Disclosure of Medical Errors: A Literature Review and the Situation in Turkey

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Received 24 November 2017

Revised 9 March 2018

Published 27 April 2018

Evaluating the efficacy and accuracy of clinical reasoning and distinguishing between complications and medical errors is a difficult task. However, it seems to be an even more difficult task to provide models for systematically reporting and reducing those errors through improvements in the entire web of healthcare delivery.

The report “To Err Is Human: Building a Safer Health System” published in 1999 highlighted the importance of patient safety and proposed some interventions. However, a follow up by the authors of the report in 2005 stated that progress in matters of safer care delivery and improved communications was slow. The interventions proposed include “pay for performance” incentives, implementation of electronic health records, diffusion of safe practices and team training for full disclosure of medical errors to patients following injury.

As patients increasingly are consumers, customers and regulatory actors in their own healthcare, it becomes harder to hide medical mistakes in clinical encounters. Explaining why and how the medical error happened, giving informed assurance that the mistake will be avoided in the future and offering sincere apologies to patients and families are skills that need to be taught to medical students as early as the undergraduate level. Those skills are very difficult to teach in the university environment and would be learned more effectively with years of experience. However, structured educational programs focusing in the necessity and components of a good medical error disclosure would improve awareness in the importance of an effective and honest doctor–patient relationship.

In this review paper, we compare international literature and examples from Turkey with regard to disclosure of medical errors. The Turkish literature on malpractice cases is rich and most of them point out that medical errors occur because of heavy workloads, insufficient infrastructure and lack of high quality medical education. However, the lack of any papers on medical disclosure to patients in Turkey seems to point out to the big communication gap between patients and doctors, among other reasons. We will address some of the reasons for such lack in Turkey and present recommendations about how to disclose medical errors to patients such as implementation of electronic medical error disclosure systems, education and training, and legislation.

Keywords: Disclosure of medical errors; malpractice in medicine; medical education and training.

1. Introduction

Interview and survey-based research works conducted among specialists and trainees from a variety of medical disciplines point to the fact that inadequate disclosure of medical errors is a universal, specialty-overarching problem.¹⁻⁵

In 1983, Neil McIntyre and Karl Popper declared that ‘Mistakes occur in medicine as in other walks of life’. They emphasized the necessity of a new medical ethics, which teaches doctors to recognize and analyze not only their own but also their colleagues’ mistakes.⁶ Later, in the early 90s, Leape and Brennan of Harvard University showed the magnitude of medical mistakes in the U. S. causes 100,000 deaths and 1,000,000 undesired outcomes (adverse effects) per year.^{7,8}

The report ‘To Err is Human: Building a Safer Health System’ was released by the U. S. Institute of Health in 1999 and highlighted the importance of patient safety. It proposed the definition of error as “the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim”.⁹ Recently, the term “patient safety incident” has been coined in some publications, and used instead of the term “medical error”;¹⁰ and some also prefer to use the term “adverse effect”, meaning an “incident causing the patient harm of some type in the course of their health care, which was not a result of the underlying disease”.¹¹

Many medical errors can be prevented and their frequency diminished. However, they cannot be completely eliminated. The communication about these errors to the hospital administration, to colleagues, and to patients and patient’s families, is of vital importance. The necessity of error disclosure to patients and patient’s families is based on general moral arguments, such as protecting the trust relationship between the medical practitioner, the healthcare organization and the patient. Also from the perspective of medical ethics, not disclosing medical error is a basic breach of the professional relationship contractually established through informed consent and, the physician violates the expectation of transparency in the therapy process.¹⁰ By not disclosing a committed mistake, he/she fails to provide the patient with all the information that may be important for future decisions about his or her own health and future treatments.¹²

When an error is committed and there is failure in disclosure, the medical professional/organization incurs in a form of deception. Disclosure of medical errors to patients and their families is considered an ethical duty of the physicians and will become inevitable as there is more emphasis in safer and more patient-centered care.^{3,10}

2. The Problem of Uncertainty in Medicine

Distinguishing between medical errors and complications is a difficult task, and this problem seems to be connected to the inherent uncertainty in matters of healing: How can medical standardization be reconciled with the big diversity of bodies and pathologies? How can doctors standardize diagnosis and therapy, in the midst of

variation in work conditions, training and education, and also, experience and personal background?

