

CLINICAL ETHICS

With cases from cardiology

Editor: Assoc. Prof. Dr. P. Elif EKMEKCI

Clinical ethics with cases from cardiology

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Preface



I am pleased to present this book written by TOBB ETU International Bioethics Unit faculty members and student community on the 10th anniversary of TOBB ETU Faculty of Medicine. In the book, 24 cases compiled from real life experiences are analyzed with a broad ethical perspective. This book, which is a first for the field of cardiology within the framework of clinical ethics, is a reference book for all medical school students, physicians and those working in the field of bioethics. I believe that this book will be an important step towards the development of systematic and consistent approaches to ethical problems encountered in medical practice.

Prof. M. Nejat AKAR, M.D.

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About the editor



Perihan Elif EKMEKCI was born in Ankara in 1971. After she completed her education in TED Ankara College, she graduated from the Medical Faculty of Ankara University in 1995. She had her PhD in History of Medicine and Ethics from Ankara University in 2014. Currently she is an associate professor and head of History of Medicine and Ethics department at TOBB ETU School of Medicine

She was a research fellow in Imperial College Tanaka Business school, London, UK in 2006. She has been a Fogarty Fellow at Harvard University and had her Fogarty/NIH Program Master's Certification in Research Ethics in 2014. She has been a fellow of WIRB International IRB Western Institutional Review Board Research Ethics Training Program, Seattle Washington (USA) in 2016.

She served as the head of EU relations department of Ministry of Health Turkey (2007-2016) and developed several projects in alliance with the EU. She was the Turkish representative for the European Center for Disease Control Advisory Board and served in this position between years 2011-2016.

Currently she is the chair of the International Unit in Bioethics/ WMA Cooperation Center and deputy dean of TOBB ETU School of Medicine. She is chairing the Intuitional Review Board of TOBB ETU, and she is a member of open science committee of TOBB ETU. She is a member of World Association for Medical Law and the International Forum of Teachers of the International Unit in Bioethics. She has several publications in distinguished journals on ethics and history of

medicine. Dr Ekmekci is the co-author of the book titled "Artificial intelligence and Bioethics" published by Springer in 2020. She is teaching undergraduate and postgraduate courses on history of medicine and ethics.

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Abbreviations

Angiotensin Converting Enzyme		
Atrial Fibrillation		
Alanine Transaminase		
Coronary Artery Disease		
Cardiopulmonary Resuscitation		
Computerized Tomography		
Echocardiography		
Electrophysiology Studies		
Food And Drug Authority		
Glomerular Filtration Rate		
Implantable Cardioverter Defibrillator		
In-Flight Medical Emergency		
International Normalized Ratio		
Low Density Lipid		
Muscarinic Receptor Antagonists		
Non-St Segment Elevation Myocardial		
Infarction		
N-Terminal Prohormone of Brain Natriuretic		
Peptide		
Premature Ventricular Complex		
Sodium-Glucose Transport Protein 2		
Social Security Institution		
Transesophageal Echocardiogram		

Introduction

Ethics is a discipline related to the values that form the basis of human behavior in the most general sense. All relationships that a person establishes with himself, other people, the environment, and technology are within the scope of ethics. Ethics is about what is right and wrong in these relationships. Normative ethics is the field of ethics that reveals which norms are important in morally acceptable behavior, that is, what is right and wrong, and what should be done and what should not be done. Practical or applied ethics, which is a sub-branch of normative ethics, is the field that deals with the application of conceptually defined norms to value problems encountered in daily life or professional practice.

Medical ethics is one of the most advanced branches of practical ethics. Throughout history, the concept of a good physician has included having the necessary knowledge (episteme) and technical skills (techne) as well as ethical skills to practice the profession. Medical ethics developed with him as an inseparable building block of being a physician. Today, special fields such as research and publication ethics, public health ethics, occupational medicine ethics and clinical ethics are defined under the title of medical ethics.

This book focuses on clinical ethics, which is one of these special fields, and examines the ethical problems encountered in the clinic with a special focus on cardiology. To provide as broad a perspective as possible in the ethical analysis of cases, different ethical approaches such as deontological theory, utilitarian theory, and practical ethical analysis methodologies such as the four-box method are included, as well as principle-based ethical analysis. The main reason for presenting this diversity in methodology is that ethical problems encountered in the clinic often contain ethical dilemmas that cannot be resolved based on a single norm or theory.

The first step in solving the ethical problems encountered in the clinic is to determine the existence of the ethical problem. The first goal of ethics education, which is integrated into all periods at TOBB ETU Faculty of Medicine, is to develop ethical sensitivity that can recognize ethical problems that arise in the practice of medicine. Ethical problems or ethical dilemmas are situations in which it is not possible for the physician to avoid deciding and has no choice but to take the conscientious responsibility of the decision. Because of this unavoidable situation, it is essential for the physician to be equipped in the field of ethical decision-making. If this skill cannot be given during medical education, the physician is faced with the options of imitating the practices around him, copying them without questioning whether they are true or false, or trying to identify ethical problems and try to produce personal solutions as much as she can realize.

The first option is often reflected in practice as continuing the existing without questioning it, and it is generally tried to be defended with the sentences "everyone is doing this" or "if I don't do it, someone else will do it" and causes the wrong attitude to be reproduced. The second option requires deciding what the right action is in the face of the identified ethical problem. The ethical decision process should be open to disagreements and divergent ideas and should include systematic consideration of conflicting well-founded arguments. The main purpose of the process is to reach well-founded, thought-out judgments. This book aims to be a guide for physicians in the decision process.

All the 24 cases in this book have been compiled from real-life experiences. Even though the cases come from the cardiology clinic, the ethical problems they involve can be encountered almost in the clinical field and in every health institution where the practice of medicine is practiced. Therefore, this book can be a guide for ethical thinking and analysis not only for cardiologists and physicians who want to specialize in this field, but also for all medical school students and physicians.

I would like to express my heartfelt thanks to Assoc. Prof. Dr. Aksüyek Savaş Çelebi for compiling the cases in this book, members of the TOBB ETU International Bioethics student community for writing the stories and translating the cases, Dr. Banu Buruk for contributing ethical analysis, Prof. Dr. Berna Arda and Prof. Dr Müberra Devrim Güner for providing scientific and ethical consultancy, Özlem Çanakçı for designing the cover prepared the book for publishing and to Prof. Dr. M. Nejat Akar for encouraging and supporting the whole team throughout the process.

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Case number	Context	Ethical issues	Ethical analysis methodology
Case 1	Patient with severe cardiac problems prefers to use vinegar instead of scientifically proven medicine suggested by the physician.	Beneficence Respect for autonomy Pseudoscience	Principle-based approach Virtue ethics
Case 2	Physician wants to use patient's images for educational purposes.	Confidentiality and privacy Physician-patient relationship	Principle-based approach Virtue ethics
Case 3	Patient lies about her lifestyle habits to her husband. Wants the physician to keep her secret.	Confidentiality/priv acy Physician-patient relationship Cultural moral norms	Virtue ethics
Case 4	Incompetent patient requires immediate intervention in the emergency room.	Providing benefit Informed consent- incompetent patient Emergency exception	Principle-based approach
Case 5	Competent patient willing to transfer her right to self-determination to a designated person. The patient is in immediate need of medical intervention.	Beneficence Informed consent Transfer of rights to another person	Principle-based approach

Case 6	Physicians forgot to take informed consent to angiography before sedating the patient.	Beneficence Respect for autonomy	Principle-based approach
Case 7	Retired physician-patient wants to oversee his treatment plan personally.	Physician-patient relationship Juristic personality and responsibility of health institutions Duties of physicians towards patients	Principle-based approach Virtue ethics
Case 8	Patient needs sedation during TEE. The patient was not informed about the use of sedatives and the informed consent form did not include this knowledge.	Beneficence Informed consent- context/ procedural Soft paternalism	Principle-based approach Virtue ethics Balancing in ethical dilemmas
Case 9	Patient wants her medical intervention executed without waiting for the result of Covid-19 test because of her social preoccupations.	Decision making Rational concern	Four boxes method
Case 10	Patient refuses to involve residents in her treatment in a training and research hospital.	Patient rights/ limits Residents' and medical students' involvement in clinical procedures for training purposes	WMA Declaration of Lisbon

Case 11	Patient asks the occupational health center physician to keep his health condition confidential.	Confidentiality Dual roles of physicians	Deontological approach
Case 12	Patient asks for angiography to satisfy his anxiety about having a cardiac problem.	Role and authority of physician in decision-making Avoiding unnecessary harm	Four models of physician-patient relationship
Case 13	The mother refuses to get her children checked although the children have a significant risk of premature death due to hypertrophic cardiomyopathy.	Surrogate decision- making Role and authority of the physician Minors' capacity to assent	Rule of sevens Ethical grounds for surrogate decision-making
Case 14	The patient refuses angiography because he thinks he is being misdiagnosed although two different cardiologists had the same diagnosis.	Competency Respect for autonomy Providing benefit	Risk assessment matrix
Case 15	End stage cancer patient asks ICD for his cardiologic problems.	Futile treatment Effective use of scarce resources	Case-based approach

Case 16	Patient living in a remote area wants his physician to prescribe his pills without examining him in person.	Virtual consultations Non-maleficence Role and responsibility of the physicians'	Principle-based approach
Case 17	A high-risk patient insists to have treatment in a hospital that lacks adequate supplies to implement the procedure safely.	Physician-patient relationship/ paternalistic and interpretive models Decision making	Four boxes method
Case 18	A CAD patient wants to have cupping together with his prescribed medicines.	Pseudoscience The moral value of scientific knowledge Physician's advocacy role	Deontological approach
Case 19	Senior patient asks to delay his discharge from hospital until his relatives are available to come to take him.	Fair allocation of scarce resources Beneficence	Four boxes method
Case 20	An inexperienced dermatologist hesitates to intervene with a dyspneic patient on a flight.	Risk-Benefit assessment in emergency Inflight medical emergency	Principle- based approach Case-based approach

Case 21	Patient urges the doctor to report false tests results so that his medication will be refunded by SSI	Beneficence Deception and loyalty	Utilitarian Approach Deontological approach
Case 22	Surgeons use renal artery stent off-label because there are no coronary stents appropriate for the patient.	Off-label use of drugs or medical devices Beneficence	Risk assessment matrix
Case 23	Medical students disclose private information of a patient during a morning visit. Hearing that, the patient refuses any students involved in his treatment.	Confidentiality/ privacy Patient rights	Principle-based approach
Case 24	Patient requires a professor doctor to perform angiography instead of attending cardiologist.	Patient rights	Virtue ethics WMA Declaration of Lisbon

Case 1

A 60-year-old male patient diagnosed with coronary artery disease (CAD) comes to the cardiology clinic for routine control. During the lab tests, Low-Density Lipid (LDL) is found to be 160 mg/dL. The cardiologist recommends the patient use a statin drug, a lipid-lowering agent to lower the LDL levels, decrease cardiovascular risk and prevent atherosclerotic cardiovascular diseases in the long term. While taking informed consent from the patient, the cardiologist discloses the following information about the benefits and risks of the drug: "Statins are shown to have anti-inflammatory and antioxidant effects which are of use in the atherosclerotic process, especially in experimental models. However, they may have some adverse effects including damage to the liver. Statins may lead to an increase of Alanine Transaminase (ALT) in plasma corresponding to hepatocellular damage in 0.5-3.0% of patients. Despite those numbers, the elevation of ALT has not been shown to be associated with true hepatotoxicity or changes in liver function, and progression to liver failure is extremely rare"1,2. The physician also adds the adverse risk of myopathy and advises the patient to inform him if he develops myalgia. After having this information, the patient says that he does not want to use statins because what he heard now supports his previous thoughts about how harmful they are. He says he is afraid of these adverse effects and adds that he will use "Hawthorn Vinegar" instead of a statin because he had read a lot of benefits of it on the internet and a friend of his had benefited from this organic remedy.

Ethical Issues

Providing benefit, respect for autonomy, pseudoscience.

Questions

How should the physician proceed?

Please note that Hawthorn Vinegar is not an acknowledged treatment of coronary artery disease, according to the current guidelines of the American College of Cardiology³

- 1. The physician understands and acknowledges the patient's right to determine his own treatment and respects his decision to use Hawthorn Vinegar.
- 2. The physician explains the short and long-term risks of high LDL in male CAD patients and convinces the patient that Hawthorn Vinegar is not a scientifically valid medical treatment and has some serious side effects such as prolonging bleeding time.
- 3. The physician does not plan the treatment and refers the patient to another physician because the patient refuses her medical recommendations

Ethical Analysis

The ethical issues in Case 1 can be discussed in the frame of two different ethical perspectives.

The first one is the principal-based approach. Contemporary principles of biomedical ethics consist of four core principles. These are providing benefits, avoiding harm, respect for autonomy, and justice. There is no hierarchical order among these principles hence it is the physician's call to specify and balance these principles when she faces an ethical dilemma⁴. In this particular case, the ethical dilemma is between the principles of providing benefit, avoiding harm, and respect for autonomy. While approaching the dilemma and balancing providing benefit and avoiding harm against respect for autonomy, the physician should scrutinize how each principle applies to this case.

It is obvious that the patient has a serious health condition that may cause further problems if not treated properly. The treatment offered by the physician is grounded on evidence-based medicine and there is sufficient scientific proof that it will provide benefit to the patient. These provide good reasons to act on providing benefits. The adverse effects of statins are well described and can be managed if the patient is controlled regularly. On the other hand, there are serious adverse effects of Hawthorn Vinegar which may cause harm to the patient and there is no scientifically proven knowledge about its effectiveness in CAD.

