

Bedside Hazard, Bioethics Case

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“...the apprentice physician does not acquire a clinical eye in the books, but rather by permanently dealing with his patients. (Erwin Risak)... I believe in the Medicine which serves the patients without ever using them (L.V. Décour) ... all men are an exception to a rule that does not exist (Fernando Pessoa) ... bedside is more than a metaphor, it is a meeting point of Medicine-science and Medicine-applied discipline...”

Impacting

Clinical bioethics is integrated to the bedside as a moderator power of technician ideologies and safeguard of excesses of “nationalism of Medicine”, such as the “medicalization of life”. It amalgamates “voice of Medicine, voice of the physician” with “voice of the patient, voice of consent”.

If the side symbolizes the physician’s vision and the bed represents the available Medicine, clinical bioethics presents as a biopsychosocial adjustment factor which is the size of the comforting mattress. When redimensioning is necessary, it contributes to find the adequate measure, stretching it or reducing it in the presence of restrictions or uncomfortable excesses.

Conflicts: the biological and the psychosocial

The role-players of the presumed knowledge and of the presumed suffering are before anything else people, exclusivity of DNA in the presence of an infinite plurality, guaranty of nature for heterogeneities. From actions and reactions, conflicts with biological and psychosocial representations arise.

The recognition of the predominantly biological context is indispensable for clinical management. Manifestations are formatted in such distinct settings as a *Lilliputian* conflict between microscopic viruses and bacteria and human immunocompetence, a *nutriparadoxal influence* of food for life over the death of an organ, or yet, an effect of the *passage* of drugs toward the target-location.

The aggregates of psychosocial order represent sequels of “Sophie’s choice”. Since the understanding of a goodness results frequently in the understanding of a badness, conflicts of interests usually arise in the relationship between the physician who has obligations to his profession and the patient who exerts his free-will. Sometimes a refusal to follow recommendations occurs, sometimes an unacceptable

demand arises, at other times an unexpected event occurs, deteriorating the physician-patient relationship.

Bedside hazards

This is a typical case! Collecting them is not enough. The bedside library has to offer different readings in the official language of the book.

Knowledge of bedside dialects is necessary. They are the means of communication of random meetings of shreds of the book chapters with the patient’s values. The combinations shape the bedside hazards.

This is a “bedside hazard!” Collecting its infinite biopsychosocial compositions requires the inveterate of variants, a minuteness that goes far beyond ordering mere plagiarisms of the book.

Making the components of hazard intelligible gives rise to the sensation of clinical hyperesthesia, that thrust that stems from texts, grows in the alliance with the patient and matures in the ethical commitment.

Bedside hazards are multipotent. They turn into academic boomerangs, ideas of clinical research perceived from them that are sent forward, applications based on evidences that come back. They are converted into a humanistic thrust that brings afloat the biopsychosocial portion submerged in the pedagogical iceberg, hidden in the learning of the disease dissociated from the patient. They mobilize clinical bioethics for the stabilization of the tripod supporting the society’s desires regarding the physician’s performance: honesty, confidentiality and efficiency. They send a warning that schematizations may be as didactic as illusory, for it is simplifications – see hazard 1 – that support the jocosity of “we are not new graduates, so we do not know everything”.

Post-graduates for ever

It is the formality of a time predetermination that makes of the medical residency a mere prologue to the empathy with bedside hazards. Chemistry goes ahead endlessly, tacit residency, year after year, in the art of bedside manners.

The physician that remains “residing” at bedside keeps a renewed badge of his profession. In this continued education, his abilities and ways of being mature and the sensitivity to the technical in reciprocity to the human are developed. He makes the familiarity with bedside a permanent defense of

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the thesis “we break the confidentiality of diseases but not of the patient”.