Evaluating the efficacy and accuracy of clinical reasoning is a difficult task. The two primary models developed to investigate reasoning in diagnostic and therapeutic tasks in clinical medicine are the decision-analytic approach and the information-processing or problem-solving approach.¹³ While the decision-analysis is based on comparing a doctor's diagnostic accuracy with a mathematical model, the information-processing analysis describes cognitive processes in reasoning tasks, based on case protocol analysis and observational techniques.^{14,15} Research on understanding accurate diagnosis methods and figuring out the most effective expert tools for developing therapy plan not only support efforts to reduce medical errors in clinical practice, but also serve as artificial intelligence (AI) research in medical cognition, "characterizing productive and less productive lines of reasoning in therapeutic and diagnostic tasks".¹³

While research from both the sides of cognitive psychology and computer engineering aims to reduce medical errors committed by medical professionals, it seems to be an even more difficult task to provide models for how to systematically reduce those errors through improvements in the entire web of healthcare delivery. As the report, "To Err Is Human: Building a Safer Health System" points out:

"The health care delivery system is rapidly evolving and undergoing substantial redesign, which may introduce improvements, but also new hazards. . . As health care and the system that delivers it become more complex, the opportunities for errors abound. Correcting this will require a concerted effort by the professions, health care organizations, purchasers, consumers, regulators and policy-makers. Traditional clinical boundaries and a culture of blame must be broken down".⁹

3. Why is Medical Disclosure a Hot Topic Nowadays?

In the performance-based evaluation of healthcare professionals, what counts as success for a doctor or nurse is hardly the quality of the care provided, which is difficult to assess in numbers, but the number of patients served. This pressure of serving as many patients as possible, with the lack of adequate numbers in co-workers, clinical infrastructure and technological limitations, combined with the pressure to commit no medical mistakes, put the doctors in an almost unresolvable dilemma. Also, it must be noted that, the number of private-run healthcare facilities increase in many countries, where the doctors work under the pressure of making maximum profit. Under these conditions, it becomes harder to avoid medical errors in clinical encounters. This is why, an increasing number of paper in a variety of specialist journals today deal with the problem of disclosing medical failures to patients. As pointed out in almost all of the studies, providing explanation about why and how the medical failure happened, giving informed assurance that the error will be avoided in the future and offering sincere apologies to patients and families, is a communication skill that needs to be included in the medical education.

One important aspect of making sure that further failures will be avoided is continuous improvement in the delivery of healthcare. For this purpose, national and international, anonymous failure reporting systems have already been established.

4. Global Change in the Doctor–Patient Relationship

Cole *et al.* (2013) studying the correlation between ethical reasoning and error disclosure among medical residents from John Hopkins Hospital, showed that residents with higher ethical reasoning scores were more likely to state that they would definitely disclose an error, and feel greater personal responsibility for errors. Additionally, when selecting scripted responses, they chose responses with greater levels of details, and which expressed more personal responsibility, using more readily the word ‘error’ in their explanations.⁴

In modern medical ethics, “Patient autonomy” has been established by Beauchamp and Childress as the primary principle informing the doctor–patient relationship. The principle of patient autonomy has priority over the other four principles of medical ethics, beneficence, justice and nonmaleficence.¹⁶

The increasing role that the patient plays as a partner in medical decision-making requires strong communication skills from medical professionals. Informing the patients about risks, side effects, possible alternatives and the possible outcomes of a treatment is not only time-consuming and difficult, but also includes the problem of explaining unforeseeable events. The changing expectations of patients, such as sharing information about all aspects of diagnosis and therapy, transparency with regard to possible complications and also with regard to medical mistakes, may strongly undermine the medical authority of doctors in general.

As stressed by Martinez *et al.* in their study on dealing with surgical mistakes, a hierarchical work environment in medical care does not serve well, when it comes to disclosure.¹⁷ A transformation of power structures in the medical profession does not seem to be immediately achievable. Doctors may fear to appear professionally incompetent, having to suffer malpractice punishments, and be harshly treated by colleagues, especially by senior doctors, and may try to ignore, cover up and silence medical errors. However, refusing to take the responsibility for the care provided will become more problematic, as patients play a larger role in choosing and carrying out therapies.