The second principle at stake, respect for autonomy, has some shortcomings when we meticulously probe the decision-making procedure of the patient. Taking informed consent of the patient is the way we respect the autonomous decision-making of the patient. Beauchamp and Childress defined seven elements of informed consent. The first two elements are competence and voluntariness. These two

are considered preconditions of a proper informed consent procedure. They are followed by the informational elements: disclosure of information, recommendation of an action plan, and the patient's understanding of these two. The last two elements are the decision of the patient and authorization of the plan decided upon⁵. In this case, the preconditions of informed consent are met. The patient is competent and is willing to decide. Although not much detail is provided, we can assume that the first two elements of information, disclosure, and recommendation, are fulfilled as well. However, there is a problem in a patient's ability with decision-making procedures as he is unable to comprehend the information and prefers to act on a false belief rather than scientifically proven knowledge. If the decision of the patient is based on pseudoscience instead of scientifically proven medical evidence, it indicates that the patient is unjustified in believing the premise that he decides accordingly. If the health problem contains a considerable risk of mortality or morbidity, then the patient's decision may be invalidated in ethical terms. In this case, the physician may rightfully choose to act on providing benefit and override the decision of the patient. This case implies that the right to refuse treatment is not absolute and should be questioned if the health problem embodies a high risk for the patient's well-being⁶.

This conclusion is supported by the virtue ethics perspective which is the second approach we appeal to in this case. The virtue ethics perspective in medical sciences places the virtuous moral character of the physician at the center of medical ethics and "investigates how the doctor's good moral character enables them to promote the good for the patient". In this respect, the benefit and well-being of the patient are more important than abstract principles, and it is the physician's duty to find the right course of action even in cases of ethical dilemmas. The way to find the right course of action depends on the virtues of the physician such as discernment, understanding, and reasoning. Demonstration of these virtues in medical practice ensures the promotion of a patient's benefit. The virtue-based approach gives physicians more flexibility to think and act beyond the limits of principles. In the current case, the virtuous physician doesn't have to accept the decision of the patient right away but tries to understand the rationale behind this decision with special attention to the specific characteristics of the patient instead. While doing so, the main objective of the physician is to find the most suitable solution that would improve the health condition of the patient. In this regard overruling the patient's decision would be acceptable. However, even if the patient's decision is not acknowledged, the virtuous physician has the necessary character traits to effectively communicate with the patient to avoid any resentment.

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¹François Mach, Colin Baigent, Alberico L Catapano, et al. 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk: The Task Force for the management of dyslipidaemias of the European Society of Cardiology (ESC) and European Atherosclerosis Society (EAS), European Heart Journal, Volume 41, Issue 1, 1 January 2020, Pages 111-188, https://doi.org/10.1093/eurheartj/ehz455

²Rosenson R, Statins. Actions, side effects, and administration. In: Post TW, ed. *UpToDate*. UpToDate; 2021. Accessed December 18, 2021. Statins: Actions, side effects, and administration - UpToDate

³Fihn SD, Blankenship JC, Alexander KP, et al. 2014 ACC/AHA/AATS/PCNA/SCAI/STS focused update of the guideline for the diagnosis and management of patients with stable ischemic heart disease: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines, and the American Association for Thoracic Surgery, Preventive Cardiovascular Nurses Association, Society for Cardiovascular Angiography and Interventions, and Society of Thoracic Surgeons. *J Am Coll Cardiol*. 2014;64(18):1929-1949. doi:10.1016/j.jacc.2014.07.017

⁴An ethical dilemma is a situation in which relevant ethical principles and/or moral obligations require the ethical agent to act in at least two incompatible ways. (Beauchamp TL, Childress JF. Principles of Biomedical Ethics. 8th ed. Oxford Uni. Press; 2019:7-9.)

⁵Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 8th ed. Oxford Uni. Press; 2019:24.

⁶Note that we don't propose the physicians interrogate if the beliefs of the patient are rational and invalidate the decisions of the patient if they are grounded on irrational beliefs. A patient is fully righteous to decide for herself and act accordingly. However, if a patient decides against scientifically proven knowledge and if this decision risks her life, then the physician is ethically responsible to understand the reasons of this decision.

⁷Kotzee B, Ignatowicz A, Thomas H. Virtue in Medical Practice: An Exploratory Study. *HEC Forum*. 2017;29(1):1-19. doi:10.1007/s10730-016-9308-x

Case 2

An 83-year-old female patient comes to the hospital with left leg pain induced by exercise and relieved by rest with necrotic changes at the first and second toes of the left foot. The on-call cardiologist performs a peripheral angiography and diagnoses a 100% ostial occlusion at the left superficial femoral artery. Percutaneous transluminal balloon angioplasty is applied to the occluded lesion, and the stenosis is opened up in the same session. Because the cardiologist considered this case quite challenging, she wants to share images of the peripheral angiography and the necrotic finger on social media for educational purposes.

Ethical Issues

Confidentiality and privacy, physician-patient relationship

Questions

How should the physician proceed?

- 1. Must obtain a patient's written consent and should not post any media without it.
- 2. The cardiologist may post without permission from the patient if images are anonymized to conceal the patient's identity.

Ethical Analysis

In the ethics literature, personal data is mostly addressed within privacy and confidentiality. Although these two concepts are frequently used synonymous with each other, their content and scopes are different. In Case 2, these differences play a very important role in ethical evaluation.

The concept of privacy first appeared in Aristotle's philosophy to describe the personal space of the individual which is exclusive to her private and family life. Since then, privacy has been used to indicate various private areas such as physical privacy, data privacy, the privacy of decision-making procedure, the privacy of property, or relational privacy. In medical ethics, the contemporary concept of privacy has two main aspects. The first one is keeping personal information away from the third parties and the second aspect is an exclusive space dedicated to the individual for taking her own decisions¹. On the other hand, confidentiality is related to the duty of an ethical agent to keep the personal data of another person that is commended to her out of reach of irrelevant or unauthorized parties².

In Case 2, the physician's motive to share the images of the patient on social media challenges both concepts.

The physician-patient relationship is based on trust. The patient exposes her exclusives like her physical body, details about her private life, or her personal data to the physician for purposes of getting help to improve her health. This trust depends on the belief that the physician's

sole and primary motive is to improve the patient's health and that the commended exclusives will be kept away from unauthorized third parties. In other words, the private issues that are disclosed to the physician are limited with the physician's role and responsibility to restore the patient's health. The confidentiality of the disclosed information is also limited in terms of third parties' involvement in the provision of health service to the patient. In this respect, it is plausible to say that sharing the images with others who are not involved in the treatment process is not ethically appropriate because doing so disrupts the grounds of trust of the patient to the physician and violates the confidentiality and privacy of the patient.

On these grounds, it could be argued that it would be ethical if the physician gets the informed consent of the patient before sharing the images on social media. Nevertheless, before opting in for this argument we should take a closer look at the concept of "social media". There are various platforms with different security measures on privacy and confidentiality of the uploaded data, hence both the physician and the patient should be rigorous about these measures during the informed consent procedure.

Another discussion is on anonymous data. Would it make a difference in ethical terms if the physician anonymizes the images before she shares them online? Should the physician still need to take the informed consent of the patient? From a principle-based ethical perspective, it may be argued that since anonymized data cannot be traced back to the individual neither privacy nor confidentiality are relevant anymore, hence no informed consent is needed. Although this sounds plausible

at first sight, from a virtue ethics perspective we can see that this attitude is also violating the trust between patient and physician. As we discussed in the previous paragraphs, the patient encloses private information to the physician with the expectation (trust) that it will be used only for purposes that will serve her health and well-being and its confidentiality will be respected. Under these terms, the physician is not free to share these data even if she anonymized them. To protect and respect the trust of the patient, the physician should get the informed consent of the patient regarding the following phrase: "your physician may share any image or data about you on social media as long she anonymizes them so that it would not be made explicit to whom they belong to."

Deference

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¹Allen A. Chapter 2: Genetic Privacy: Emerging Concepts and Values. *Genetic Secrets: Protecting Privacy and Confidentiality in the Genetic Era*. In: Rohstein M, ed. Yale Uni. Press; 1997: 31–59.

²Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 7th ed. Oxford Uni. Press; 2013.

Case 3

A 40-year-old female patient is being followed with the diagnosis of CAD. For a long time, she had no complaints other than shortness of breath. At this time, she comes to the cardiology outpatient clinic with her husband for the persistent dyspnea. The cardiologist talks with the patient in the presence of her husband about the course of her disease, checking her diet and daily habits to find what triggers the shortness of breath. Since the cardiologist cannot spot any causal factors for the symptoms, she plans to do echocardiography (ECG) to find the cause. When they go to the echocardiography room for the test, the patient tells the physician that she was not being honest while answering questions about smoking and that she is a smoker, but her husband does not know about this. She asks the physician to keep this information from her husband.

Ethical Issues

Confidentiality/privacy, physician-patient relationship, cultural norms

Questions

How should the physician proceed?

1. The physician understands and respects the patient's request and does not share this information with the patient's husband.

2. The physician says that smoking is a very risky habit for CAD patients. Tells the patient that she needs to quit smoking and she will need her husband's support while freeing herself from this addiction. The physician tries to convince the patient to explain this situation to her husband.

Ethical Analysis

The physician-patient relationship is an intimate and confidential relationship. The reason and aim of this special relationship is to provide benefit to the patient. The intimacy serves this aim well since it would be too hard, if not impossible, for the physician to help the patient if she doesn't know particular details of the patient's lifestyle, habits, and diet to determine what may be causing the health issue. The prerequisite for this intimacy is the belief and trust that the intimate information conveyed to the physician will be kept private and will not be disclosed to irrelevant third parties and that is where confidentiality comes into prominence.

On the other hand, cultural and religious codes have an impact on concepts of medical ethics. In some countries, women must have a man relative accompanying them when she is admitted to the hospital. This obligation may be emerging from cultural codes or religious beliefs. In either case, this intrusion risks the intimacy and confidentiality of the physician-patient relationship. In some other cultures, the involvement of third parties like family members, relatives or even close friends may be customary and not limited to gender. In these cultures, the core

concepts like privacy, confidentiality, and individual autonomy are conceptualized differently than prominent theories of liberal individualism in Western countries.

Ubuntu ethics is a good example to understand how customs and culture impact core concepts of ethics. Ubuntu is the African worldview of life that originates from the culture, religion, and collective consciousness of Africans¹. Ubuntu ethics conceptualize individuals as building blocks of the community who are interrelated with each other through the dynamics of the society. Hence, it is plausible to say that the rights and presence of the individuals are embedded in the construction of the community. In this perspective, individual rights are defined on the grounds of communal rights by stating that individual human rights can only gain meaning in the context of the society in which the individual is living. A similar perspective is present in Asian countries in which "understanding the interdependency between the well-being of the community and the individual and balancing good for others and self is the outcome of the moral maturity of the individual"2. In these perspectives, the community takes precedence over the individual, and the well-being of communion of people takes priority over individual rights including self-autonomy, privacy, and confidentiality³.

Of course, this perspective has implications on clinical ethics and particularly in physician-patient relationships. The third parties consider themselves as essential elements of the physician-patient relationship and may claim the right to access personal health data as well as take an active part in the decision-making procedures.

In the current case, for a physician who has been raised in the community and who has no ethical awareness regarding individual rights beyond what her community has taught her, the second choice of action would be plausible. Likewise, a physician whose ethical realm is limited to the liberal individualistic perspective would find it unacceptable to have the husband in the examination room in the first place and would only let him if the patient confirms her consent for his presence. It is plausible to say that the Western perspective-oriented principal-based approach and non-Western communal value-based ethics, both have serious limitations in terms of respecting cultural differences without breaching human rights.

On the other hand, an ethical perspective based on virtue ethics can provide the flexibility and open mindlessness that a physician needs when dealing with patients from different cultures. This approach may enable the physician to put a core virtue, trust, in the center of the physician-patient relationship, use effective communication as the main tool to establish and sustain the trust⁴ and focus on the main aim of this relationship that is providing benefit to the patient throughout the whole process⁴.

In the case that we are discussing, respecting the communal values and letting the husband in the room would be plausible. However, the physician should use her skills to follow both verbal and non-verbal communication of the patient to probe if the patient is at ease when speaking in his presence. Second, the physician should keep in mind that whoever gets involved in the process, the physician-patient relationship is an intimate and confidential one between the two, and

the patient's values and choices have precedence over any other party's view. Therefore, the patient's request to keep the information about her smoking habit confidential is a legitimate one. A virtuous physician should respect the privacy and confidentiality of the patient as long as doing so does not expose any concrete risk to the well-being of the patient. In this case, keeping the private information confidential does not strip the physician from her ethical duty of providing information about the risks of smoking in CAD and suggesting effective tools for quitting this habit. After providing information about the causal relationship between smoking and increased morbidity and mortality in CAD, the physician should advise a plan for quitting smoking that may include informing the husband about the process. However, it is still the patient's autonomous decision to accept the proposed plan or not.

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Case 4

A 45-year-old male patient comes to the emergency department of the hospital with chest pain. After a preliminary examination and blood tests for cardiac enzyme level measurements, an ECG is planned. Meanwhile, the patient develops cardiopulmonary arrest before the results of the tests are obtained. Since the patient does not have any relatives present with him, the physicians cannot learn about his medical history. He is resuscitated, his cardiac rhythm returns to the sinus, but ST elevations are observed in the anterior leads. Therefore, an emergency coronary angiography is planned but the patient's informed consent could not be obtained because he is unconscious.

Ethical Issues

Providing benefit, informed consent-incompetent patient

Questions

How should the physician proceed?

- 1. Since the patient's life is in danger, the physician should do any emergency therapeutic intervention without consent.
- 2. The physician needs to get the consent of the patient or the legal guardian. She should not attempt any medical intervention until the physician obtains one.

Ethical Analysis

Informed consent is an essential element of clinical ethics that ensures respect for the autonomy of the patient. Physicians are ethically and legally obliged to disclose sufficient information about the medical intervention including the implementation of the intervention, risks, and potential benefits of the procedure as well as alternative procedures and their risks. However, this obligation is overruled if the patient is incompetent to give her informed consent for the procedure in an emergency situation with a high risk of mortality. The physician has the right and responsibility to perform necessary, potentially lifesaving, medical intervention without the written consent of the patient in an emergency situation. This is called the emergency exception to having informed consent¹.

The rationale behind emergency exceptions is to act in the best interest of the patient. In terms of a principle-based approach, the physician is giving prominence to providing benefit principles to save the life of the patient. The emergency exception is an ethically and legally valid reason for the physician to perform a medical intervention to save the life of a patient without informed consent. Note emergency exceptions may be appropriate in some conditions in which the patient is competent, but because of the emergency, the physician does not have time to get a full informed consent.