Progressiveness of long lasting post-graduation to the diagnostic and therapeutic ambientation of bedside assembles authentic compilations of hazards, catalogued one by one in the collection of clinical legitimacies. The valuable patrimony of particularities of experience needs to remain exposed and available, out of respect for the Hippocratic oath... *to share my goods with him... to teach them this art... to impart to... (those) who have agreed to the rules of the profession the precepts and the instruction...*

In the bedside pedagogical meta-analysis, the hazards experienced are shared with the globalization of “out-of-ordinary” reports in the journals, with selected anatomoclinical meetings and their *in vivo* or *post-mortem* findings, not perceived by medical practice, and with second opinions formally or informally expressed.

The “clinical memory” results amplified and in the expansion the chances of a further identification of an “almost the same” rise. Knowledge is thus compacted as a balance stick for risk trajectories over the bedside.

Official truth, truth of the art

Enlargements and abridgements of the textbook stimulated by hazards are true growth hormones of bedside clinical bioethics.

Safe-conducts are developed for the three fundamental destinations: to preserve health, to heal/alleviate, and to avoid premature death – see hazard 2.

The undefined subject erupts in the universe of publications, the I and the you, in the bedside dialects where they become us, the desired plurality for facing challenges on *what has to be done* and of conflicts on *whether it should be done*.

Clinical bioethics carpets the roads from precept to accepted, before the unheard-of bedside hazards. It is part of the code to decipher the riddles formed by contrapositions to the bookish typical, classical and pathognomonic.

Clinical bioethics softens the impact of *decipher me or I'll devour you*, because it lines memory gaps of the “same” with the velvet of humanization – see hazards 3 and 4.

It is in the code of medical ethics

As a consequence, cases from textbooks and hazards of a free context adjust to the emblematic saying of article 2 of the Code of Medical Ethics: *the target of the physician's full attention is the health of human beings in the benefit of which he shall act with the utmost zeal and the best of his professional ability*.

Gold-image

As regards hazards, to be or not to be useful and efficient involves bioethics in the balance of anthropocentric expectations with clinical and technological conceptions of beneficence /non-maleficence – see hazard 5. The screening is made in the checklist integration: *what, to whom, when, how and where*.

Clinical bioethics helps keeping, before hazards, the

adequate mutuality between the archeology of legacies to be preserved and the futurology of novelties to be incorporated.

In the circuit bedside – book – bedside, signs of the classic physical propaedeutics persist with the label of typical and pathognomonic, whereas emerging evidences vary at the mercy of the wind of their own classes, sensitive to the power of statistical analyses.

Futurity of propaedeutics based on image – *in-vivo* macroscopy – is one of the highlights of clinical bioethics. It deals with the expansion of the bedside clinical certainty. Attention is driven toward the *gold-image* of a vegetation, delamination, rupture of the chordae tendineae, coronary occlusion and much more, and toward the *gold-measurement* of an ejection fraction, valve area, and many other calculations.

The progressive shift from the gold-standard since the historical anatomopathological truth – appropriate for a future case – to the *in vivo* iconographic glamour of an already old lady coronary angiography or of an infant cardiovascular magnetic resonance imaging – appropriate in this case –, should not obscure the clinical lucidity.

Clinical bioethics warns that not always do bedside manners validate the old saying *image is worth more than a thousand words*; an echocardiogram image without history taking, for instance, may have a limited value of contribution to clinical decisions, that is, an isolated imaging finding is one thing, propaedeutics isolation by image is another.

The integration between “medical practice is sovereign and image is powerful”, “clinical vision on one hand and processed vision on the other, ideally fused in a cyclopic physician's eyesight” seeks to prevent “ethical strabismus”. In fact, “not all that glitters is gold-standard”: if on one hand, the clinics that glittered like myocardial infarction results elucidated by an image of delamination due to aortic dissection, on the other hand, the image that glittered interpreted as a vegetation loses the connotation of gold-standard due to the absolute lack of a clinical manifestation.