5. Constructing not Hierarchical, but Supportive Relationships through Disclosure and Apology

Patients in all cultures around the world expect an apology and emotional sincerity.¹⁸ Health Law and bioethics experts interviewed by Giraldo *et al.* (2016) mostly agreed that health providers should always disclose adverse events regardless of its severity (84.7%); and that this disclosure should be documented in the clinical history of the patient (73.9%) together with the response of the patient and/or the

patient's family to this disclosure (78.2%) and a sincere, honest and clear apology should be issued always (82.6%).¹⁹

Dahan *et al.* (2017), in their work based on face to face interviews with seven physicians in a neonatal unit in France, point to the importance of a sincere and open apology, especially in order to establish mutual emotional support. The authors offer a semiotic analysis of what those medical professionals consider to be a good medical apology to patients in cases of medical errors. Emerging questions are: What differentiates a medical apology from an everyday apology? How does the apology, along with explanations about how similar mistakes will be avoided in the future, help to restore the doctor–patient relationship? How can the apology support the trustworthiness of the description of the event? According to the authors, apology helps to remove the doctor–patient relation from a hierarchical one to a human encounter. Through the apology conversation, participants can exchange emotions, such as empathy, regret and responsibility for each other's condition. In this way, disclosure points to a commitment though the word uttered, putting the healthcare team or the institution into a position of obligation: I know I did wrong, and I am ready to do whatever I can to change that.

Lin (2015) discusses the significance of apology in the context of Chinese culture, and makes so patient's families reactions to medical errors more comprehensible to outsiders, as these reactions include notions of honor, related to not having received an apology from the healthcare institutions, instead of a demand of financial retaliation. Lin explains that in Chinese culture, essential elements of an apology are: Acknowledgement of fault, admission of responsibility and an offer of reparation, in order to restore the harmony of human relations. In Chinese, apology (*pei li dao qian*) literally means: "To restore the ethical relationships (*pei li*), to make an avowal of one's wrongdoing and to express regret about bringing incompleteness to the existing hierarchical ethical relationships (*dao qian*)". Hence, an apology is more than an individual expression of wrongdoing and the wish to restore harm to the victimized party. It is rather a disruption of the harmony of the community, and so, threatens the entire social texture. This is why, Lin argues, disclosure of medical errors and providing apologies is basic to restore the traditional relationships between professions, based on trust, personal sacrifice and self-punishment in cases of wrongdoing.²⁰

However, as Gao *et al.* (2015) observed, in practice, many doctors in China feel uncomfortable disclosing complications and errors to patients. The authors state that the standard is to say nothing, unless there are serious consequences. The authors believe that during the last 30 years, trust between patients and doctors has been eroded due to rapid economic development and high incentives for personal gain. They also stress that the situation worsens through regulations with regard to medical malpractice which are scattered, ambiguous and poorly applied, and recommendations for solving disputes being vague and nonspecific. The authors stress the importance of better medical ethics education in faculties, as well as clear and uniform legal and institutional guidelines with regard to litigation of medical errors, error disclosure and error reporting.²¹

6. To Disclose or Not to Disclose?

Although patients, professionals from the field of medical ethics, physicians, medical trainees and other healthcare professionals agree that errors should be disclosed,^{1,3,17,22} in reality many errors are not disclosed.^{17,18}

In a study from Coffey *et al.* (2010) in pediatric residents from a Canadian Hospital, when confronted with scenarios involving medical errors, over 90% of respondents correctly identified the error, but only 40% would definitely disclose it; if harm occurred, far fewer would acknowledge it and make use of the word “mistake”.³ In another study involving medical trainees, it was reported that regarding their intention of disclosing an error to patients, only 43% will “definitely” do it, 47% would “probably” do it, 9% would do it “only if asked by patient”, and 1% will “definitely not” do it.²

In a study carried out among medical trainees in a U. S. teaching hospital, only 50% of the participants chose disclosure statements explicitly stating that an error occurred, rather than calling the incidence “an adverse event”. Regarding apologies, trainees were split between a general expression of regret (52%) and an explicit apology (46%) and interestingly, respondents at higher levels of training were less likely to use explicit apologies.²

