

Is it ethical to immobilize patient's jaws for weight loss? A deontological perspective

SADJ April 2023, Vol. 79 No.3 p160-163

S Bhattay-Loonat¹, J Gardner², HD Miniggio³

ABSTRACT

The demand for elective aesthetic treatment is increasing globally, in line with aggressive media portrayals of a certain standard of beauty and body image. This trend is also changing the landscape of modern dentistry and is blurring the role of dental professionals as healthcare providers versus aestheticians.

This article explores the ethical dilemma that dental professionals are faced with when patients request a treatment modality such as intermaxillary fixation, to treat a medical condition or enhance aesthetics through weight loss. We evaluate whether intermaxillary fixation for weight loss falls within the dentist's scope of practice from a deontological perspective.

INTRODUCTION

The demand for elective aesthetic treatment is increasing globally, in line with aggressive media portrayals of a certain standard of beauty and body image. This trend is also changing the landscape of modern dentistry and is blurring the role of dental professionals as healthcare providers versus aestheticians.

One such elective treatment request for weight loss that dental professionals may be faced with is intermaxillary immobilization or fixation, commonly known as jaw wiring.¹ Intermaxillary fixation is traditionally indicated for healing of jaw fractures and in orthognathic surgery. Given that the jaws are immobilized for up to eight weeks, during which the patient is restricted to a liquid diet, one of the side effects of this treatment modality, is weight loss. An interesting, yet underexplored ethical dilemma arises when patients request intermaxillary fixation for the sole purpose of weight loss, either intended for enhancement of physical appearance, for health-related reasons, or both.

This article explores the ethical dilemma that dental professionals are faced with when patients request a treatment modality such as intermaxillary fixation, to treat a medical condition or enhance aesthetics through weight loss. We evaluate whether jaw wiring for weight loss falls within the dentist's scope of practice from a deontological perspective. In brief, deontology is derived from the Greek word 'deon' which means that which is obligatory.¹

Deontology is a philosophical theory which bases morality on foundational principles of obligation and duty.² In contrast to utilitarianism, deontology is not focused on the consequences of a particular action, instead it is focussed on the moral duty of an action, in other words what ought to be done. Given that deontology is based on the duties and obligations of an individual, in this article we evaluate the scope of intermaxillary fixation in dental practice with reference to the ethical duties that have been outlined by the Health Professions Council of South Africa (HPCSA) and the legal duties outlined by the South African Law.

This paper begins with an overview of the four deontological theories, briefly outlines the differences between ethics and the law and summarises the duties that dentists have to their patients and to themselves. It then discusses how these duties influence the professional relationship between the dentist and the patient and how these duties in turn, influence the scope of dental practice. To this end, this paper provides clarity on the concepts of professional misconduct and malpractice and analyses the scope of dental practice from a legal perspective using the Health Professions Act (HPA) No. 56 of 1974.

The authors believe that by using the moral theory of deontology, intermaxillary fixation performed independently by dentists for weight loss, falls out of the scope of dental practice. In subsequent publications, intermaxillary fixation performed independently by dentists will be evaluated from a utilitarian perspective and principle-based approach.

Authors information:

1. S Bhattay-Loonat, *BDS (Wits), MScMed (Bioethics and Health Law) (Wits)*. Tel: +27 64 532 6428, Email: Admin@dentalsparkle.co.za. Practitioner in Private Practice
2. J Gardner, *BA (Rhodes), MScMed (Bioethics and Health Law) (Wits), PhD (Philosophy) (Stellenbosch)*. Senior Lecturer, Steve Biko Centre for Bioethics, School of Clinical Medicine, Faculty of Health Sciences, University of the Witwatersrand, South Africa. Tel: +2711 7172635, E: Jillian.Gardner@wits.ac.za
ORCID: <http://orcid.org/0000-0002-0549-9117>
3. HD Miniggio, *BDS (UMF, Cluj-Napoca), MScMed (Bioethics and Health Law) (Wits), PGDip (Health Sciences Education) (Wits), PhD (Bioethics and Health Law) (Wits)*. Senior Lecturer, Department of Oral and Maxillofacial Pathology, Oral Microbiology and Oral Biology, Sefako Makgatho Health Sciences University, South Africa. Honorary Senior Lecturer, Steve Biko Centre for Bioethics, School of Clinical Medicine, Faculty of Health Sciences, University of the Witwatersrand. T: +2712 5214882 E: Hilde.miniggio@smu.ac.za.
ORCID <http://orcid.org/0000-0003-2003-0306>.