In Case 4 the physician should do the emergency medical intervention to save the patient. The physician is relying on the assumption that if the patient was competent, she would give her consent for this medical intervention. In medical ethics literature, this is called implicit or implied consent². The patient's admission to the hospital and agreement to be hospitalized imply that she would have approved the implementation of a procedure that may save her life. Implied consent is not properly informed consent as there is no real information disclosure or consent, but rather an assumption about how the patient would have decided if she had the competence to do so. Therefore, it is invalid if the patient has declared *in written* form that she refuses a particular type of treatment even if that treatment would save her life in emergency situations.

References

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²Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 7th ed. Oxford Uni. Press; 2013: 80-85.

A 70-year-old woman patient comes to the emergency unit of the hospital with intermittent chest pain for three days. In the ECG, there are nonspecific ST/T wave changes. A simultaneous cardiac enzyme level measurement shows an increase in troponin levels. The patient is admitted to the cardiology inpatient clinic and angiography is recommended by the cardiologist. However, the patient states that she does not want to make this decision without consulting his son, but his son is out of town and only to return the next day. Thereupon, it is decided to follow up with the patient medically until the next day and delay the intervention until the son is contacted. During the follow-up, the patient's chest pain increases, and she does not respond to parenteral nitrate infusion. Subsequently, ventricular tachycardia and ventricular fibrillation develop. She is defibrillated, but the ECG shows ST elevations in the inferior leads. The patient is told once again that she must get the procedure done immediately.

Ethical Issues

Beneficence, Informed consent - competent, but willing to transfer decision responsibility to a relative

Questions

How should the physician proceed?

1. Does not perform the procedure because the patient does not consent.

- 2. Asks a psychiatrist to assess the patient's competency for decision-making.
- 3. Attempts to reach the patient's son explain the situation and seeks his approval. Does not perform the procedure without her son's approval.
- 4. Since the patient's life is in danger, she proceeds to emergency therapeutic intervention that she deems appropriate without the patient's consent.

Ethical Analysis

This case is like Case 4 however, there is a significant difference in terms of the patient's cognitive situation. In Case 4 the patient is unconscious, and this justifies the physician's emergency exemption. This justification is supported by the implied consent that grounds on the willingness of the patient to apply for medical help when she was conscious.

In Case 5, the patient clearly expresses her thoughts about transferring the decision-making authority to her son and does not consent to any medical intervention without his approval. This situation nullifies the implied consent argument for this case. If the patient was not in an emergency with high mortality risk the first option would be an ethically appropriate one.

It is worth considering if the patient's competency is breached because of the stress created by the cardiac condition. Asking for physiatrist consultation to determine if the patient is competent does not seem possible because of the need for immediate medical intervention to avoid worsening of the situation. Even if this consultation could be done timely, the question of how to proceed would still prevail if the consultation result showed that the patient is competent.

Reaching out for the patient's son to ask for his consent would be a practical solution that meets the ethical requirement for respect for autonomy. His approval would give enough ethical grounds to proceed with the medical intervention. On the other hand, his disapproval would make the situation even more complicated. On these terms, the physician may rely on the principle of beneficence and her duty to avoid irreversible harm and prioritize them on the principle of respect for autonomy and may choose to make the emergency therapeutic intervention that she deems appropriate.

A 60-year-old male presents himself with angina. He mentions that he had the pain for a week, increased with effort, decreased with resting. He doesn't have any risk factors except smoking. Following an ECG and a treadmill test, he is diagnosed with high risk in Duke Treadmill score (DT-13) and down-sloping ST depression in V5-6. He is hospitalized for angiography. He mentions that he is nervous about the procedure and for this reason; 3 mg of midazolam is given. After the patient is sedated, the physician who performs angiography notices that the patient didn't sign the informed consent form.

Ethical Issues

Beneficence, respect to autonomy

Ouestions

How should the physician proceed?

- 1. The doctor should wait for the patient to wake up without performing angiography because the patient hasn't signed the informed consent form.
- 2. The doctor should give the antidote of midazolam, flumazenil, to the patient to wake him up, since he can't perform angiography without consent.
- 3. The doctor should continue the procedure without losing time.

Ethical Analysis

Schloendorff vs Society of New York Hospital, 1914 is the paradigm case that determined the right of a patient to be free from any medical or surgical intervention that she did not give open consent. The judge reported "Every human being of adult years and sound mind has a right to determine what shall be done with his own body, and a surgeon who performs an operation without his patient's consent commits an assault for which he is liable in damages. This is true except in cases of emergency where the patient is unconscious and where it is necessary to operate before consent can be obtained"¹

This legal statement is supported by the principle of respect for autonomy with the argument that any competent person has the right to make decisions regarding implementation of medical innervations on her body². Written informed consent is considered as the proof of the patient's consent in legal and ethical terms. However, it is beyond discussion that informed consent is not a mere disclosure of a set of written sentences. On the contrary, informed consent procedure involves effective communication between the patient and the physician that embraces disclosure of relevant facts listed below³:

- The condition/disorder/disease that the patient is having/suffering from
- The natural course of the disease and possible complications
- Consequences of non-treatment
- Alternative treatment options

- Potential risks and benefits of suggested and alternative treatment options
- Duration and approximate cost of treatment
- Expected outcome
- Follow-up required

After disclosure, the physician should spare time to answer questions, to enable the patient to make a considered judgment. The final step of the informed consent procedure is to get the patient to sign the informed consent form. This step is a legal requirement except for some particular conditions and has to be fulfilled before proceeding forward with the medical intervention⁴.

Reading through Case 6, it is plausible to think that a thorough communication was carried out between the physician and the patient. It is also obvious that the patient has given her verbal consent to go through angiography. However, the informed consent procedure was not finalized as the patient did not sign the form. In an emergency situation where the patient would face irreversible or serious harm if angiography is postponed, then it would be legally and ethically justifiable to rely on verbal consent and do the intervention. However, in Case 6 we do not see such an emergency.

Midazolam is a benzodiazepine that is used to sedate a person who is having a minor surgery, dental work, or other similar medical procedures and it has an elimination half-life of 1.5–2.5 hours. Its common side effects involve amnesia or forgetfulness after the procedure⁵. The antidote of midazolam, flumazenil, also has some very

common side effects such as dizziness, vertigo, and ataxia⁶. These side effects cloud decision-making procedures and breach the patient's competency. For a proper informed consent procedure, the patient should be in a clear mind state to sign the informed consent document. Trying to awake the patient with the antidote, to sign papers is not appropriate both legally and ethically. The physician should wait for the patient to wake up without performing angiography and get her signature and plan the intervention for an appropriate time.

Defenerace

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⁵Midazolam. https://www.drugs.com/mtm/midazolam.html. Accessed December 18, 2021.

⁶Flumazenil Side Effects https://www.drugs.com/sfx/flumazenil-side-effects.html. Accessed December 18, 2021.

A 75-year-old male retired internal medicine physician presents with shortness of breath. He says he has had this symptom for a month. It increases with effort, and he experiences orthopnea at night. His ejection fraction is measured to be 30% in echocardiography and N-Terminal prohormone of brain natriuretic peptide (NT-proBNP) level is calculated as 1200 pg/mL. Following the examinations, he is diagnosed with Stage-C heart failure. His medical treatment is initiated immediately. However, he requests to plan his own medical treatment since he is a physician himself.

Ethical Issues

Physician-patient relationship, juristic personality and responsibility of health institutions, duties of physicians towards patients.

Questions

How should the physician proceed?

- 1. Although the doctor knows that his patient is a retired physician, considering his vulnerability as a patient, she should not leave the treatment planning job to his patient.
- 2. The physician should discuss every step with the patient to include him in the decision-making procedure as much as possible to keep the patient compliant with the treatment.

- 3. The doctor should not let the patient intervene because she has the legal responsibility and ethical duty to plan and perform the treatment without the interference of irrelevant actors.
- 4. Doctors should respect the patient's autonomy and let him plan his own treatment considering his background.

Ethical analysis

When a patient applies to a hospital because of a health problem, she expresses her intention to accept to be taken care of in this health facility. Ethicists argue that this intention can be considered as an implied consent to be treated there. Obviously, this implied consent does not overrule the ethical obligation to obtain proper informed consent for medical interventions deemed necessary for the patients' health problems. However, it indicates that the patient is willing to have the health service provided by the healthcare facility.

Hospitals are institutional bodies that provide service via their personnel under the jurisdiction of the health law. Because of the juristic personality, hospitals can be charged with penalties in cases of proven misconduct. The legal responsibilities of the hospitals are closely linked, but not limited, with the ethical and legal obligations of their staff physicians.

This case will be addressed from two perspectives. From a principle-based ethical perspective, there is the ethical obligation of the physicians to provide benefit and avoid harm to their patients. The patient's health problem is serious and should be handled by specialists

immediately. Therefore, these two principles oblige the physicians to reject the patient's claim and proceed with the treatment if they can obtain informed consent. In terms of the respect for autonomy principle, even if the patient is a health specialist, he has already implied his willingness to be taken care of by the professionals in the hospital that he admitted himself. He has no ethical, legal, or professional grounds to claim for being in charge of curing himself by using the means of the hospital. Besides, this claim cannot be considered within the respect for autonomy principle because this principle defines and justifies the rights of a person that emerges from being a patient. It is obvious that the claim of this patient cannot be grounded on this principle since it does not root in the role of being a patient.

The second perspective focuses on the essentials of the dynamics of relationship. Successful physician-patient physician-patient relationships depend on trust and open communication among parties. Because of the vulnerable and disadvantaged position of the patient and the power asymmetry between the physician and the patient, it is physician's responsibility to initiate and drive this interaction. The physician should be able to empathize with the patient to comprehend why the patient comes up with this claim. Is it because of distrust to the competence of his physician? Does the patient feel good-for-nothing because of his disease and is naively attempting to rebuild his selfesteem? Or is it a search for recognition from his colleagues that he has been competent for some time to help patients like himself? Effective communication and emphatic approach may help the physician to reveal the patient's motives, dismantle his doubts and endorse his selfesteem to proceed with the treatment.

A 30-year-old woman presents herself for heart palpitations. She says that she has experienced palpitations for the last 72 hours. The palpitations start suddenly and are sometimes accompanied by dizziness. Following the examinations and the ECG test, she is diagnosed with Atrial Fibrillation (AF). She is recommended to undergo Transesophageal Echocardiogram (TEE) and electrical cardioversion thereafter. She is informed about the benefits and risks of these procedures. During the TEE procedure, she was not able to swallow the TEE probe due to excessive anxiety that is why the cardiologist decided to give her midazolam However, the informed consent was only obtained for TEE and electrical cardioversion, not for sedatives

Ethical Issues

Beneficence, informed consent-context/procedural

Questions

How should the physician proceed?

1. The doctor should wait for the patient to wake up without performing transesophageal echocardiography because the patient's consent does not involve sedatives.

- 2. The doctor should give the antidote of midazolam, flumazenil, to the patient to wake her up, since he can't perform transesophageal echocardiography without consent.
- 3. The doctor should continue the procedure without losing time.

Ethical Analysis

This case has similarities to Case 6 that was about not getting signed informed consent of the patient before the procedure. The major difference between Case 6 and Case 8 is that in Case 8 there is a signed informed consent, however, the content is not comprehensive enough to cover some essential components of the procedure.

As mentioned in the discussion for Case 6 a proper informed consent should contain information disclosure that involves how the procedure is going to be implemented and medications that will be given during the procedure¹. In this perspective, the use of a sedative is undoubtedly a piece of very important information that should not be kept from the patient. From a principle-based perspective, it is plausible to argue that the respect for autonomy principle is breached because of failure to disclose essential information.

On the other hand, considering the patient's severe clinical status emerging from the AF and the complexity and time-sensitivity of the TEE and electrical cardioversion, it is plausible to argue that physicians should continue the procedure to provide benefit to the patient. Moreover, leaving the procedure undone to disclose information and

starting over if consent is obtained has the risk of harming the patient. This harm may be severe and irreversible if the clinical course of the patient deteriorates.

From a principle-based approach, this case is an example of an ethical dilemma². An ethical dilemma can be present in two different ways:

- 1. A situation in which a moral agent has to do action A to comply with some ethical principles and also has to do action B to comply with other ethical principles, but action A and B cannot be done at the same time.
- 2. A situation in which the moral agent should do action A and should not do action A to comply with different ethical principles.

In ethical dilemmas, the moral agent faces moral failure regardless of her choice. In clinical ethics physicians are faced with ethical dilemmas frequently. There are several ethical decision-making frameworks to approach these dilemmas. In Case 8 the moral agent (physician) has to act in a way to comply with the respect for autonomy principle and has to act in another way to comply with providing benefit and avoiding harm principles, and both actions cannot be done at the same time. The first step in approaching an ethical dilemma is to recognize the existence of the dilemma and that either course of action will result in sacrificing at least one ethical principle or moral obligation to protect another ethical principle or fulfill a moral duty. Ethical dilemmas in clinical settings urge physicians to find the right course of action in a situation in which no solution is morally perfect. While seeking the right course of action the physician should balance the contradicting

ethical principles and make sure that the preferred action will protect more principles than the other options.

In Case 8, providing benefit to the patient can be balanced with higher priority compared to respect for autonomy and the procedure can be resumed as clinical evidence suggests. However, the physicians should inform the patient as soon as possible to avoid further breach of her autonomy and be transparent about the rationales of their action.

From a virtue-based perspective, this case represents fewer ethical problems compared to the principle-based approach. Virtue-based medical ethics argues that the main aim of medical interventions is to provide benefit to the patient and the physician is a moral agent who knows what is moral to do in case of an ethical dilemma. In Case 8, this approach drives the physician to overlook the shortfalls in information disclosure and take a soft paternalistic approach³ to provide benefit to the patient.

References

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³Soft paternalism is medical intervention to provide benefit or avoid harm in cases in which patients are either poorly informed about the procedure or no informed consent is taken because of their temporary limited capacity to rational deliberation and free choice.