Ghalandarpoorattar *et al.* (2012) presented data obtained through a questionnaire in a big public hospital in Teheran, Iran, carried out among 53 attending surgeons and second to fourth year surgical residents. The participants discussed two clinical scenarios and answered questions regarding best disclosure of a medical error and their actual practice in the case of their last error. The results revealed a gap between surgeons’ intentions and actual practices, which authors relate to the paternalistic traits in medical culture specifically, and the Persian–Shia culture in general.²³

Leone *et al.* (2015) video recorded 38 Italian clinicians, who participated in a simulated error disclosure conversation, with a simulated family member. According to their results, clinicians were more eager to disclose major errors, and also more explicit in disclosing error and offering apology if the responsibility was not a shared one, but a directly personal one. Only 55% of the clinicians directly referred to an error and/or apologize. According to the authors, the results indicated that disclosure is not a common practice in Italy and especially if the responsibility is more system-based, the patients are less likely to get information and apology.²⁴

D’Errico *et al.* (2015) used anonymous questionnaires to ask physicians in an oncology clinic in Italy about the nature of the information that should be given to the patient, and also to ascertain whether it is possible to institute a full error disclosure policy in specific settings. The authors noted that although all participants recognize the importance of error disclosure, 50% have never disclosed a medical error to their patients. The physicians stated fear of loss of patient’s trust and fear of lawsuits as the major obstacles to error disclosure. The physicians interviewed also stated that “in cases of error, assistance given by the Health and General

Administration of the hospital in communicating the mistake to the patient is absolutely vital, as it proves that the center has taken charge of every aspect of the problem-clinical, organizational and, if necessary, economic". The authors support the notion of creating "crisis units" in hospitals, where the head of the crisis unit, or a hospital's risk manager, accompanies the care provider/s in the meeting with the patient and family. The clinical risk manager is also expected to provide training courses for clinicians, with a focus on error communication.²⁵

Harrison *et al.* (2016) questioned the factors enabling open disclosure or hindering it, through semi-structured interviews with 13 doctors and 22 nurses in five national healthcare institutions in Great Britain. The authors stress the significance of positive role models in the hospital setting, where senior doctors and nurses not only provide guidance, but also support the creation of a non-punitive learning environment, where candor is supported. They note: "Despite policy advancement and implementation around open disclosure, as few as 30% of harmful events may currently be disclosed to patients. Recent high profile cases, such as the events occurring at the Mid Staffordshire Hospital Trust in the UK demonstrate that the practice of open disclosure continues to fall short of patient and family expectations." Based on the conducted interviews, the authors identified five themes describing supportive factors for open disclosure to take place: (1) Accepting open disclosure as a moral and professional duty, (2) positive past experiences, (3) understanding the repercussions of the medical error and of the disclosure, (4) role models providing guidance, and (5) institutional clarity and transparency.²⁶

Box 1

Types of disclosure of medical errors

- (1) Full disclosure
- (2) Partial disclosure
- (3) Nondisclosure

Box 2

Elements of full disclosure of medical errors

- (1) Explanation: why and how the error happened
- (2) Assurance that it will never happen again
- (3) Apology: Taking personal responsibility

Table 1. Frequently reported causes for not disclosing medical errors and their recommendations for overcoming them.

Cause	Recommendation
Fear of legal repercussion	Implementation of ‘apology laws’
Lack of training in how to disclose errors	Education and training
Fear of professional reputation damage	Implementation of policies and guidelines
Culture of ‘ineffability’ fo the physician	Education and training
Personal morality	

7. What, When and How of Disclosure

Several guidelines and recommendations exist regarding the components of a disclosure. For example, the American College of Emergency Physicians (ACEP) recommends that disclosure of a medical error to the patient should be done in a timely manner, providing full information about the error and its consequences, while showing respect and commitment to patient welfare, and including a sincere apology.^{3,27}

In a qualitative analysis performed by Fein *et al.* (2007) among hospital administrators, physicians, residents and nurses, three types of disclosure were identified:

- A full disclosure matching the expectations of patients, including admitting and discussing the event and linking the event to direct and indirect, long-term harm;
- A partial disclosure with some explanations of what happened, and some commitments about how to compensate for the harm induced; including a ‘connect-the-dots’ approach, with a lack of linking the error to its effects, and so misleading the patient and family about whether the error constituted a mistake or was a natural part of the disease process or care.²⁸
- Nondisclosure.