Corresponding author:

Name: S Bhattay-Loonat
Tel: +27 64 532 6428
Email: admin@dentalsparkle.co.za

Author's contribution:

1. S Bhattay-Loonat: Conceptualisation, writing-original draft, writing first draft, second draft, review and editing of final draft and final approval.
2. J Gardner: Conceptualisation, writing first draft, second draft, review and editing of final draft and final approval.
3. HD Miniggio: Writing first draft, second draft, review and editing of final draft and final approval

Declaration

This article is based on the first author's Masters research report.

OVERVIEW ON INTERMAXILLARY FIXATION

Intermaxillary fixation, first introduced in the seventeenth century, is a treatment modality that is used by dental professionals to treat simple fractures of the upper and/or lower jaws and for orthognathic surgery.^{3,4} The jaw fixation inhibits mouth opening and the patient is confined to a liquid diet for the duration of the treatment which can result in a patient losing weight.⁵

The first studies of jaw wiring for the purposes of weight loss were documented in the 1970s.⁶⁻⁹ These studies concluded that jaw wiring can be used as a treatment for obesity, if it forms part of an integrated treatment plan.⁶⁻⁹ The importance of having a multi-disciplinary team approach when using jaw wiring to treat obesity was emphasised in all of the studies.⁶⁻⁹ Interestingly, jaw wiring is preferred over intestinal bypass surgery because it can be done under local anaesthetic, and it is an inexpensive, non-permanent intervention.⁶⁻⁹ However, it was also shown that patients who participated in these studies struggled to maintain their weight, following the removal of the wires.⁶⁻⁹

Amongst the most significant risks associated with jaw wiring is pulmonary aspiration of vomitus.¹⁰⁻¹¹ Since the patient's jaw is wired shut, if they vomit, there is a risk that they will not be able to expel the vomit from the mouth. This could lead to asphyxiation or a subsequent aspiration pneumonia, both of which could be life threatening.¹⁰ Although aspiration and asphyxiation are the most challenging risks associated with jaw wiring, the risk of these happening is exceptionally low.^{10,12} Patients can be trained to correctly position themselves when vomiting to avoid pulmonary aspiration and can be trained to cut the wires in an emergency.^{6,10,13}

Other risks associated with intermaxillary fixation relate to the damage of teeth that have been wired, or to the surrounding oral structures.¹⁰ Oral hygiene measures are difficult leading to gingival inflammation and later periodontal disease.^{14,15,16,17} In addition, patients may experience decalcification of enamel, and halitosis due to the difficulty in maintaining oral hygiene around the wires and brackets.^{10,17} Furthermore, temporomandibular joint dysfunction (TMD) could also result from having the jaws wired.^{10,15} However, the detrimental effects of intermaxillary fixation on the oral cavity are not permanent, since the gingival and periodontal effects can be reversed, and the gingival health can be restored post removal of the wires.^{14,18,19} Even though the detrimental effects of jaw wiring on the oral cavity may not be permanent, jaw wiring does have a negative consequence on the oral health of the patient for the duration of the procedure.

OVERVIEW OF DEONTOLOGY

Deontology is a philosophical theory which bases morality on foundational principles of obligation and duty and can be broadly subdivided into four duty theories.² These four duty-based theories are:

- Deontological theory advanced in the 17th century by Samuel Pufendorf, a German Philosopher.² He divided duties into three different groups namely, duties to God, duties to oneself and duties to others.²
- Rights-based theory defines a right as "a justified claim against another person's behaviour".²
- Kant's theory is founded on the principle that rational persons are worthy of basic respect simply by virtue of

being human".²⁰ The German Philosopher, Immanuel Kant proposes that all our duties are based on one main principle – the Categorical Imperative.²⁰

- Ross's prima facie theory of duties was founded by the British Philosopher W. D. Ross in the nineteenth century. He based his moral theory on a list of seven prima facie duties. These duties are not absolute and can be overridden by other duties when the duties conflict with each other. According to Ross, "these duties are a part of the fundamental nature of the universe".²
- An evaluation of the four theories falls outside the scope of this article, thus this paper focuses on the moral and legal duties of the dentist laid down by the HPCSA and the National Health Act (NHA) which are analysed within the context of the topic. Since this section is focused on the moral duties, legal duties and rights of the dentist and patient, it is necessary to explore the relationship between ethics and law.