A 70-year-old female presents to the clinic at 08:30 a.m. with severe angina pectoris. She says that she had myocardial perfusion scintigraphy revealing ischemia in another city a few days ago. Due to ischemia, coronary angiography is recommended. The patient mentions that she came with her daughter and son-in-law and rented a car and has to hand over the car no later than 12 a.m. For that reason, she requests her physician to perform angiography and to leave the hospital as soon as possible. She is informed that this procedure can't be performed before a negative COVID-19 nasopharyngeal swab test result and the results are out in 6 hours. Should the procedure be delayed or performed before swab test results are out?

Ethical Issues

Decision making, rational concern

Ouestions

How should the physician proceed?

- 1. Physicians shouldn't perform the procedure because doing so before having test results is too risky for other patients' and healthcare professionals' health.
- 2. Physicians should accept a patient's request and perform the procedure as soon as possible to provide benefit to the patient.

Ethical Analysis

The decisions that taken by physicians in clinical settings ground on their professional role that aims to provide healthcare service to their patients. Hence, any decision should be considered from two aspects:

1. Scientific evidence

2. Moral obligations

Scientific evidence is used to determine the appropriate medical intervention to enhance the health status of the patient. The physician's competence in her profession enables her to make the most accurate deliberations for planning the medical interventions based on scientific evidence. Moral obligations require the physician to take principles of medical ethics, deontological obligations, and moral values into account while providing the needed health service. These two aspects constitute the basic grounds for decision-making in clinical settings.

Depending on the specifics of the case and the context it is in, social, cultural factors and patient preferences can also be considered. However, frequently, these factors may imply contradicting decisions. The four-topics method suggested by Jonsen et al. provides a handy tool for physicians to achieve reasonably considered decisions in clinical ethics¹. This method introduces four essential categories to visit while deciding:

- Medical indications
- Patient preferences and values

- Quality of life
- Contextual features

"Medical indications" is the first step. It is led by the physician. The clinical status of the patient is identified, options for diagnosis and treatment are considered with special emphasis on the patient's capacity of medical benefit from the considered interventions. In this step, the physician refers to her scientific and ethical competence. The second step depends on the patient's preferences. This step is led by the patient since her preferences depend on her definition and understanding of a good life. This is the area in which the patient exercises her autonomy. The third step is about the impact of the considered medical indications and patient's preferences on the quality of life of the patient. Although quality of life decisions relies heavily on a patient's preferences, physicians' thoughts are equally important because of their professional expertise to predict the impact of the medical intervention. The fourth step consists of contextual features that affect the decision. Here, the physician considers the context in which the case is taking place and checks if the suggested decision complies with the specific needs and requirements of the context such as fair allocation of resources or confidentiality issues².

In Case 9, the physician and patient are certain about the medical indication of coronary angiography. However, a contradiction arises in the second step, which is patient preferences. The patient clearly states that her preference is to do the intervention without any delay. The patients' preferences should be evaluated for two main qualifications. The first one is the reason for the preference. The physician should see

if the patient's preference results from rational concerns³ or justified norms; or a false belief that contradicts with scientifically proven facts. If the preferences ground on the latter one, then the physician should make sure that the patient's competency in decision-making has deteriorated because of her medical situation. If one of them is the case, then this step may lose its priority in the decision-making process.

In Case 9, the patient's competency for decision-making is questionable since the premises of her preferences are irrational. The reason for her preference to have the procedure immediately depends on a trivial practical need (handing over a rental car by her son-in-law) which may be considered irrelevant by any rational being who can understand the concept of pandemic and implications of a positive test result on the planned medical interventions and severity of the medical condition.

The quality of life step validates the execution of medical indication after the negative COVID-19 test result. The last step, contextual features, is particularly important for this case. During public health emergencies, such as pandemics, the physicians must consider some factors that would not be considered in normal times. One of the factors that come with pandemic and must be considered in Case 9 is balancing the benefit for the individual patient to benefit to public health. Proceeding with the medical intervention without a negative COVID-19 test may jeopardize the well-being of other patients and the healthcare staff. Therefore, the reasonable choice is to wait until the negative test result arrives.

Note that another discussion would be needed about the right course of action if the patient tested positive for COVID-19. If the patient is asymptomatic for COVID-19 and has no sign of serious COVID-19 disease like lung infection and if consultation by experts reveals no elevated risk because of COVID-19, should the physicians perform the medical intervention by taking extra protective precautions for themselves or should they postpone the procedure for the sake of protecting health personnel and other patients?

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³Ploug and Holm define rational concern as follows: "A person X has a rational concern about a future state of the world Y if and only if:

- 1) X believes that Y is undesirable,
- 2) X believes that Y may occur,
- 3) X can provide a coherent justification for how Y may result from the current state of society,
- 4) the occurrence of Y is supported/not ruled out by existing scientific evidence, and
- 5) the undesirability of Y is supported/not ruled out by a value-system which satisfies minimal

requirements of public reason."

(Ploug T, Holm S. The right to refuse diagnostics and treatment planning by artificial intelligence. Med Health Care Philos. 2020;23(1):107-114. doi:10.1007/s11019-019-09912-8)

Ms. K.D. is a young woman in her twenties and a plaza worker. She has been a heavy smoker for several years. She applies to a training and research hospital cardiology clinic with tachycardia and dizziness. PVCs are observed after the patient's examinations and tests. Electrophysiology studies (EPS) and ablation are recommended for the treatment. Ms. K.D. who reads the informed consent form, asks whether the residents also perform the procedure since it is a training and research hospital. It is stated that residents can also enter the procedure for training purposes and can sometimes be the primary operator. The patient wants her procedure to be done by a physician who has the academic title "Professor Doctor", and no residents should be involved in the procedure.

Ethical Issues

Patient rights

Questions

Does the patient have the freedom of choosing a physician under certain rules? Is freedom of choice limitless?

- 1. Patients have the freedom of choosing a physician in any situation.
- 2. Patients have freedom of choosing physicians, but it is not limitless.
- 3. A patient does not have freedom of choosing a physician in training and research hospital

Ethical analysis

The fundamental aim of medicine is to help the needy to recover their health status by providing health care. Hospitals are the institutions that are developed to meet this aim. Although hospitals have evolved to provide training and research in time, the main objective of providing health care is maintained. This thought is supported by the following statement in the World Medical Association's Declaration of Geneva; "the health of the patient is the main consideration of physicians".

Patients' rights and preferences have a significant weight in the way healthcare is planned and provided. World Medical Association Declaration of Lisbon lists the rights of the patient as follows:

- 1. Right to the medical care of good quality
- 2. Right to freedom of choice
- 3. Right to self-determination
- 4. The rights of the unconscious patient
- 5. The rights of the legally incompetent patient
- 6. Procedures against the patient's will
- 7. Right to information
- 8. Right to confidentiality
- 9. Right to health education
- 10. Right to dignity
- 11. Right to religious assistance

Right to freedom of choice is defined as "choosing freely and changing her physician and hospital or health care service institution, regardless of whether they are based in the private or public sector"².

This definition clearly states that patients have the right to choose their physician in any health care facility. However, this right is not absolute or limitless. Patients' freedom to choose is limited by contextual factors such as the quality and quantity of the health care staff in the hospital, the availability of the physicians who are specialized for the unique medical needs of the patient, or the workload of the physician who is chosen by the patient. Apart from these practical contextual factors, physicians and hospital administrations have the moral obligation to ensure the sustainability of health care services. This moral obligation is grounded on the ethical principle of utility³. Healthcare facilities and physicians are not only responsible for providing benefits to individual patients, but also maintaining the utility of healthcare services for all people in need. These two responsibilities may be limiting factors for the freedom of choice of a single patient especially in emergency services or in public health services.

In the historic evaluation of hospitals training of physicians and other healthcare workers and clinical research activities have gained considerable weight. Currently, training and research have become a fundamental function of some hospitals. It is plausible to think that patients who choose to admit to a training and research hospital *prima* facie consent for the involvement of medical students and residents in their health care provision. This argument is invalidated by the fact that training and research hospitals have the capacity to provide advanced

medical services and patients who are in need of these services may not have another option other than one facility. Second, even though medicine can be best thought of by the bedside, the involvement of residents and medical students in inpatient care cannot overcome the privacy and rights of the patient. Third, the responsibility of physicians to train and mentor residents is hierarchically inferior to the moral obligation to provide health benefits to the patient.

In Case 10, effective and transparent communication between the principal physician and the patient would be essential to balance the right of the patient to choose (or refuse) her health care providers and the contextual factors that limit the execution of this right while maintaining training of the medical students and residents.

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³In Jeremy Bentham's words principle of utility "is meant that principle which approves or disapproves of every action whatsoever, according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question" (Brink, David, "Mill's Moral and Political Philosophy", The Stanford Encyclopedia of Philosophy (Winter 2018 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/win2018/entries/mill-moral- political/>.)

Mr. A. is a 32-year-old football player in a professional club. He comes to the cardiologist at the occupational health center of the club for a routine compulsory health examination. The cardiologist does an effort test after the anamnesis and physical examination. There are ischemic changes in the effort test. The patient does not want the club to know about the test results because he thinks it will ruin his career.

Ethical Issues

Confidentiality, dual roles of physicians

Questions

How should the physician proceed?

- 1. The physician should report to the club for any possible complication in future.
- 2. The physician should be loyal to the patient and keep the information confidential.

Ethical analysis

Confidentiality is a principle of medical ethics to keep the information about a patient obtained during the course of a professional relationship secure and secret from irrelevant third parties. Confidentiality is also defined as a right of the patient that should be respected even after her death¹.

The ethical responsibility of physicians to keep the private information confidential is subject to discussion in settings where the physician has a dual role. Military physicians, forensic medicine specialists, and occupational health professionals are positions in which physicians have dual roles, that is having a responsibility to their patients as health service providers and to their professional partners as an interlocutor of their contracts.

The dual role of physicians doesn't waive their ethical responsibility to keep patient information confidential. However, it limits and changes the context of this responsibility². For example, laws urge physicians to report any suspicion of a crime or threat to public health whenever they detect one. This legal responsibility, although it limits the patient's right to confidentiality, is in effect regardless of the settings where professional service is provided. The disclosure of confidential information to third parties may be justified due to the context in which private information is obtained. Apparently, an occupational health service physician is in a different professional position than a physician operating in a hospital or a private practice. The physician's responsibilities to a person with health problems in occupational health care service and in a usual healthcare facility are different. This difference justifies disclosing confidential information to a third party that may be considered irrelevant if the disclosed information was gathered in a hospital. Another justification for disclosing private information that is confidential in normal settings would be to contribute to a sustainable workplace and to avoid harm to other workers or the worker whose information is disclosed. The physician in the occupational health center is responsible for suggesting changing the workplace of a worker if there are serious health concerns. Disclosing the information about a worker with psychiatric problems who expresses her intention to harm another person or damage the workplace can be considered ethically permissible on the grounds of avoiding harm to third parties.

On the other hand, some precautions may be taken to avoid excessive breaches of confidentiality in occupational health services. The employees should be clearly informed that the physician in charge is not bound with the conventional responsibility of confidentiality that the patients are used to in healthcare facilities. Together with this information, the consequences of the dual role of physicians on their privacy and confidentiality should be explained to reach a mutual understanding.

In this case, the physician has the ethical responsibility to inform the club about the health problems of the player and provide information to the player about the risks and treatment options for the cardiac problem.

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¹Bourke J, Wessely S. Confidentiality. BMJ. 2008;336(7649):888-891. doi:10.1136/bmj.39521.357731.BE

²Beauchamp TL, Childress JF. Principles of Biomedical Ethics. 8th ed. Oxford Uni. Press; 2019:250-251.

A 45-year-old male patient admits to the cardiology outpatient clinic. He states that he has a strong family history of CAD that her father died at the age of 40 and her uncle at the age of 45 from sudden heart attacks. The patient has been smoking for 19 years. The routine controls show no health problems. Still, the patient wants to have coronary angiography to eradicate any risks of CAD since he feels anxious about having the same faith with his father and uncle.

Ethical Issues

Role and authority of physician in decision making, avoiding unnecessary harm

Questions

Should the physician fulfill the patient's request to have an angiography?

- 1. The physician explains the patient's control results to the patient in detail. He says that the patient's anxiety is normal, but that there is no serious problem. He explains the risks of the angiography to the patient and does not perform the angiography.
- 2. Although there is no medical indication, the physician performs the angiography to respect the patient's decision and satisfy his fears.

Ethical Analysis

This case represents ethical issues emerging from irrational or unrealistic demands of patients from the physician. The ethical analysis for this case is based on the physician-patient relationship and how different models of physician-patient interactions would lead the physician to act. Ezeikel J. Emanuel et al. defined four physician patient relationship models¹. Each model is placed on a spectrum that has highest weight on patient preferences on one end and physician authority on the other.

The paternalistic model is the one that represents utmost power to physicians while deciding for diagnostic or treatment purposes. Because of their higher hierarchical position in the paternalistic model, physicians are thought to be entitled to take decisions on behalf of their patients. The paternalistic model attributes a passive role to patients that is limited to accepting what is imposed by the physician. This model ignores the autonomy of the patients and reduces them to a passive recipient position. The paternalistic model is largely abandoned by contemporary clinical ethics apart from particular contexts in which the patient has no ability to use her autonomy and a decision is to be made immediately. Being under the influence of drugs or a comatose state that require immediate medical intervention and limit the competence of the patient are some of the examples of the settings which justify paternalistic patterns in decision making.

The second model that Emanuel defined is the informative model. This model is also called the scientific engineering or consumer model. As

implied by these titles, the informative model appears on the opposite end of the spectrum by giving all decision power to the patient and reducing the physician to a technical person that is obliged to provide all relevant information to the patient and execute the medical intervention that is chosen by the patient. This model places significant weight on patient autonomy while neglecting the moral agency of the physician. In the current case, the proponents of the informative model would plausibly argue that the physician should do the angiography as demanded by the patient. The only prerequisite would be to make sure that the patient understands the potential risks of the intervention and consents to take these risks.