Heteronyms

Overlaps and contrapositions between the sovereignty of medical practice and the power of image – see hazards 6 –, support periodic reviews of decision-making processes in the bedside hazards; they are rapid adjustments in favor of “time is prognosis”, in tune with an essential bedside concept: to have doubts does not mean to disbelieve.

The “I” of the physician who prescribes – which, for the patient, is the sacred treatment that will cure his diseases – lives with the “I” dissatisfied with the real reach of the treatment he chose, with the “I” that still thinks of proposing another method for confirmation of the diagnosis that guided the pharmacological treatment, with the “I” impelled to impose his knowledge in the face of the patient's hesitations and with the “I” resigned to tolerate the limits.

It is as if the bedside were visited by heteronymous subjects, each of them emerging as a reaction of the orthonymous to convergences and divergences. Clinical bioethics contributes to the existence of harmony of the various “Is”, integrated with the beneficent /non-maleficent planning.

Science vs. Applied discipline

Good diagnosis-good therapeutics is an old expression of the physician-patient feedback. One should, however, be prudent and ask: good from the point of view of whom?

If good from the point of view of both, we will be in front of the ideal patient as intended by the majority that benefits from the method; if from the point of view of none of them, we will be facing a specific technical ineligibility that surpasses the diffuse beneficence; if from the point of view of the physician only, class I recommendations may result non-consented by the patient.

In this latter situation, hazards are determined by the free, informed and sovereign non-acceptance of the book beneficence – hazard 2. The unapplied of any classic recommendation, guideline of a society of specialties or consecrated practice haunted by ghosts of negligence or imprudence.

Bioethics contributes to surpass, case by case, or better, hazard by hazard, fears of negligence when a minor benefit considered by Medicine-science is the permission given by Medicine-applied discipline.

Bioethical routes may enfeeble the Manichaeism of pre-suppositions of right and wrong and color the humanism of adjustments. They supply pencil and eraser to redraw lines in the clinical picture, according to perceptions of the panorama.

Bedside hazards do not usually afford two identical readings, as occurs with texts. hazard 6 is an example: eraser on antibiotic therapy and pencil in corticosteroid therapy.

Code of medical ethics again

Our Code of Medical Ethics is human when it strengthens the abidance of autonomy as enough justification for exemption of negligence or imprudence in the face of certain “scientifically inadequate” circumstances; it is also wise when it makes an exception to imminent life threat.

The physician shall not perform any medical procedure without previous information and consent from the patient or his legal representative, except in the imminence of a life threat (article 46 of the Code of Medical Ethics) represents respect to citizenship; notwithstanding, the potential of sorrows coming from further privation of measures is created, when what was not taken care of comes to be a factor of imminent life threat, now an ethical impediment to the autonomous practice.

Immediacy regarding the prognosis of survival to the morbidity is, therefore, a variable of the ethical reason. However, not always is consensus achieved as regards criteria to declare the imminent life threat of a bedside hazard. The following two examples illustrate the issue.

Example 1 – Patient with aortic stenosis is admitted to the emergency room due to a third episode of syncope in a six month period; transvalvular gradient is 100mmHg and post-stenotic dilation of the aorta is close to an aneurism. The patient insists on refusing to undergo valve replacement. Is the known risk of sudden death associated with the symptomatic phase of aortic stenosis a criterion of imminent life threat, with its consequences on the free-will?

Example 2 – Patient with severe metabolic disorders, ventricular dysrhythmia, and intense pharmacological

treatment for months starts a hunger strike. The following days, low potassium levels below 3 mEq/L are observed. Which potassium level would be applicable to the terms of article 51 of the Code of Medical Ethics: *the physician shall not feed compulsorily any person on hunger strike who is considered physically and mentally capable of making an accurate judgment of the possible consequences of his attitude. In such cases, the physician shall make the patient aware of the likely complications of prolonged fasting and, in the hypothesis of imminent life threat, he shall treat this person.*

The combination of hydrogen and oxygen molecules sometimes makes still water, sometimes troubled water on the edge of the river bed; the combination of the biological and the psychosocial sometimes makes a typical case, sometimes a hazards at the patient’s bedside.