ETHICS AND THE LAW

Ethics and the law are similar in that they both guide actions. Law however, is enforced by government and is described as the minimum standard of ethics which guides actions.²¹ The law leaves no room for choice and non-compliance with the law carries penalties.²¹ Ethics on the other hand, comes from an individual's moral sense and it gives that person options that guide their moral decision-making process.²¹ In other words, law dictates the actions that we are obliged to follow, ethics guides the actions that we ought to do.²¹

When considering the scope of dental practice in terms of deontology which is based on the duties and obligations of an individual, one needs to investigate if jaw wiring falls within the scope of dental practice, especially when carried out for issues such as weight loss and not as a therapeutic solution for fractured jaws.

The HPCSA was established to regulate the education, training and registration of healthcare professionals that have been registered under the Health Professions Act (HPA) and ensures that the healthcare professionals uphold and preserve ethical and professional standards.²² The HPCSA also investigates complaints lodged against healthcare professionals and takes the necessary disciplinary action against any healthcare professional when they do not comply with the ethical and professional standards expected from them as professionals.²²

DUTIES OF DENTISTS

The HPCSA defines duty as "an obligation to do or refrain from doing something".²³ To have a duty to another individual means having an obligation to them.²³ Duties and rights are interlinked because the duty of one person implies the rights of the other. At the same time those who feel entitled to rights also have a duty to the person enabling their right.²³ Healthcare professionals have moral and legal duties to their patients by virtue of being qualified and licenced professionals trained within their respective fields.²³ Legal duties are duties that are imposed by the law that compel healthcare professionals to "adhere to certain procedures and to use a particular skill and care when treating patients".²³ Legal duties are imposed by the National Health Act (NHA) (Act 61 of 2003) or the Health Professions Act (HPA) of 1974 and by common law.²³

Dentists have duties to their patients and to themselves. The list of duties to the patient are extensive and for the purposes of this article, the duties that are directly relevant to intermaxillary fixation for weight loss are reviewed. The primary duty of a healthcare professional is to always act in the best interest of the patient.²³ Given that the weight loss that occurs because of intermaxillary fixation is temporary and there are risks of aspiration vomitus, damage to the teeth and surrounding structures and risks to the general health of the patient, such a treatment modality is not in the patient's best interest. To act in the patient's best interest dentists should avoid abusing the position of power they have over their patients.²³ Dentists also have a duty to provide the patient with all the relevant information with regards to intermaxillary fixation for weight loss, "in a language that the patient understands" and communicated in an appropriate manner that takes into consideration the patient's level of knowledge and their values.^{22, 23} Furthermore, dentists have a duty to avoid over-servicing their patients which makes it necessary for them to avoid treatment that does not serve the needs of the patient.²³ The dentist's duties to themselves require that they continuously improve their professional knowledge and skills through continuous professional development programs.²³ The dentist also has a duty to acknowledge the limits of their competence and knowledge and to refer a patient when the treatment the patient requires or requests, falls out of the scope of dental practice.²³ Although dentists are trained to wire jaws, they are not adequately trained to treat, or monitor weight loss.¹⁶ Thus the dentist has a duty not to independently treat patients who require weight loss.