The third one is the interpretive model. This model is placed near the end of the spectrum where the paternalistic model is placed. During the interaction with the patient, the physician gathers information about values, preferences, and the concept of a good life of the patient. This information enables the physician to offer the most convenient medical intervention that fits the lifestyle and moral values of the patient. The main role of the physician is to assist the patient to recognize her values and her concept of a good life and drive her towards the choice that will meet them. In other words, the physician is obliged to "help to interpret the patient's values for the patient." In the interpretive model, the patient is considered ignorant or partially aware of her own values who needs the physician's assistance to realize them. Obviously, this approach places the patient in a lower hierarchical position than an autonomous adult who is capable of making reasonable choices without the help of an expert. In the current case, a physician who prefers the

interpretive model would try to learn more about the patient and help the patient to make the rational choice which is not doing the angiography.

The last model is the deliberative model. This model portrays the physician as a friend or a teacher who assists the patient to identify the most health-related values relevant to the medical situation of the patient. The physician and patient deliberate which values should be taken into consideration and discuss the weight of each moral value in the context of the medical situation of the patient. The friend or teacher role of the physician enables her to indicate the best medical choice to the patient without breaching the patient's right to autonomy or disdaining her capacity to recognize her own values. The deliberative model places the physician and the patient in the same hierarchical level without ruling out the professional competency of the physician or the capacity of the patient to decide. Because of this settlement, the deliberative model is the most preferred type of physician-patient relationship in contemporary clinical ethics.

In the current case, a physician who approaches the patient from the perspective of the deliberative model should give time to understand the apprehensions of the patient that lead to insistence to have the angiography without the existence of any medical indication. After having a full comprehension of the concerns of the patient, the physician should offer alternative solutions to overcome them as a friend or a teacher would do. Note that, the deliberative model does not suggest the physician execute the angiography if the patient insists on

his decision. The physician has the right to refuse to perform any medical intervention lacking medical indication.

References

¹Emanuel EJ, Emanuel LL. Four Models of the Physician-Patient Relationship. JAMA. 1992;267(16):2221–2226. doi:10.1001/jama.1992.03480160079038

A 45-year-old woman applies to the polyclinic with a complaint of shortness of breath for the past 3 months. She states that her complaint increases with effort, while also having difficulty in climbing the stairs. ECG corresponds with left ventricular hypertrophic changes accordingly hypertrophic cardiomyopathy is detected echocardiography. The interventricular septum is detected to be 24 mm (<15 mm). The patient says that she had 4 children, 1 girl and 3 boys, but her oldest son died of a sudden heart attack while exercising three years ago. The youngest child is now 5 years old and the oldest one is 17. Echocardiographic screening is also recommended for the children of the patient owing to hereditary features of the disease. The patient does not want to have her children to be screened, saying that they may panic from echocardiographic screening because of the death of their oldest brother

Ethical Issues

Surrogate decision making, role and authority of physician, minors' capacity to assent

Questions

Should the physician explain the situation to the patient's children and perform an echocardiographic scan?

- 1. The physician explains that screening is necessary and that it is the most important way to prevent a possible risk and tells the patient's children that screening should be done.
- 2. The physician respects the patient's decision. At the patient's request, he does not explain the situation to her children and does not do echocardiographic screening.

Ethical Analysis

Patients have the right to refuse to initiate or continue any medical intervention at any stage of their treatment. Patient rights are closely linked with fundamental human rights. The right to autonomy that gives the authority of self-deliberation to individuals provides the ethical ground for the patients to refuse a medical intervention that is deemed necessary by the medical professionals. The World Medical Association Lisbon Declaration on patient rights defines the right to self-determination of the patient as follows:

- "a. The patient has the right to self-determination, to make free decisions regarding himself/herself. The physician will inform the patient of the consequences of his/her decisions.
- b. A mentally competent adult patient has the right to give or withhold consent to any diagnostic procedure or therapy. The patient has the right to the information necessary to make his/her decisions. The patient should understand clearly what the purpose of any test or

treatment is, what the results would imply, and what would be the implications of withholding consent."

Children are among the group of vulnerable populations who lack the competency to self-deliberation. That is why parental consent is required for any medical intervention before the age of eighteen. The reason for giving the right to decide for their children to parents is the general acceptance that parents act for the best interest of their children. The ethical legitimacy surrogacy of parents depends on four factors²:

- 1. They should be competent to make a reasonable decision
- 2. They should have sufficient information and cognizance about the medical situation that requires decision-making
- 3. They should be stable emotionally and psychologically
- 4. They should always act to protect the best interest of the patient child

During the interaction with the parents, the physicians have the responsibility to provide all relevant information with the current medical situation that would help the parents to make a reasonable choice while the parents are ethically obliged to place the best interest of the sick child over any other concern. If the physicians suspect that the parents of the sick child don't carry one or more of the four factors to surrogate decision making or if they have scientific evidence that the decision of the parents would harm or risk the health of the child, then they have the exclusive legal right and ethical obligation to intervene to overrule the decision of the parents³.

Children, although they are not legally authorized to make decisions for themselves, should be informed about their health status and the suggested medical interventions. The content and details of the disclosed information should be appropriate for the children's maturity level, intellectual capacity, and emotional situation. The ethical obligation for this disclosure grounds the principle of respect for autonomy and the deontological ethical norm that urges us to treat human beings always as an end and never as only a means to an end⁴. The recognition that children achieve varying degrees of maturity and capacity to self-determination is represented by the rule of sevens⁵. According to the rule of sevens the capacity to self-determination of a child is very similar to an adult after the age of fourteen⁶. In the discussed case, the oldest child is 17 years old. If there are no particular reasons that becloud the self-determination capacity of this teenager, then he should be told about the health risks he carries and the medical indication for the diagnostic angiography. This disclosure may warn the adolescent about the health risks he carries and may avoid him to take excess risk in his daily activities. Hence, the disclosure is not only justified by respect for autonomy or treating every human being as an end in itself, but by the principle of avoiding harm as well. The younger children should also be informed in a way that is suitable for their ages. Note that neither of the children's assent will be legally sufficient without the written informed consent of the parent.

This case represents a parent who refuses the diagnostic intervention on the basis of avoiding psychological harm to her children. However, there is scientific evidence suggesting that her refusal brings serious risk to her children's health by taking away their chance to be diagnosed early. Hence, it is plausible to say that the parent's decision is not in the best interest of her children. On the other hand, she has a point regarding the psychological stress and anxiety that the echocardiography would introduce to the children. However, the risk-benefit analysis still requires medical intervention to be pursued. In this case, instead of refusing a potentially beneficial medical intervention, a mechanism to avoid or manage stress and anxiety that would come together with it should be suggested. The trust between physician and parent and transparent communication would be the main path to the solution.

References

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³Fleischman AR. Pediatric Ethics: Protecting the Interests of Children. Oxford, UK: Oxford University Press; 2016. https://oxfordmedicine.com/view/10.1093/med/9780199354474.001.0 001/med-9780199354474. Accessed December 18, 2021.

⁴Kant, Immanuel. Critique of Practical Reason. Translated by Thomas K. Abbott, Dover Publications, 2004.

⁵Rule of Sevens: Children younger than 7 years are assumed to lack the capacity to self-determination. 7–13 years old children's capacities are considered to be improved to make some case-based decisions, children over 14 years are thought to have a similar capacity to adults to make decisions on their health. Note that the capacity to self-determination in these age ranges vary significantly due to several factors such as

cognitive development, physiological and emotional factors, stress, level of maturity etc.

⁶Diekema DS, Mercurio MR, Adam MB, eds. Clinical Ethics in Pediatrics: A Case-Based Textbook. Cambridge: Cambridge University Press; 2011; Page 8 doi:10.1017/CBO9780511740336

An 80-year-old male patient applies to the cardiology outpatient clinic with his son. According to his son's words, an exercise ECG test was performed in another hospital with a complaint of chest pain, and he was recommended to undergo coronary angiography. However, the patient had doubts about the procedure and the accuracy of the diagnosis, so he decided to refuse it. Since the patient's symptoms persisted, they decided to come to a different hospital and see if the diagnosis was accurate.

The cardiologist checks over the previous exercise ECG test. Present cardiologist determines that the Duke Treadmill score is measured as high risk and observes down-sloping ST depression. After interpreting these results and examining the patient herself, the doctor says that the coronary angiography recommendation of previous doctors was accurate, and the physician recommends the patient to have the angiography done as soon as possible. However, the patient again refuses to have angiography because he thinks the current doctor misdiagnosed the situation as the previous one did.

Ethical Issues

Competency, respect for autonomy, risk assessment

Questions

How should the physician proceed?

- 1. The cardiologist should respect the patient's decision without any further interference
- 2. The cardiologist once more explains the severity of his condition and tries to persuade the patient to have the angiography thinking that it is her job to help this patient.

Ethical Analysis

The ethical issue in this case represents a dilemma for the physician to respect and obey the patient's decisions or to urge the patient to accept the recommended medical intervention. Accepting the patient's decision and acting accordingly is an ethical and legal obligation for the physician if several factors are met. The first factor is the level of competency of the patient. A person whose intellectual and psychological features are adequate for self-determination may fail to make reasonable choices because of an emergent clinical situation or hearing bad news about prognostics of her health condition. Being at senior age may provoke loss of full capacity in some situations. Therefore, before withholding a medical intervention due to the request of the patient, the physician should check if one or more of these incompetency factors exist. Asking for psychiatric consultation may be a good choice to make sure about the level of competency of the patient. If the physicians agree that the competency for self-determination of the patient is diminished, then due to the ethical principle of providing benefit to the patient, they may need to use alternative communication skills to persuade the patient for the execution of the procedure and take a written informed consent form the patient's legal guardian.

If the consultation and evaluation process reveal that the patient is fully competent to self-determination, then the physician once more faces the ethical dilemma between respecting the autonomy of the patient and providing benefit. In ethical and legal terms an appropriate informed consent procedure should include the following steps:

- 1. Full disclosure of all relevant information about the clinical condition, risks and benefits of the medical intervention, alternative procedures, and consequences of withholding the medical intervention should be provided
- 2. The information should be conveyed with simple words, medical terms and long complicated sentences should be avoided
- 3. The written consent form should be designed in a reader friendly way that would make it easy for the patient to read
- 4. The physician should use effective communication skills to check if the patient understands the disclosed information and encourage the patient to ask questions about any uncertainty
- 5. Enough time should be given for the patient to contemplate and make a rational choice
- 6. Factors that becloud the voluntariness and free will of the patient should be watched and avoided as much as possible

All these factors are necessary for the patient to make a rational choice¹, that is a decision that would maximize the patient's net expected benefit. The dilemma emerges, when there is scientifically proven evidence that the patient's decision will not maximize the medical

benefit or will harm the patient. In general, it is a legal and an ethical obligation for the physician to respect the decision of the patient if all the factors about informed consent are met. However, clinical ethics requires a diligent approach to each case before referring to general principles. The physician must focus on the specifics of the context of the case to determine the morally right course of action. Beauchamp and Childress suggested a risk evaluation matrix to evaluate the specifics of the case². (Table 1)

		Probability of the risk		
			high	low
Magnitude	of	major	1	3
the risk		minor	2	4

Table 1: Risk assessment by considering probability and magnitude of the case

If patient's decision to withhold the suggested medical intervention will probably put the patient in box one, that is a clinical condition with high risk of mortality and/or morbidity, then due to the principle of providing benefit, the physician may prefer to communicate with the patient once more to make sure that the patient is fully aware of the consequences of her decision. The same course of action may be plausible for cases that fall in box three, where the magnitude of the risk of mortality or morbidity is high, but it is not very likely to happen. The dilemma

between respect for autonomy and providing benefit (or avoiding harm in some cases) is lower for boxes two and four. Physicians may act more comfortably according to the decision of the patient since the medical consequences of doing so are more tolerable for the patient.

References

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²Beauchamp TL, Childress JF. *Principles of Biomedical Ethics*. 7th ed. Oxford Uni. Press; 2013.

A 98-year-old man comes to the hospital with complaints of coughing and dyspnea. The patient's history reveals that he had chemotherapy and radiotherapy for end-stage lung cancer. It is also learned that due to his cancer's stage, additional treatment was not recommended. Recently, he had poor oral intake and lost about 20 kilograms.

The patient's ejection fraction is detected 15% in echocardiography. Pharmacological treatment for heart failure is planned (beta-blockers, ACE inhibitors, MRA, diuretic, SGLT-2 inhibitor). 3 months later, the patient once again applies to the cardiology clinic. He has well-responded to the treatment clinically. He states that one of his relatives, who is also a cardiologist, told him about an Implantable Cardioverter Defibrillator (ICD) device that could be implanted on heart failure patients to relieve their symptoms. The patient asks the cardiologist to have an ICD implanted as well.

Ethical Issues

Futile treatment, effective use of scarce resources

Questions

How should the physician proceed?

- 1. The physician should inform the patient that considering his medical condition applying the ICD would give more harm than benefit and that implementing ICD would be a futile intervention.
- 2. The physician should try ICD due to the patient's preference.

Ethical Analysis

This case represents a situation in which the physician must make a decision about the futility of a medical intervention. Futile treatment refers to a medical intervention that will neither improve the current health situation of the patient nor will contribute to the treatment of the disease¹. In other words, the futility of medical intervention is discussed when the current scientific evidence shows that the proposed intervention will not benefit the patient but will possibly burden the patient with unnecessary pain and harm.

Futile treatment discussions have two aspects. The first one is end-of-life decisions. This aspect focuses on withdrawing life-sustaining treatment from a patient that no longer has the capacity to return to a normal life. Decisions about patients in persistent vegetative states who are kept alive by life support systems are in this group. The second aspect is withholding or withdrawing treatment from terminally ill patients who have no medical capacity to benefit from the proposed medical intervention. Case 15 is about the second aspect of the futile treatment concept.

Futile treatment decisions have qualitative and quantitative components². The quantitative or factual component is based on scientific evidence about the vainness of the medical intervention. This component is mainly led by physicians because they have clinical experience and knowledge about the current scientific evidence. The second component is the qualitative component that places the emphasis on the patient's concept of a good life and moral values. The qualitative component is led by the patient or surrogate decision-makers if the patient is incompetent. Each person has a unique perspective of good quality of life. A life that is considered not worth living by one person may be acceptable for another. The beliefs or moral values of one person may drive her to stay alive no matter what, while another person may find it more valuable to die in a setting of her choosing where she can bid her loved one's farewell. The quantitative aspect of futile treatment decisions gives place to individual choices and preferences.