Hazards and cases

Six bedside hazards with main focus on Cardiology are now presented.

Hazard 1 – *ABC is a disability retiree who, at the age of 47, presents with fever reaching peaks of 38. 5°C. He recently completed a six-week antibiotic therapy for Staphylococcus aureus.*

The diagnosis was endocarditis in prosthesis implanted five years earlier and explanted five weeks earlier in compliance with the clinical surgical character of the infection.

Immediate reoperation is strongly considered because of the hypothesis of active infection in the new prosthesis. The image of the vegetation does not elucidate. It is the same shown in the echocardiogram performed during antibiotic therapy.

Following the Service procedures, the search for an extracardiac focus of infection is awaited, a differential diagnosis which, if ruled out, would authorize an immediate cardiac reintervention.

A dental panoramic radiography identifies two images highly suggestive of a focus of infection. The patient had already been told that a reoperation supported by the multiprofessional team is imminent, but it is postponed. Septic patient and skeptical physician long for in loco confirmation by the dentist. Infection is confirmed and eliminated in two visits.

The clinical thermometer is now the precious technology necessary for the next step: hospital discharge or operation room.

The uninterrupted succession of records below 36.6° C after elimination of the dental focus convinced the team that a cardiac reoperation was unnecessary.

The favorable progression persisted month after month and 180 days after discharge ABC is considered clinically cured of the endocarditis.

Meanwhile, two other similar cases of hyperthermia immediately following clinical and surgical treatment of endocarditis in prosthesis occurred; both did not present an extracardiac focus of infection and the findings of reoperation confirmed the persistence of active infection in the heart.

This bedside hazard illustrates the beneficence centered in information from the patient and not in a simplified mental

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organization based on the highest probability. It represents the oneness that speaks louder than statistics.

Hazard 2 – BCE and CDE are a couple of lawyers, both 29 years old. After three years of marriage, they seek family counseling on the risk of gestation in a woman with heart disease. They were informed that, in fact, there could be a cardiac decompensation during gestation and puerperium. The husband asked about the convenience of a surgical correction prior to gestation and was evidently surprised to hear that the intention to become pregnant was not an indication for surgical treatment of the mitral regurgitation due to mitral valve prolapse in a patient in functional class I

The physician noticed the couple's dissatisfaction at the end of the visit.

The situation resulted in a conflict when the couple, 15 days later, came back and reported that a second opinion suggested that they had the right to demand the operation and that the physician could be charged for negligence should a gestational event occur.

One could notice that the husband was more demanding of the intervention than was his wife, who had trusted the cardiologist for many years, since her parents, very scared, had taken her to the first visit because of a heart murmur detected by a sports physician. Confidence had brought her back after a duel with her husband's contrary opinion.

The physician-patient (couple) relationship became tense, the physician knew how to deal with that moment, but he could not foresee the future of the gestation, which, to a certain extent, was being demanded. He even tried to give explanations on risk-benefit, commitments with an occasional prosthesis, anticoagulation, etc..., however he did not succeed. The objective of the counseling was not being achieved.

The physician made his autonomy prevail. Based on his professional confidence, his mastering of ethics, and his experience in bioethics, he did not let himself be convinced by the recommendation that was transmitted to him as a second opinion. He knew how much a second opinion is valued by the patient, but he was sure of his first opinion.

For the following two months, the couple disagreed with each other; the husband insisted that he would not have a "child with problems", inadequately linking the heart condition of his wife with the embryonic development and, thus, revealing his main concern. The couple split up.

Ten months later, the patient returned to her cardiologist. She was pregnant and her future husband showed an optimistic attitude toward the progression of the gestation. In an environment of common objectives, the prenatal cardiologic follow-up strategy was agreed on.

In the sixth month of a twin pregnancy, the patient presented acute pulmonary edema. Surgical correction of the mitral valve disease was then proposed and soon performed. The postoperative period was uneventful. Mother and children are healthy three months after a cesarean delivery and normal puerperium.