The dentist can participate in the weight loss treatment of obese and overweight patients only when the dentist is a member of a multi-disciplinary team that is made up of physicians, psychologists, dieticians, bio-kineticists and physiotherapists.¹⁶ When the dentist is part of this team of professionals, the dentist's role is not to diagnose or to follow the progress of the patient's weight loss, but the dentist will be responsible for the aspects of treatment that falls within the scope of dentistry.¹⁶ If intermaxillary fixation is proposed as part of the integrated treatment plan that has been agreed upon by the multi-disciplinary team, then the dentist will be responsible for ensuring that the patient has good oral hygiene and that there is no disease or dysfunction within the oral cavity that is caused by the wiring.²³

MALPRACTICE AND PROFESSIONAL MISCONDUCT

The HPA (1974) defines unprofessional conduct or professional misconduct as "improper or disgraceful or dishonourable or unworthy conduct or conduct which, when regard is had to the profession of a person who is registered in terms of this Act, is improper or disgraceful or dishonourable or unworthy".²⁴ Section 41 of HPA of 1974 states that "a professional board shall have power to institute an inquiry into any complaint, charge or allegation of unprofessional conduct against any person registered under this Act, and, on finding such person guilty of such conduct, to impose any of the penalties prescribed in section 42".²⁴ Malpractice is classified as a type of negligence, and medical negligence is the failure of a healthcare professional to exercise the degree of skill and care of a reasonably competent practitioner in the field concerned.²⁵ Malpractice in dentistry is when the dentist provides treatment which is below the acceptable care and this treatment results in serious personal injury to the patient.²⁶ If a dentist independently wires a patient's jaw for weight loss, the dentist will be at risk of professional

misconduct or a malpractice claim.¹⁶ Regulation 238 (2009), of the HPA (1974) states with regards to dentist's scope of practice that, "clinical examinations are limited to the physical clinical examination of the oral maxillofacial and related structures of a person".²⁴ Regulation 238 (2009) of the HPA (1974), further states that the dentist's scope is limited to "diagnosis of diseases, injuries and conditions of the oral, maxillofacial and related structures, including determining the relevance of systemic conditions, and/or giving advice on such conditions".²⁴ It is clear from the above that dentists are restricted to examination and diagnosis of the oral cavity and related structures only. The dentist is not permitted to diagnose or treat systemic conditions, but the dentist is allowed to determine the effects that systemic conditions have on oral health and advise the patient with regards to the oral effects of the systemic condition. Systemic conditions are those conditions which affect the whole body and not an isolated organ or part of the body. Obesity, the overweight condition, and eating disorders are classified as systemic conditions, because it affects the whole body. Thus, according to Regulation 238 (2009) of HPA (1974), the dentist is not allowed to diagnose and treat obesity, the overweight condition and eating disorders.²⁴

With regards to clinical procedures, Regulation 238 (2009) of the HPA (1974), states that dentists can, "perform dental procedures and/or prescribing medicines aimed at managing the oral health of a patient, including prevention, treatment, and rehabilitation".²⁴ Regulation 238 (2009) of the HPA (1974), further states that dentists can "perform any procedure on a patient aimed at fitting or supplying a dental prosthesis or appliance".²⁴ Dentists manage the oral health of patients and they can fit appliances and prosthesis within the oral cavity. It could be argued that a dentist is allowed to wire jaws for weight loss because jaw wiring is a procedure whereby the dentist is fitting an appliance within the oral cavity.

A counter argument to this could be that Regulation 238 (2009) of HPA (1974) states that the dentist is only allowed to determine the relevance of systemic conditions on the oral health of a patient.²⁴ Therefore, it could be deduced that the dentist is allowed to wire jaws when the purpose of the treatment is for healing of a jaw fracture because a dentist is allowed to diagnose and treat fractures of the jaws. Nonetheless, the dentist is not allowed to independently wire jaws for weight loss because the dentist is not allowed to treat systemic conditions. The dentist can participate in treating obesity when she or he forms part of a multi-disciplinary team because, the dentist will not be responsible for diagnosing and independently treating a systemic condition.¹⁶ The diagnosis of obesity will be made by the physician and the dentist will only provide the dental services as part of integrated treatment plan.¹⁶

As for aesthetic procedures, Regulation 238 (2009) of HPA (1974), states that dental practice is limited to, "performing any aesthetic or cosmetic procedure on a patient pertaining to the oral and peri-oral area".²⁴ Dentists can perform aesthetic work on teeth, gingiva, and any intra-oral area and peri-oral structures. Thus, the dentist is legally not allowed to assist a patient with weight loss for purely aesthetic reasons as the dentist is only allowed to carry out aesthetic procedures within the oral cavity and surrounding peri-oral area.