There is a third component of futile treatment decisions which is about justice and fairness in the allocation of scarce resources. End-of-life treatments or high technology cardiologic medical interventions are among scarce medical resources. The scarcity urges health authorities and physicians to set norms for fair allocation. There are different approaches to setting priorities and norms for fair allocation of scarce resources. Merit, medical utility capacity, urgency, and severity of medical need, and first come first served are some of these approaches. The utilitarian theory is the most frequently used approach that prioritizes the maximization of benefit for the maximum number of

people by placing emphasis on providing scarce medical resources to the ones with the highest capacity to benefit³.

In this case, the decision about withholding treatment is considered futile by the physician. The patient does not agree with his cardiologist because he has received opposing expert opinions from another source. Usually, in ethical dilemmas about futile treatment decisions, the tension is between the qualitative and quantitative components, that is scientific evidence versus individual values and preferences. However, this case represents a different dilemma: confusion about the interpretation of scientific evidence in a case-based approach. The cardiologist who gave the second opinion about the ICD that could be implanted on heart failure patients to relieve their symptoms was right in general terms. However, general knowledge is not enough to decide futility in particular cases. Considering the incurable end-stage cancer and expected life span and taking into account the risks of implementation of ICDs, this medical intervention may give harm rather than any benefit to the patient. The suggested approach, in this case, would be to disclose relevant information with reference to the patient's current health situation to dissolve his doubts. However, after full disclosure and transparent communication, if the patient persists on his decision, the physician cannot be forced to perform the medical intervention that is "patently futile and excessively burdensome to the patient"4.

References

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³Ekmekci PE, Arda B. An evaluation of justice and right to health in the frame of basic ethical theories. Turkish Clinics J Med Ethics. 2015; 23(1): 6-21.

⁴The Committee on Bioethics (DH-BIO) of the Council of Europe. The Guide on the decision-making process regarding medical treatment in end-of-life situations. 2014.

A 56-year-old male patient is being followed for hypertension. The patient is a civil engineer and works at a construction site outside the province. He was issued an official report from the hospital that states that he has to take the prescribed antihypertensives for one year. The report expired and his pills are over. Because he is in a remote area, he calls his doctor and says that he is out of medication and wants a new prescription to take his pill. When the doctor offers him an appointment, he says he won't be able to come because of his work. He asks the doctor to renew the report for the prescription without seeing him in person. The patient states that he is satisfied with his current medication and that there are no side effects. He notes that he regularly measures his blood pressure, and it is under control. He adds that the headache has passed too¹.

Ethical Issues

Virtual consultations, non-maleficence, role and responsibility of the physician

Questions

How should the physician respond?

1- The physician should prescribe the medication again at the request of the patient to respect his choice.

2- The physician should reject the patient's request without checking up on the patient himself to avoid any harm and malpractice.

Ethical Analysis

The ethical issue, in this case, represents a dilemma for the physician to respect the patient's virtual consultation request. Today, "instant messaging/calling app" consultation is very common in physicianpatient communication. Currently, patients prefer to receive the "best health care service in the shortest time". In other words, the approach of "time is everything, and technology should be used in the most efficient way for time management" comes to the forefront for patients. There are other reasons underlying patients' virtual consultation requests besides efficient time management. These are; the examination fees, refraining from entering health centers, or going to these centers by public transport due to the risk of contamination during the COVID-19 pandemic. However, the most basic issue in the practice of the profession of medicine is that the doctor sees her patient in person to provide the most appropriate health service. It is essential for the physician to communicate with the patient one-on-one in order to make the correct diagnosis or to avoid mistakes in the follow-up of a diagnosis and treatment. Virtual consultation increases the risk of error and causes ethical problems such as violating the non-maleficence principle, damaging the informed consent elements, and malpractice. Virtual consultation increases the risk of malpractice by causing or permitting wrongdoing which may be initiating or sustaining a futile or harmful treatment. For this reason, using the patient's online consultation request as a criterion in order to fulfill the obligation to provide benefit causes them to fail to comply with the principle of nonmaleficence

The other ethical problem of virtual consultation is damaging the informed consent elements. The elements of informed consent are as follows²:

- Competence to understand and decide
- Voluntariness
- Disclosure of relevant material information
- Recommendation of a plan
- Understanding the information and the recommendation
- Deciding in a favor of a plan
- Authorization of the chosen plan

In online communication, the physician cannot be sure whether the patient understands the information conveyed to him. Especially the limiting conditions for understanding such as illness, irrationality, and immaturity are not easy components to detect through a "instant messaging/calling app" consultation.

The last ethical problem, in this case, is the probability of malpractice. To make out a successful claim of medical malpractice, a patient alleging medical malpractice must generally prove elements such as³:

 A breach of duty by a failure of the treating doctor to adhere to the standards of the profession, A causal relationship between such breach of duty and injury to the patient.

The standards of the medical profession require the physician to see and evaluate the patient in person. If this step is ignored, and examination is performed virtually, it would be plausible to argue for the existence of a causal relationship between the virtual examination and the harm that occurred. Therefore, a simple and well-intentioned "instant messaging/calling app" consultation may impose legal allegations on the physician.

Another problematic aspect of maintaining online communication with the patient is, it obliges the physician to be available 24/7, like a call center. On the basis of physician rights, physicians are not obliged to be available all the time to respond to the needs of any patient. The unconditional support of online physician consultation may possibly cause several ethical and legal problems.

References

¹Some health systems permit the health care providers to issue an official report for chronic disease patients to retake their pills when they are over. The problem in this case would be in question when this official report expires.

²Beauchamp TL, Childress JF. "The elements of informed consent." *Principles of Biomedical Ethics.* 8th ed. Oxford Uni. Press; 2019:80

³Bal BS. An introduction to medical malpractice in the United States. *Clin Orthop Relat Res.* 2009;467(2):339-347. doi:10.1007/s11999-008-0636-2

A 50-year-old male patient is admitted to the cardiology clinic where he has been followed for hypertension and a cyst in the kidney. He has chest pain that spreads to his left arm and back. Cardiac scintigraphy was done, and severe ischemia was observed. An urgent coronary angiography is recommended.

Laboratory tests are performed, and the Glomerular Filtration Rate (GFR) value is determined to be 35mL/min that indicates kidney dysfunction. The opaque substance that will be given during angiography has the risk of further disrupting kidney function and causing acute kidney failure. Considering the high risk of acute renal failure, a nephrologist may be needed, but there isn't one in the hospital. The physicians explain to the patient his health situation, risks, and potential benefits of the intervention and suggest transferring him to a more advanced healthcare center nearby, where probable complications could be managed. However, the patient insists on being treated here because he trusts this hospital and his doctors here for such an invasive procedure.

Ethical Issues

Risk-benefit assessment in emergency, patient rights

Questions

How should the physician proceed?

- 1- The physician should consider the complications that may occur during and after the treatment. They should transfer the patient to an advanced healthcare center that has a nephrologist.
- 2- The physician should consider the urgency of the situation and the patient's wishes. He should immediately do the coronary angiography.

Ethical Analysis

The four-boxes method that was explained in Case 9 will be used for this case to discuss what a reasonably considered decision would be. (Table 2)

The	The Definition of	The Content of Case 17 by
Category	Category	Category
Medical	- The clinical status	-The clinical status of the
indications	of the patient is	patient shows that there is a
	identified	need for coronary
		angiography. However, the
	-Options for	kidney dysfunction of the
	diagnosis and	patient is a preventing factor
	treatment are	for angiography due to the risk
	considered with	of acute kidney failure.
	special emphasis	
	on the patient's	
	capacity of medical	

	benefit from the medical interventions	
Patient	-Patient's	-Patient's preference is being
preferences	preferences depend	treated in the hospital where
and values	on his definition	there is no nephrologist. He
	and understanding	priorities trust in his physicians
	of a good life and	in decision-making.
	his moral values	
		-The patient is competent and
	-The area in which	free to mention his wishes;
	the patient	however, his concerns are not
	exercises his	rational since the decision-
	autonomy	making process has some
		errors of calculation or
		reasoning. The error he is
		conducting is that the relevant
		facts indicate acute kidney
		failure, and his reasoning
		ignores these facts.

Quality of life

- -The impact of the considered medical indications and patient's preferences on quality of life of the patient
- -Physicians'
 thoughts are
 equally important
 on quality-of-life
 decisions because
 of their
 professional
 expertise to predict
 the impact of the
 medical
 intervention

- -The considered medical indication's risks and patient's preferences are not compatible with each other
- When evaluating the appropriateness of coronary angiography, it is important to consider how it will affect the patient's quality of life. Because the quality-of-life decisions have strong subjective components, the patient's own preferences are important. In Case 17, the patient's current views on the matter do not comply with his wellbeing; on the contrary, he makes a choice that may reduce the quality of life; which has been proven by the scientific facts and the professional expertise of the physician.

Contextual	-The physician	-The context in which Case 17
features	considers the	is taking place has no notable
	context in which	features such as economic,
	the case is taking	religious, cultural factors or
	place and checks if	confidentiality issues.
	the suggested	However, there is a specific
	decision complies	contextual feature in this case
	with the specific	which is the impact of the
	needs and	decision on the physician.
	requirements of the	Making a treatment attempt
	context such as fair	that does not support the well-
	allocation of	being of the patient harms both
	resources or	the autonomy of the physician
	confidentiality	and the principles of
	issues	professional ethics.

Table 2: Four-boxes method applied to Case 17.

With a broader assessment of the contextual features, it is important which physician-patient relationship model will be used in case a conflict emerges between physician and patient¹. Every model differs from the other according to the degree of passiveness or proactiveness of the physician and the patient². The choice of model depends very much on the nature and specifics of the clinical manifestation of the health problem like the severity and the acuteness of the problem and the patient's competence level. If the condition is considered severe and acute, a paternalistic approach can be justified depending on the best

interest of the patient. This justification is valid for cases in which the patients have lost their competency to some degree that prevents them from making rational decisions that will serve their best interests. The interpretive model is another appropriate choice for cases that represent inchoate and conflicting choices by a patient that exposes him to a significant risk of harm. When the clinical status and the irrational concerns of the patient in Case 17 are evaluated, it is seen that the interpretive or paternalistic approach would enable the physicians to avoid serious harm and protect the best interest of the patient.

References

¹See ethical analysis in Case 12 for physician-patient relationship models

²Emanuel EJ, Emanuel LL. Four models of the physician-patient relationship. JAMA. 1992 Apr 22-29;267(16):2221-6.

A 70-year-old male patient who has been followed-up with CAD comes to the cardiology clinic. He says that he has no complaints and is using his prescribed medicines, aspirin, a beta-blocker, and an ACE inhibitor, as advised by the cardiologist. The patient says that one of his relatives has had cupping, which made his relative feel much better. He also said that in a hospital commercial cupping¹ is presented as a healthy practice for CAD and arteriosclerosis. He asks his cardiologist if he should try cupping to enhance his wellbeing.

Ethical Issues

Pseudoscience, the value of scientific knowledge, physician's duties

Questions

- 1. What are the ethical differences between scientific and conventional treatment methods?
- 2. How should the physician proceed?

Ethical Analysis

Case 18 focuses on the question "What are the ethical differences between scientific and traditional treatment methods?". The main issue here is the conflict between empirical and non-empirical medicine. Knowledge is considered scientific if it can be proved by empirical

experiments and if it can potentially be confuted². The main way to produce empirical knowledge is the scientific method. The steps of the scientific method are, in order, question, observation, hypothesis, test with experiments, data collection/analysis, verification/falsification³. Forming a research question to fill a practical need or to have more knowledge about the world is the first step in the process. In the observation step, the resources are observed and information is gathered with a skeptic approach. In the third step, according to critical observations, a hypothesis is structured. In the next step, the hypothesis is tested by performing experiments. At the end of the experiments, the obtained data is analyzed. The results of the analysis verify or falsify the hypothesis. If the hypothesis is falsified the researcher turns back to the third step to start with a new hypothesis. When the existing hypothesis is verified, the results are published so that they can be re-tested by other scientists. Such a scientific method in medicine grounds the medical interventions on scientific evidence, in other words, "evidence-based medicine".

The effectiveness, risks, and adverse effects of evidence-based medical interventions are evaluated by scientific methods. In terms of medical ethics, the interest of patients in a medical intervention depends on the risk-benefit ratio. Expressions such as minimal risk, or high risk usually refer to the probability of experiencing harm and the magnitude of the harm. Scientific treatment methods enable us to identify the potential for benefit and risk for harm that patients will encounter with greater precision and take the necessary precautions accordingly. Such identification can only be done with scientific methods because these

methods have been verified, whereas traditional treatment methods are usually not. Therefore, it is plausible to say that traditional treatments not proven by scientific methods pose an unknown risk to patients. Clinical interventions should rather be designed according to scientific research results instead of traditions or customs. Any traditional treatment should undergo a scientific research process that is required for licensing a drug or a treatment intervention before it is suggested to a patient.

However, the number and scope of scientific research conducted to show the effectiveness or adverse effects of traditional medicine is very limited. Yet, there is a hype that popularized traditional treatments as an alternative to medical interventions grounded on evidence-based science. This hype encounters risk for loss of confidence in evidencebased medicine that is also provoked by infodemics. As stated at a conference of the WHO in the early days of the COVID-19 pandemic, humanity is "not just fighting an epidemic; we're fighting an infodemic. Fake news spreads faster and more easily than this virus, and is just as dangerous"4. The ideas that are put forward without relying on sufficient scientific knowledge trigger irrational thought patterns in people. Irrational thoughts cover beliefs that lack a solid evidence base of normative rationality⁵ and cover beliefs that differ in content such as conspiracy beliefs or anti-science attitudes⁶. The problem here in Case 18 is that such anti-science attitudes are becoming common and they have a high probability to mislead reasoning processes.

