent and Commercial models of the doctor-patient relationship.

CHAPTER 4

MATERIALS AND METHODS

4.1.1. Presentation of Weaknesses

The AAO Principles of Ethics and Code of Professional Conduct will be subjected to analysis in order to provide logical evidence for change. Statements will be held up to the scrutiny of ethical theories presented within the Literature Review. Statements will be judged as "weak" if scrutiny reveals a paradox, misinterpretation, or potential for abuse within the bounds of the language. Strong statements do not need revision and will not be analyzed in this paper.

4.1.2. Fault Correction

Statements that have been labeled as "weak" will be modified in such a way that they will no longer be upholding paradoxes or illogical scenarios. The modifications made will support a Partnership model of orthodontics rather than an Agent or Commercial model. Works cited in the literature review will be used to justify the arguments made.

CHAPTER 5

RESULTS

Principle I:

Members shall be dedicated to providing the highest quality orthodontic care to his/her patients within the bounds of the clinical aspects of the patient's condition, and with due consideration being given to the needs and desires of the patient.

The above principle will be considered to be weak because it fails to account for the definition of "the highest quality orthodontic care." This is because such a definition is complicated and hard to define. To one orthodontist, "highest quality" may mean liberal use of TADs, Damon brackets, and Invisalign Express for finishing while another orthodontist may feel that "highest quality" orthodontics only exists in the realm of Begg technique. Due to the subjective nature of the orthodontic field, this must be addressed when a code of ethics is being legitimized. The principle is weak and requires revision.

There are two possible solutions to this dilemma: define what "highest quality" orthodontics is or clarify the definition so that it conforms to the accepted standards of orthodontics. Since it is impossible to define "highest quality," the latter option is the one which must be chosen. For this purpose,

the addendum – "*within standards commensurate with the accepted science and techniques of orthodontics*" should be added to the statement.

The above principle articulates another major problem with the AAO code: emphasis is placed on pleasing the needs of the patient without considering the needs and abilities of the practitioner. Principle I is driven by the *Principle of Autonomy* over all others. This principle does not involve the orthodontist and, as such, is a clear advocate of the Agent model. If due consideration is given to the partnership rather than the patient alone, it will imply a more coherent union between doctor and patient. The proposed revisions will read as follows:

Members shall be dedicated to providing the highest possible quality orthodontic care to his/her patients within standards commensurate with the accepted science and techniques of orthodontics, the clinical aspects of the patient's condition, and with due consideration being given to the needs and desires of the doctor and patient within a relationship based on partnership.

By considering the standards of accepted science and techniques, the ethical playing field is more adequately regulated when it comes to treatment style. Though any practitioner can determine his or her own viewpoint regarding "highest possible quality," they are still bound by the standards of current orthodontics. Thus, the Begg orthodontist and the Damon

orthodontist both are bound to treat to similar standards, though their appliance systems may differ.

It is also relevant to note that the term "due consideration" is difficult to define and is open to extremely widespread interpretation. If the practitioner adheres to an Agent model of practice, "due consideration" involves obeying the patient's every request. By contrast, a more paternalistic orthodontist would feel that the "due consideration" is very low and of little consequence when making treatment decisions. Input from both doctor and patient, in a partnership model, strikes a better balance between autonomy and nonmaleficence.

Advisory Opinion IE:

A second opinion should include a diagnosis and treatment plan recommended to the patient. It must be honest and focus on the facts presented. It is unethical to propound a specific technique, philosophy, training or ability as superior without acknowledging that each orthodontist uses different techniques based on training and experience, and that the second opinion is based on an orthodontist's individual perspective. A second opinion must disclose to the patient any conflict of interest of the member providing the opinion.

This advisory opinion provides a method by which an orthodontist can propound their techniques as being superior simply by acknowledging that orthodontists are trained in different places and use different techniques. The

principle of *Justice* must be invoked to judge this opinion as weak. *Justice* would state that every practitioner is entitled to the benefit of the doubt and that their techniques must be free from judgement except in cases where scientific proof says otherwise. This advisory opinion gives an ethical excuse for orthodontists who seek to outsell their competition by reporting other techniques to be inferior to their own. In a situation like this, emphasis is placed on the salesmanship of the individual practitioner, a quality most relevant in the Commercial model.