ETHICAL RULES OF CONDUCT FOR HEALTHCARE PRACTITIONER

The Ethical Rules of Conduct for Healthcare Professionals

which is registered under the HPA defines what sort of behaviour is necessary for a healthcare practitioner to be considered professional. Ethical rule 21 (2006) of the HPA (1974) states that “a practitioner shall perform, except in an emergency, only a professional act for which he or she is adequately educated, trained and sufficiently experienced”.²⁴ Since dentists are not adequately educated, trained, and experienced to treat any metabolic disorders, a dentist who independently wires jaws for weight loss is not adhering to ethical rule 21 of The Ethical Rules of Conduct for Healthcare Professionals. Not adhering to ethical rules of conduct is professional misconduct and thus, if a dentist independently wires a patient’s jaws for weight loss can lead to an inquiry of professional misconduct and if the dentist is found guilty the dentist will be subjected to a penalty.

Lastly, according to South African law, if a patient dies due to the negligence of the healthcare professional, the healthcare professional can be charged with culpable homicide.²⁷ If a patient dies from aspiration of vomitus after a dentist independently wired a patient’s jaw for weight loss, the dentist can be charged with culpable homicide.²⁷

There are also studies that show an increased mortality rate associated with intentional weight loss in obese patients.^{28,29} Jaw wiring for weight loss is a means of intentional weight loss, which means there is a risk that an obese patient can die due to intentional weight loss caused by jaw wiring.^{28,29} If this happens a dentist can be charged with culpable homicide. The dentist is justified in overriding the patient’s autonomy, when the patient’s requests will result in the dentist carrying out treatment which is unethical and illegal.²⁷

ADVERTISING

It is both reasonable and necessary for dentists to advertise their professional services to the general public. Dentists are permitted to advertise their professional services, provided it is within the ethical rules. According to the HPCSA, “a practitioner shall be allowed to advertise his or her services or permit, sanction or acquiesce to such advertisement: provided that the advertisement is not unprofessional, untruthful, deceptive or misleading or causes consumers unwarranted anxiety that they may be suffering from any health condition”.²² Advertising the service of independent jaw wiring for weight loss would thus be considered a form of misleading advertising, as it falls out of the scope of dental practice.

Furthermore, “a practitioner shall not canvass or tout or allow canvassing or touting to be done for patients on his or her behalf.”²² Canvassing is defined as “conduct which draws attention, either verbally or by means of printed or electronic media, to one’s personal qualities, superior knowledge, quality of service, professional guarantees or best practice”²². An example would be claiming to be the best dentist in town. Lastly, touting is defined as “conduct which draws attention, either verbally or by means of printed or electronic media, to one’s offers, guarantees or material benefits that do not fall in the categories of professional services or items, but are linked to the rendering of a professional service or designed to entice the public to the professional practice”.²² An example of this is using patient testimonials to promote oneself. If a dentist is uncertain about advertising or suspects they may be in violation of the guidelines, they should consult the HPCSA for advice to avoid potential unprofessional conduct.

CONCLUSION

The moral theory of deontology was used to critically analyse if jaw wiring for weight loss falls within the scope of dental practice. Since deontology is concerned with duty and obligation, it was argued that both the ethical and legal duties confirm that when the dentist independently wires jaw for weight loss this treatment falls out of the scope of dental practice because the dentist is not trained to treat metabolic diseases. As per guidelines formulated by the HPCSA, the dentist has ethical duties to themselves and their patients. Regulation 238 (2009) of the HPA (1974) defines the scope of practice for dentists which shows us that when a dentist independently wires jaws for weight loss then this treatment falls out of the scope of dental practice. However, when a dentist forms part of a multi-disciplinary team treating an obese patient, and if the jaw fixation is part of the treatment plan, then jaw wiring for weight loss falls within the scope of dental practice.

Thus, a dentist that independently wires jaws for weight loss or advertises the service, does not adhere to ethical rule 21 (2006) of the HPA (1974) and is at risk of being charged with professional misconduct, medical malpractice, or culpable homicide.

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