There are two behavioral patterns that are recommended in order to prevent the harm by this problem⁷. The first one is to stop tolerating and

legitimizing pseudoscience, especially at universities and health-care institutions. These institutions should advocate for the prominent value of science and knowledge produced by scientific methods. Besides, the researchers who are working in scientific knowledge production should take an active role against pseudoscience. In this respect, the question in Case 18 should be "What should the physician's approach be to traditional medical treatments and scientifically proven treatment methods?". Legitimizing pseudoscience threatens both individual and population health, as does the lack of trust in the vaccine during the COVID-19 pandemic. For this reason, it is one of the basic duties of physicians to have and to use scientific knowledge and to advocate for evidence-based medicine. The position of the physician should not be devaluing scientific knowledge.

Certainly, medicine not only cures an illness but also takes care of the patient. In this case, the approach of the physician to the patient who wants cupping, which is a traditional treatment method will not only depend on curing the illness but also to restore the patient's mental and physical equilibrium by recognizing his/her personal values. From an ethical perspective, in Case 18, considering the risk of cupping is minimal, the physician may leave the decision to the patient, after explaining that cupping is not proven by scientific methods, from a position that prioritizes the value of scientific knowledge obtained by empirical methods.

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A 95-year-old male patient was admitted to the emergency department with dyspnea. He had been diagnosed and had been hospitalized before because of ischemic cardiomyopathy. The patient is hospitalized, and his treatment is initiated. He responds well to the treatment. On the 4th day of the admission, the patient is informed that he will be discharged the next day. The patient says his relatives are out of town and because of their busy work schedule they can't come until the weekend. The patient's relatives call the hospital and want his discharge to be delayed until they return.

Ethical Issues

Fair allocation of scarce resources, beneficence

Questions

- 1. Should the patient be discharged from the hospital on the day decided by the physicians, or should he be allowed to stay in hospital until the weekend?
- 2. How can this case be evaluated on the basis of fair use of scarce resources?

Ethical Analysis

The four-boxes method explained in Case 9 will be used for Case 19 to achieve a reasonably considered decision.

The	The Definition of	The Content of Case 19 by
Category	Category	Category
Medical	- The clinical status	-The clinical status of the
indications	of the patient is	patient shows that the need for
	identified	him to stay in the hospital has
		ended.
	-Options for	
	diagnosis and	-The patient's capacity for
	treatment are	medical benefit from
	considered with	hospitalization for a few more
	special emphasis	days is limited.
	on the patient's	
	capacity of medical	
	benefit from the	
	considered	
	interventions	

Patient	- Patient's	-The patient's relatives'
preferences	preferences	preference is to keep him in the
and values	depending on his	hospital until they come back
	definition and	to the city. The patient's
	understanding of a	implied preference is
	good life	compatible with his relative's
		request since he calls them
	-The area in which	when he receives the news
	the patient	about hospital discharge. A
	exercises his	reasonable assumption would
	autonomy	be that he lacks the capability
		to leave the hospital without
		the assistance of his relatives.
		The definition of a good life for
		the 95-year-old patient would
		depend on the presence of
		loved ones and a safe
		environment.
		-The patient is competent and
		free to mention his wishes,
		however even if he wishes to
		stay or to go; he has to wait for
		his relatives to come back to
		the city to take him out of the
		hospital.

Quality of	-The impact of the	-The considered medical
life	considered medical	indications and the absence of
	indications and	the knowledge of a patient's
	patient's	preferences on the quality of
	preferences on	life do not place on solid
	quality of life of the	ground to reach a conclusion.
	patient	That's why we need
		assumptions about the wishes
	-Physicians'	of the patient.
	thoughts are	
	equally important	-Medical interventions aim to
	on quality of life	improve patient's quality of
	decisions because	life. Keeping him in the
	of their	hospital for a few days more
	professional	will have no medical impact;
	expertise to predict	however, will have a social and
	the impact of the	psychological impact on the
	medical	well-being of the patient.
	intervention	
Contextual	-The physician	-The context of Case 19
features	considers the	features fair allocation of
	context in which	limited resources and practical
	the case is taking	needs of a patient who lacks the
	place and checks if	ability to leave the hospital
	the suggested	without the assistance of his
	decision complies	relatives. Keeping the patient
	with thespecific	in the hospital is a problematic

needs and	decision in terms of justice and
requirements of the	equity. Continuing to
context such as fair	hospitalize a patient who no
allocation of	more needs medical treatment
resources/confiden	as an inpatient precludes the
tiality issues	right and access of another
	patient needing similar
	treatment.

Table 3: Four-boxes method applied to Case 19.

With a broader assessment of the contextual features, it is necessary to examine the fair allocation of scarce resources and justice issues in depth. In terms of the decision of fair allocation of scarce resources, we try to determine how much health care to provide and what kind of healthcare to provide for which health problems. In Case 19, the scarce resource is the number of hospital beds. The fact that hospital beds are not a single-use limited resource such as organs to be transplanted, that is, when they are put into use by a patient, do not become unusable for another patient in the future, allows the use of the resource to be evaluated only for the moment. Therefore, as in Case 19, if there are other empty beds for any other emergency hospitalization and the patient only needs to be kept in the hospital for a few more days, tolerance can be provided to the request of the patient's relatives.

Mr. M., the father of two children who is a director of photography at the age of 46, is getting on a plane from Istanbul to Paris. Half an hour after the plane takes off, his breathing speed starts to increase, and Mr. M. tells the employee on duty that he has a fear of flying. One of the flight attendants on board takes Mr. M's blood pressure and heart rate. His blood pressure is 180/100 mmHg, and his heart rate is 95 bpm. Despite the attendant trying to calm him down, the patient soon feels like fainting due to shortness of breath. While the patient is asking for help with hand gestures showing that he has difficulty in breathing, an announcement is made to ask if there is a doctor on the plane. There is only one doctor on the plane: a dermatologist who has just completed his residency. The doctor is hesitant about whether to respond to the announcement since he has never encountered such an emergency before

Ethical Issues

Risk-benefit assessment in emergency, inflight medical emergency

Questions

1. Should the physician respond to the announcement, help the patient using the means found on the plane at that time, even though he is not a cardiologist?

2. Should the physician order to land the plane to the nearest airport because he is not experienced enough to understand if the cardiac problem may be a serious one?

Ethical Analysis:

Case 20 is an In-Flight Medical Emergency (IME) situation. In IME situations, there may be conflicts between some ethical principles, such as non-maleficence, beneficence or some moral obligations such as taking responsibility to intervene or not in a risky and low-resource environment.

These dilemmas occur during IMEs because on the airplanes there is limited medical equipment and during the flight, airplanes may be hours away from the closest medical center. Such an insecure environment in terms of providing health care services creates an unfamiliar care challenge for both the crew on the aircraft and the health care professionals. Aircrafts have "emergency medical kits" like protective gloves and equipment for a basic medical assessment, hemorrhage control, initiation of an intravenous line and medications to treat mild pain, allergic reactions, bronchoconstriction, hypoglycemia, dehydration, and some cardiac conditions¹. For sure, in order to use this equipment in the aircraft for emergencies, the presence of health professionals trained in health care is essential.

When an emergency health problem arises on the aircraft, the following should be considered: Is there more than one volunteer health care professional, just one; or none? If more than one potential volunteer exists, a collaborative discussion about what every professional's

capability/experience/personal current state is preferred to be done. In Case 20, there is only one physician on board. Therefore, factors such as expertise, experience, and current personal situation are not comparable factors; they are only factors that can be evaluated in terms of the urgency of the health problem occurring in the aircraft.

If there is only one physician on board, no matter what the physician's expertise or experience, intervening with the patient is a moral obligation and legal responsibility for that physician. On the other hand, there are some factors that determine the limits of intervention. The current personal state of the only doctor is one of these factors. The physician may be having flight anxiety or may be under the influence of a drug or alcohol that hinders her from providing health service. The physician should consider her own capability of providing medical care under the current circumstances. In addition, it is quite normal that the inexperienced physician on the plane, who does not have another colleague with whom she can share the responsibility, fears the situation and experiences anxiety. Fear is commonly thought of as a disincentive, but it can also act as a motivator in such emergency situations. Physicians may fear the shame accusation that results from abandoning patients². For this reason, it is the first duty of the doctor, both professionally and morally, to evaluate whether she can take this responsibility alone, both physically and mentally.

If the doctor has decided that she can take responsibility, her primary role is to collect information, assess the passenger in medical need, communicate with the aircraft crew, and search for the necessary medications within the emergency medical kit to be able to perform medical procedures. While collecting information, and assessing the passenger in medical need, the physician should determine the type and duration of symptoms, if they are high-risk symptoms or not, and also determine if there are any vital signs such as pulse increase/decrease and increase/decrease in respiratory frequency, and also mental status. If the symptoms detected by the doctor are symptoms that cannot be relieved by the medical facilities on board, she should ask the aircraft crew to contact the nearest airport or health center.

In addition, the patient in medical need may be threatening to other passengers, which can create a challenge for the physician in the enclosed environment of the airplane. For this reason, there are two ethical dimensions of the doctor's responsibility to intervene in the aircraft; responsibility for ensuring the well-being of both the patient and other non-sick passengers on board the aircraft.

When the pilot in command is notified of the situation; next, the pilot communicates with the airline operations center; not only to inform the central situation, but also to learn the nearest health center and contact them. When the airplane decides to land at the nearest airport or health center, the important point is to convey the health problem to the ground with clear messages in their order of importance; repeating the key messages; and using clear visual demonstrations to help clarify the information of the patient. During such a time, the key to success is for everyone involved to contribute their expertise as part of a collaborative team, with the sole goal of ensuring the best interest of the patient with the IME in consideration of all passengers on board. For this reason, even if the doctor decides to do the intervention herself, if time pressure

allows, it may be preferable for the patient to share the situation with the first medical center she can contact and ensure that no detail is missed.

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Case 21

A 65-year-old farmer in a small town far away from the city, has been telling his circle of friends that he is feeling unwell for the past few days and complaining that he is constantly tired. However, he refuses to go to the hospital despite the insistence of his relatives. When he feels pain like someone squeezing his heart, he decides to apply to the outpatient clinic at the insistence of his friend. Since he also has a smoking history, the doctor orders pulmonary Computerized Tomography (CT) angiography for diagnostic purposes. The CT shows a thrombus in the pulmonary artery. Warfarin treatment is planned for the patient, and it is stated that his International Normalized Ratio (INR) should be monitored at regular intervals. The patient objects to having regular INR follow-ups and asks whether any other treatments that don't require INR follow-up are available. The doctor mentions that there is a new oral anticoagulant and if he uses this new drug, there will be no need for INR control. However, he has to pay this drug out of pocket since his medical coverage does not meet the refundment indications set by the Social Security Institution (SSI). The patient asks the doctor to write down the needed indication for refundment. The doctor says that would be deception, but the patient insists on doing so because he has no means to buy this drug out of pocket.

Ethical Issues

Beneficence, right to healthcare, deception and loyalty

Questions

Should the physician change the control results to cover the costs of SSI for the treatment that doesn't require INR?

Ethical Analysis

This case represents an ethical dilemma that requires the deception of the health system to provide benefit to a patient. This kind of behavior is usually justified by consequentialist approaches that accept the only criterion for an action to be ethically good and right depends on the consequences of that action. If the consequences of an action outweigh the harm it causes, then that action is considered ethically correct. According to this perspective apart from the consequences of action, none of the ethical values, rights or principles have any significance or meaning¹.

The utilitarian ethical theory is the best known and the most widely used approach in healthcare ethics. The utilitarian ethical theory, first defined by Jeremy Bentham (1748-1932) and known as the act utilitarian approach, suggests that the consequences of each individual action be considered and that the action that would benefit the most people was chosen. Bentham argued that people naturally want to avoid pain and achieve happiness, so the action that increases happiness and prevents or reduces pain should be preferred. According to this perspective, deception of the health system or falsification of test results would be acceptable if this action provides the most benefit for most

people. Note that any action that overlooks basic ethical values and principles can be presented *as though* justified by this approach.

Bentham's approach has been widely criticized for not attaching importance to any ethical value other than the consequences of actions. According to Bentham, if the results of the action will produce more happiness and benefits for more people, it is considered ethically correct to engage in behaviors that have been wrongly defined in the field of morality throughout human history, such as lying, deceiving, breaking one's word, stealing.

John Stuart Mill (1806-1873), who presented the rule utilitarian perspective, stated that although some actions seem to bring more happiness to more people for the moment, accepting the imperativeness of some moral rules independent of the consequences will provide more benefits for humanity in the long run. According to Mill, decisions should be made based on the consequences of moral principles, not individual actions. In the face of an ethical problem, it is necessary to consider not the consequences of possible action options, but the consequences of preserving or ignoring the principles on which that action is based. For example, rule utilitarianism finds lying ethically wrong because it is predicted that lying will negatively affect trust and solidarity in society and damage the reputation and credibility of the person who lies. From this perspective, it is plausible to argue that the sustainability of a health system would be impossible if every physician falsified test results or intentionally deceived the health finance system to provide benefits to individual patients. Therefore, a rule utilitarian approach would suggest honesty and protection of integrity regardless of the consequences of individual actions. In addition, clinical ethics states that the primary responsibility of the physician is to the patient². However, this responsibility is in terms of health; not in terms of financing.

Examining this case by the deontological ethical approach enables a wider evaluation independent of the possible consequences of an action. Deontological ethical theory defined by Immanuel Kant (1724-1894) states that the field of ethics is ruled by unconditional moral laws that can be identified with reasoning. When faced with an ethical problem, the right action depends on the motive behind that action to become a universal moral law. Kant's first formulation of the categorical imperative to identify moral laws states that individuals should "act only in accordance with that maxim through which you can at the same time will that it become a universal law"3 For an action to be morally acceptable, the motivation for the action must be based on a generalizable moral law rather than any personal interactions, sharing of feelings, anxieties, or expectations of benefit. Moral laws can be specified to determine generalizable moral obligations and establish a "universalized moral codes" for medical ethics that provides guidance in individual cases. In Case 21 the question for the categorical imperative test is this: "for all patients with these conditions, physicians will deceit the test results to cover the costs of SSI for the treatment". Then we test our "yes" or "no" answer to this question with the following two questions:

• Can this motto be an unconditional universal moral law?

• Is the motivation behind this action universally applicable without causing ethical dilemmas and inconsistencies?