The paragraph must be changed to place emphasis on evidence-based medicine in cases where second opinions are given

The proposed modification to this advisory opinion is as follows:

A second opinion should include a diagnosis and treatment plan recommended to the patient. It must be honest and focus on the facts presented. It is unethical to propound a specific technique, philosophy, training or ability as superior without presenting references and summaries of scientific literature to the patient to support claims made. A second opinion must disclose to the patient any conflict of interest of the member providing the opinion.

Advisory Opinion IF:

Patients should be informed of their oral health status without disparaging comments about the patient's prior treatment which are not supported by known facts.

The implications of this advisory opinion are disturbing. It is giving the orthodontist permission to use disparaging comments about prior treatment if they can be supported with known facts. This statement is weak because it inadvertently permits a situation where a responsible health care practitioner is given license to use unprofessional language.

From a natural law argument, disparaging remarks serve only to weaken the institution of Orthodontics. The role of the orthodontist is one of respect and dignity within the community. Disparaging remarks, with or without known facts, are unacceptable if the profession seeks to preserve its high standing.

The proposed revision to this advisory opinion is as follows:

Patients should be informed of their oral health status without disparaging comments about the patient's prior treatment.

This revision eliminates the role of "known facts" and insures that the treating orthodontist avoids disparaging comments, even in cases where such comments may be supported by known facts. This revision complies with the principle of *Justice*, for it takes into account the distinction between bad work and bad outcome. Since doubt must always exist as to whether a bad outcome is a result of bad work, *Justice* requires no disparaging comments be uttered to the patient. This revision does not lean towards either Partnership or Agent models, but still falls under the scope of this study.

Advisory Opinion 1G:

Members should inform their patients of any proposed treatment and any reasonable alternatives, so that the patient understands their treatment decisions.

This advisory opinion neglects to mention prognosis, an essential aspect of autonomy. Prognosis is an essential aspect of treatment and non-treatment. If a patient is given treatment options but not a description of the problem to be solved, it gives rise to an ethical dilemma. The patient is deserving of all knowledge pertaining to their treatment in order to maintain their dignity as an autonomous individual. This opinion may reflect another subtle shift in Orthodontic ethics towards the Commercial/Agent model. The Code is only concerned with giving the patient various treatment alternatives and does not demand that the patient be informed of the likelihood of success. This relationship is more akin to that of a large retail store and its customer, where many valid alternatives are provided with scant information regarding which is best.

This advisory opinion should be modified as follows:

Members should inform their patients of their proposed treatment, its prognosis, and any reasonable alternatives, so that the patient understands their treatment decisions.

This phrasing includes emphasis on the prognosis of the patient. To respect the principle of *Autonomy*, they must be given as much information as

possible regarding their treatment. This way, no unexpected risks will be undertaken during treatment. In the event that they seek a second opinion or wish to research their condition on their own, they should know the expected prognoses of any given treatment options.

CHAPTER 6

DISCUSSION

This study was undertaken with the awareness that it would be the first of its kind. No prior papers have been written that directly address the AAO Code and try to actively amend it. The application of medical ethical theory to the AAO Code faced significant challenges in order to give proper respect to both Orthodontic and bioethical literature.

6.1. Limitations of the Study

6.1.1. Study Design

The most important limitation of this study is the fact that it required the development of its own study of methods in order to find weaknesses in the Principles and Advisory Opinions. This methodology was invented by the author of this paper and his thesis advisor, Elie Noujain, associate professor of dental ethics at the Kornberg School of Dentistry. Their technique for analysis has never been published before in the field of dental ethics.

6.1.2 Measurement of Outcomes

Validation for the proposed revisions of this paper have not been

screened by any group of ethical thinkers except for the authors. The study period was insufficient to allow for critical review by peers before completion of the paper. Additional opinions could have been useful for refinement of the ideas. Increasing the number of critical thinkers looking at the Code may also yield more points of weakness that could be open to ethical improvement.

CHAPTER 7

CONCLUSIONS

This study has allowed us to make the following conclusions, which are based on the data presented, about the AAO's Principles of Ethics and Code of Professional Conduct:

1. The AAO's Principles of Ethics and Code of Professional Conduct is in need of revision in order to increase its clarity.
2. The Principles and Advisory Opinions addressed in the Results section of this paper must be changed to their new wording in the official AAO Principles of Ethics and Code of Professional Conduct.
3. The current AAO Code leans too far towards the Agent model of the doctor-patient relationship. Orthodontics must be treated as a partnership between patient and doctor rather than a service provided at the behest of the patient.

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