No matter how much subgroups constitute case series of research in the pursuit of more exact answers, behaviors according to the so-called human nature will prevail over

statistics in many bedside hazards. Clinical bioethics becomes, under these circumstances of uncertainties, a support of usefulness, efficacy and precaution in looking at Medicine as a science and applied discipline.

Each beneficence, each non-maleficence in its turn. Same wife, different husbands made the difference in the visits. Same heart valve disease, different moments made the difference in management. This is how things occurred with respect to ethics and attention to the precepts of bioethics.

Hazard 3 – DEF is a 40-year-old housewife. She has been living with the diagnosis of active infectious endocarditis in a valve prosthesis for six years. At that time, she refused to undergo cardiac reoperation.

DEF attends the visits regularly. She has already completed several antibiotic regimens and never fails to take initiatives whenever any events occur. After an embolic accident two years ago, she has been living with sequelae and counting on uneven family support.

In this odd context, DEF has been followed by one single physician. He insists on pointing out ways of good practice in Cardiology, and at the same time he gives assistance as desired by the patient – excellent compliance, except operation.

The extreme beneficence of surgical correction, presumed usefulness and efficacy to eliminate the endocarditis, passed the test for these six years; the poor prognosis of survival with medical treatment was contested by the reality experienced, increment of experience provided by the respect to autonomy. Hazard does not invalidate the scientific, but co-validates tolerance to the human.

The patient's full exercise of autonomy is verified, although the denial to be a "typical case" is a high price on the management of her life. Physician-patient relationship adjusted to the frames determined by DEF, a term imposed by the patient on her physician, but which made her dependent on him; pages and pages written on the patient's bulky medical chart portraying the unusual day by day, safeguard words to occasional future distortions, compose this hazard of the bedside book. It does not establish any technical jurisprudence; it is the surviving exception, the unheard-of that challenges, an oasis that is not an illusion because was fertilized by bioethics.

DEF's hazard is "the absurd" that serves as a reference when we feel "neglectful", for not doing what most would do. Occasional thrusts of practicing in accordance with established concepts, "for the patient's own good", could take us to the counterpoint of imprudence.

Hazard 4 – EFG is a 20-year-old unemployed patient who survives thanks to his neighbors' solidarity. He presents with mitral-aortic valve disease manifested as class II. EFG is away from home, and was referred to a Medical Service without previous contact, to undergo "urgent" surgical treatment.

Service procedures invalidated the consideration of immediate operation. The patient alleges several social problems, considers himself disabled for work and insists on being operated based on what he has been told.

A conflict between scientific position and the patient's ideation is established. The patient attends frequent visits

with an evident dissociation between subjectivity which brings concern and cardio-functional objectivity, which proves stable.

Someone noticed the presence of an ambulance from the patient's neighboring city and got a beneficent ride back home. EFG will certainly keep on attributing his social exclusion to the non-performance of the cardiac operation.

As to beneficence/non-maleficence, the risk-benefit ratio, according to the Service procedures, pointed to a low risk and high hemodynamic benefit, but, as usually occurs with heart valve diseases, not exactly a clinical benefit; in relation to the non-maleficence, the significant probability of calcification of the indispensable corrective bioprostheses in young EFG had a weight, prospect of reoperation in the short term; furthermore, the absence of resources for a safe oral anticoagulation, in the region where the patient lives, advised against the option of the use of metallic prostheses.

As to autonomy, there was a demand from the patient, from his point of view of quality of life. The physician, in turn, used his autonomy grounded on good practices. As reinforcement for his decision, he counted on the principle of justice, in its facet that privileges patients who are in fact clinically in need of an immediate surgical treatment.

Biopsychosocial implications of bedside hazards like this are not usually commented on textbooks. The impacts cannot, however, be disregarded by the health team that needs to make clinical decisions. They comprise raw material of a clarifying dialogue. The multidisciplinary nature of bioethics contributes to avoid gaps in communication that lead to incomprehension of what is technically correct.