The answer "yes" to the first question requires that the physician is "constantly a liar" to achieve this result for each of her patients. A physician should not be "constantly a liar" to practice his profession because we cannot convert such intent to universal law and this intent cannot be applicable to all similar cases without causing ethical dilemmas and inconsistencies. So, the action here in this case cannot be generalized. Therefore, the Kantian approach can show us the right way in this case.

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¹Consequentialist approaches have three main groups. The first group is ethical selfishness. This group argues that it is ethically imperative to choose those outcomes that produce the most benefit for the person making the decision and acting. The second group is ethical altruism. Contrary to ethical egoists, this time the importance of the one who takes the action and makes the decision fades. Instead, it is argued that the behavior that provides the most benefit to other people other than the decision maker is ethically correct. The last group is the group that includes the utilitarian ethical theory and argues that the benefit of all parties, including the decision maker, should be considered.

²At the physician's oath, the sentence describing the physician's primary duty is as follows: ... THE HEALTH AND WELL-BEING OF MY PATIENT will be my first consideration... (WMA Declaration of Geneva. https://www.wma.net/policies-post/wma-declaration-of-geneva/)

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Case 22

A-70-year-old male patient comes to the hospital emergency room with chest pain. His troponin level increased, and his electrocardiography indicates acute coronary syndrome due to ST segment depression anteriorly. The patient is hospitalized thereafter. Coronary angiography shows that the left-descending coronary artery is ecstatic with an 80% stenosis in the middle part. The coronary artery is measured to be 6 mm in size. There is no coronary stent for that size of ecstatic artery to implant. Thus, renal artery stent has been used in the operation in an off-label manner

Ethical Issues

Off-label use of drugs or medical devices, beneficence

Ouestions

- 1. What is the ethical justification for off-label drug/medical device use?
- 2. Can the physician's use of an inappropriately sized stent be justified?

Ethical Analysis

The meaning of off-label drug is "unapproved use of an approved drug". The process of approving a drug for the use of patients' needs a

careful evaluation of its benefits and risks. Such an evaluation searches for strong scientific data about the drug and an explanation for physicians on how to use the drug safely and effectively for the specific condition (for a specific disease of a specific age group with a specific dosage). Moreover, the approved drug labeling for physicians gives some important information about the drug such as¹:

- The scope of the specific diseases that the drug is approved to treat
- The usage of the drug to treat those specific diseases
- The risks of the drug

Off label drug use can be motivated by several factors²:

- There might not be an approved drug to treat the patient's disease
- The physician may have tried all approved treatments without seeing any benefits
- There might be no study on any drug for a specific population (e.g., pediatric, geriatric, or pregnant use)
- There might be a life-threatening medical condition for the patient
- The general tendency of the physicians to use other medications in the same class without specific legal authority approval for that use for the same indication

As with drugs, the off-label use of medical devices is increasing in diagnosis and treatment. In some cases, off-label medical device use has become the standard treatment method in interventional cardiovascular medicine³. The risks of off-label use of medical devices are even greater than off-label use of drugs, since the authorization

procedures for drugs before marketing are more rigorously regulated than that of the medical devices. Similarly, the regulations on off-label use of medical devices are more tolerant than off-label use of drugs. For example, Food and Drug Authority (FDA) and United Kingdom Medicines Healthcare Products Regulatory Agency agree on off-label use of an approved medical device if it is deemed suitable by the physician after a meticulous evaluation regarding the risks and potential benefits of such use^{4,5}. Off-label use of medical devices is emerging as a huge problem area especially in pediatric cardiology patients. In the USA, most of the medical devices used in children don't have FDA approval for use in pediatric patients⁶.

The ethical justification for the widespread use of off-label medical devices grounds on the balancing between the principle of beneficence and avoiding the risk of harm. The motive of a physician who uses off-label medical devices is most likely to benefit his patient. In the absence of medical devices produced and approved for use in particular medical indications, the physicians make assessment of the benefits and risks of off-label use depending on expertise and experience to produce creative solutions with the possibilities at hand. The cases which are most defensible for off-label medical device use are the ones that have no approved treatment available, and the physician can have a chance to save the patient's life with this method, even if it is unproven⁷.

One of the ethical problems related to the use of off-label drugs and medical devices is that such usage is conceptually experimental. The physicians' hinge regarding the possible benefit of off-label use of any drug or medical device is a hypothesis that needs scientific justification.

Therefore, off-label use is also the subject of research ethics that embraces several ethical problems that are widely overlooked⁸.

The risk assessment matrix defined in Case 14 is a helpful tool for decisions on using off-label medical devices. Obviously, the risk of short-term extracorporeal off-label use of a medical device is likely to be far less than a medical device that will stay in the body for a lifetime⁹.

A practical evaluation of ethical appropriateness of off-label use in Case 22 can be pursued by asking the following questions:

- 1. Is there any scientific evidence to use renal artery stent instead of coronary stent?
- 2. Has any medical expert judgment, preferably, a medical consultation been done?
- 3. Is there any published literature that supports off-label renal artery stent insertion?
- 4. Is the renal artery stent insertion done in the best interest of the patient?
- 5. Has the potential benefits and risks of renal artery stent insertion been explained to the patient and is informed consent obtained?
- 6. Is a rigorous risk assessment done? Are risk mitigating strategies developed depending on the magnitude and probability of the risk?

Even if there is a life-threatening medical condition for the patient and the renal artery stent insertion done in his best interest of him, we could not reach any scientific and medical evidence to justify the off-label use. The physician has a hinge to use the renal artery stent, but it is not possible to provide every such trend, as can be seen from the fact that

not all the steps above are fulfilled. So, the basic problem for Case 22 is non-evidence-based off-label use, which puts the final action into an ethically questionable condition.

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⁹See Table 1: Risk assessment by considering probability and magnitude of the case

Case 23

A 50-year-old male patient being monitored for heart failure is hospitalized because of shortness of breath and edema in the legs. Since it is a training and research hospital there are regular visits of assistants and students accompanied by a responsible lecturer every morning. During these visits, students present the anamnesis, physical examination findings and laboratory test results of the patients to the group. That day during the visit, one student read this patient's anamnesis out loud in the corridor. During her presentation, the student talked about the erectile dysfunction of the patient and discussed that beta-blockers might have caused this symptom. The patient heard the presentation and the discussions together with other patients in the ward. He said that he felt offended and refused to have involvement with students anymore.

Ethical Issues

Confidentiality and privacy, patient rights

Questions

How should the physician respond?

1. The patient's request to refuse visits should be accepted because information contrary to the patient's privacy was obtained by the majority without notice. The patient has the right not to accept it.

2. The patient knows that the hospital in which he is hospitalized is a training and research hospital, and the exchange of information for educational purposes cannot be blocked and should be accepted.

Ethical Analysis

The most common factor in deciding to consent to medical student participation by a patient is a desire to contribute to the training of future physicians. There are several components to a patient's clinical visit in which medical students can participate: obtaining the medical history, performing the physicial examination, providing the patient with advice, counseling or education¹. Patients who come to training and research hospitals and consent to medical students' presence while they are having healthcare display an altruistic approach. On the other hand, since training and research hospitals have more infrastructure opportunities and greater expertise to provide health service for complicated cases, patients prefer these hospitals with the expectation of benefit. This expectation of benefit and altruistic approach to the training process of future physicians are in a certain harmony.

In Case 23, the patient consents to the participation of the students in his treatment at the beginning of the process, because he thinks that sharing his own health information with the students will be kept confidential by them. The main issue in this case is that necessary precautions are not taken to prevent the transfer of the personal health information of the patient to irrelevant third parties, and the confidentiality of this information is breached by being announced loudly in the corridor. Trust is the moral ground that drives the patient

to disclose private information to the physician. The patient's assumption was that medical students would be aware of the physicians' moral obligation to protect confidentiality and respect the physical-spiritual and informational integrity of their patients.

As it was explained in Case 2, the concept of privacy has two main aspects. The first one is confidentiality, that is keeping personal information away from the irrelevant third parties, and the second aspect is an exclusive space dedicated to the individual for taking his own decisions. A violation of privacy may depend not only on the kind and amount of access to private space and personal information, but also on who has access. Anyone who happens to be in the corridor at that moment and does not take part in the treatment process is regarded as an irrelevant third party who should not have access to the patient's medical information. Moreover, confidentiality is present when a patient discloses information to any healthcare staff who has responsibility in the treatment process such as physicians, medical students, residents, or nurses. The person to whom the information is disclosed pledges not to divulge that information to a third party without the patient's permission.

Loss of confidentiality means the violation of privacy and individual dignity; while at the same time loss of reputability, friends, and/or emotional devastation and humiliation². In addition, the patient's expectation of confidentiality is one way to specify the obligation of fidelity. A failure of fidelity significantly damages the patient-physician relationship. When these arguments are evaluated in the context of Case 24, the patient's initial agreement to share his sensitive health

information with both his physicians and the medical students was based on the trust he has in his physician and the students who are under his supervision. The fact that the people in the corridor heard this information was an element that damaged the patient's trust. The patient feels offended because his privacy and confidentiality has been violated, and also the failure of the fidelity component significantly damaged the relationship between him and the physician.

References

¹Ching S, Gates E, Robertson P. Factors influencing obstetric and gynecologic patients' decisions toward medical student involvement in the outpatient setting. Am J Obstet Gynecol 2000;182:1429–32.

²Beauchamp TL, Childress JF. "The Justification of Obligations of Confidentiality" *Principles of Biomedical Ethics*. 8th ed. Oxford Uni. Press; 2019: 306-307.

Case 24

A 50-year-old male patient applies to the emergency department with chest pain at 11 p.m. ECG shows negative T waves in the anterior leads. Cardiac troponin levels are increased on serial measurements and the patient is hospitalized with the diagnosis of Non-ST Segment Elevation Myocardial Infarction (NSTEMI) by the standby doctor. In the morning medical visit, angiography is recommended by Doctor A. After this recommendation, the patient asked for time to think about it and take her children's advice. In the next conversation, the patient consented to the procedure but stated that she asked doctor B, a professor who is senior in cardiology in the same hospital, to perform it.

Ethical Issues

Patients' rights

Questions

How should the physician proceed?

- 1. Physician understands the patient's desire to choose his healthcare provider and refers the patient to Doctor B.
- 2. Because the physician who makes the clinical follow-up of the patient and recommending angiography is herself, physician A refuses to refer the patient to physician B.

Ethical Analysis

In this case, the patient's right to choose his healthcare provider is in question. For this reason, the case will be evaluated on the basis of the extent of the doctor-patient relationship, the patient's right to have the choice of healthcare provider, the balance among the principle of respect for autonomy - the principle of nonmaleficence -and the principle of beneficence.

As stated in Case 10, the World Medical Association Declaration of Lisbon on Patient rights define "the right to freedom of choice of patients" as follows: "choosing freely and changing her physician and hospital or health care service institution, regardless of whether they are based in the private or public sector" Apart from international declarations there are national regulations in most countries that legalize this right².

The right to choose the physician who is dealing with his treatment is both a legal and an ethical right of the patient. This right is justified by the respect for autonomy and best interest principles. The core objective of health services is to do what is in the best interest of the patient throughout the process of treatment, and one of the factors that impact a patient's best interest is the uninterrupted management of the treatment process. During the management of the treatment process, the physician and the patient design the communication processes both at the time of the treatment and at the later stages of the treatment. The right to design the later stages of the treatment means a patient's right to choose future relationships with his physician. Such a right is crucial

for the best interest of the patient because it promotes the patient's autonomy and keeps him away from harm. The principle of nonmaleficence seeks to ensure a patient will not worsen physically or emotionally because of the medical intervention. From this point of view, the patient should have the right to change his physician without giving any reason to benefit from the treatment at the highest level.

Additionally, the effective communication processes during initial and later stages of the treatment aims to empower the patient by enhancing self-determination skills³. Basically, in the physician-patient relationship, it is expected that there should be open communication, namely veracity, to protect the autonomy of the patients, to provide benefit and avoid harm⁴. It is optimal for veracity to take place in the physician-patient relationship bidirectionally. The criteria of veracity from physician to patient embraces comprehensive, accurate, and objective disclosure of information, and fosters the patient's comprehension of disclosed information⁵. Veracity from patient to physician includes sharing information about the patient's thoughts and expectations about her own treatment, and how this treatment process affects her. The only difference here is that the physician is expected to explain the reason for every action to the patient as clearly as possible, since the physician is the expert and any medical decision to be taken will affect the patient's well-being. On the other hand, the patient does not have to share her reasons for her decisions, expectations, feelings, or thoughts with the physician.

The patient's autonomous decisions must be respected to ensure the highest level of beneficence and to protect him especially from harm.

In this case, the patient can be given time to think about possible medical intervention considering there is no need for emergency response. In Case 24, the principle of respect for the autonomy of the patient can be ensured when the patient demands to change the physician who will continue his treatment, even without giving any reason. Therefore, the physician is ethically and legally obliged to honor the patient's desire to choose her healthcare provider and to refer the patient to Doctor B.

References

¹WMA Declaration of Lisbon on rights of the patients https://www.wma.net/policies-post/wma-declaration-of-lisbon-on-the-rights-of-the-patient/

²According to Turkish PATIENT RIGHTS REGULATION Article 9: "Upon request, the patient is informed about the identities, duties and titles of the doctors and other personnel who will provide health services to the patient. Provided that the procedures determined by the legislation are complied with, the patient has the right to freely choose the personnel who will provide health services to him, to change the doctor who is dealing with his treatment, and to ask for the consultation of other doctors".

³See Case 12

⁴Emanuel EJ, Emanuel LL. Four models of the physician-patient relationship. JAMA. 1992;267(16):2221-2226.

⁵Beauchamp TL, Childress JF. "Obligations to Veracity" *Principles of Biomedical Ethics*. 8th ed. Oxford Uni. Press; 2019: 284.

All the 24 cases in this book have been compiled from real-life experiences.

Even though the cases come from the cardiology clinic, the ethical problems they involve can be encountered almost in the clinical field and in every health institution where the practice of medicine is practiced. Therefore, this book can be a guide for ethical thinking and analysis not only for cardiologists and physicians who want to specialize in this field, but also for all medical school students and physicians.

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