In hazard 3, the patient's attitude of not following the medical recommendation prevailed, whereas in this hazard 4 the patient's opinion for doing against the Service procedures did not prevail. It is one of the nuances of the application of the principle of autonomy, what the patient does not accept is definitely not made – hazard 3, and what the patient proposes, is not necessarily made – hazard 4.

Hazard 5 – FGH is a sexagenarian businessman who has noticed a progressive tiredness. He is informed that the symptom could be justified by two causes: serum hemoglobin level of 9g/dL and a significant mitral valve disease.

Infective endocarditis that could explain the manifestations was ruled out, and acute leukemia is diagnosed. Blood transfusion leads to acute pulmonary edema.

Surgical correction of the mitral valve disease is concluded to be valid, despite the risks imposed by the presence of a significant pancytopenia and the restriction to the mid-long term benefit in function of the hematological prognosis.

The culminating point of the decision for hemodynamic correction was the privilege for quality of life during chemotherapy and periodic blood replacement.

Forty days after surgery the patient is undergoing hematological treatment with no restrictions from the cardiovascular point of view, following the strategy planned.

No difficulties were found for the diagnosis and the treatment planning for the valve disease in this hazard which counted on the transoperative benefit of hematological replacement.

The major conflict regarded the extension of information on the risk of cardiovascular surgery and hematological prognosis.

The tactics used was fragmentation of communication, the details informed to the family, and what the patient needed at any given moment. The patient accepted the recommended operation better with the reinforcement of the benefit for the treatment of the leukemia than the choice between operating and not operating.

In the first part of the therapeutic planning, the cardiologic priority, the outcome confirmed the presumed beneficence and the maleficences considered as surgical risk could be avoided or corrected. The patient's participation on the decision on his treatment was fundamentally based on the confidence that this was the best to be done, despite the small number of similar hazards available in the experience of national and international Cardiology.

In hazard 3, of patient DEF, quality of life was not the priority, despite the prospect of a definitive resolution of the infectious process considered in the surgical treatment. In patient FGH hazard, the risk-benefit ratio seemed unfavorable from a holistic point of view, but the commitment with the quality of life necessary for a second phase of the treatment prevailed.

Hazard 6 – GHI is an adolescent who, on his 16th birthday, underwent operation due to the manifestation of a functional class III/IV heart failure. Surgery was indicated because of rapidly progressive deterioration of a rheumatic mitral regurgitation resulting from infective endocarditis, negative blood culture, and positive vegetation on echocardiography.

The surgeon confirms the clinical impression when filling the blank of postoperative diagnosis in the surgical report and thus co-validates the preoperative gold-image. The gold-standard of pathological anatomy, however, glitters distinctively: active rheumatic disease, absence of signs of infection.

A generous dose of prednisone replaces that of antibiotics and the patient was discharged in functional class I.

There were conflicts between the syndromic and etiopathogenic diagnoses and between the specific pharmacology and pathophysiological mechanisms, but no conflict involved the surgical treatment.

The privilege for the syndromic diagnosis was the culminating point of beneficence of the good diagnosis-good therapeutics in this hazard. The heart failure syndrome usually holds a higher hierarchical position for the management in relation to that represented by the etiology and pathogenesis of the valve deterioration. The anatomopathological gold-standard reestablished the directions of the subsequent postoperative beneficence, now more dependent on the etiology and pathogenesis.

This hazard warns for the real range of "the medical practice is sovereign and the image is powerful", signaling the possibility of a false-positive gold-image, an encouragement for not disregarding the anatomopathological gold-standard in many surgical circumstances.

Rheumatic disease is hardly ever remembered in the differential diagnosis of the gold-image to technological modernity. It is the duty of clinical bioethics to contribute for the understanding of bedside Brazilian dialects.

Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.