The type of disclosure received may impact the response of the affected patient. Wu *et al.* (2007) studied how patients react to the different methods of full, partial, or “connect-the-dots” disclosure, and found out that patients will respond more favorably to physicians who apologize and accept responsibility for medical errors, than those who do not apologize or give ambiguous responses.²⁹

Hannawa (2017) approached the question of a “good disclosure” from the patient’s perspective, and for a more grounded discussion, organized 10 focus groups among patients of five different hospitals across Switzerland. A total of 63 patients participated in group discussions about what a competent disclosure should include, with regard to messages conveyed and behavior displayed by healthcare professionals. She lists attentiveness, composure, coordination, expressiveness and inter-personal adaptability as the major attributes to be acquired through effective disclosure trainings offered to clinicians. The focus group participants stated: The

responsible clinician should enter the communication well-informed and goal directed; offer a remorseful declaration of responsibility and provide an honest apology; provide a clear and honest account of the event; open a discussion about reparation of damage and also explain how provisions are being taken for not repeating the mistake in the future. The doctor should take responsibility, offer apology and an honest account, through: Establishing a close, trusting relation; leave a door open for the patient to return in the future if the need arises; and make sure they emotionally “pay” for the error in relational terms. The patients demanded sincerity, recognition of patient’s loss and empathy, while they did not want avoidance, identity separation (arrogance, technical distance) and defensiveness.³⁰

8. Disclosure of Near-Misses

Patients and their family want to be informed of errors regardless of their severity and ethics experts agree; but again in practice, this is very often not the case.^{3,19} Most of doctors and medical trainees are rather cautious to report errors that were minor or caused no harm (near-misses). Kim *et al.* (2017) found that fourth year medical students and interns in Korea felt that the duty of disclosing an error decreases with the decreasing severity of the error outcome.³¹ The same was observed in a survey to fourth grade medical students in Hong Kong, where 6% of students did not see a particular need to address a ‘no harm’ situation.⁵ In Argentina (2004), due to the records of the first two years of an anonymous disclosure system in the Pediatric Department of a Hospital in Buenos Aires, it was identified that more than 70% of mild mistakes were not disclosed to the parents.³²

9. Barriers for Disclosure

Several barriers for disclosure have been identified through the literature. The most cited ones are: fear of legal repercussion; fear of professional reputation damage; prevalent culture in the medical institutions; lack of training in how to disclose errors; personal morality.^{4,11,17,18,32–34}

9.1. Fear of legal repercussions

Helmchen *et al.* (2010) mentioned that in a 2002 survey, the most commonly cited institutional barrier for developing or implementing disclosures policies was the “fear of medical malpractice litigation”.³³ This varies however, probably influenced by the discipline or profession, level of responsibility of the individual and the existing legislation regarding medical errors. For example, in a study between pathologists and laboratory medical directors, only 11.2% of respondents said that fear of malpractice litigation would affect their recommendations regarding disclosure of an error;¹ and in another study among residents, few of them believed that

disclosure would result in an increased risk of being sued (17% surgical versus 12% nonsurgical).¹⁷

Several studies indicate that full disclosure of errors may have a positive impact and maybe influence less law suits.^{10,35} In a survey of more than 1000 Illinois residents, Helmchen *et al.* (2010) found that patients were more forgiving and less likely to file a lawsuit when they feel confident that their provider will choose to disclose a medical error and immediately offer to remedy them.³³ The decision of starting a legal procedure has been associated with omission of information, confusing or lacking in empathy explanations and the moment of receiving explanations, the type of harm and the physician–patient relationship.³⁶

Beckman *et al.* (1994) found that in 71% of legal demands, problems occurred due to lack of communication in the clinical relationship (such as abandonment, devaluation of the problem, lack of information. . .); and 39% of the people suing declared that they would have not gone through such a procedure if there had been an explanation and an apology.³⁷

Findings from one US study suggest that providing fair compensation prevents malpractice suits, not only because patients receive adequate financial settlements, but also because maintaining a caregiving relationship with patients and families diminishes the anger and desire for revenge that often motivates patients litigation.³⁸ When legal experts in Spain were consulted, 63% agreed that if an apology was issued, it would not alone mean a confession of professional liability.¹⁹

9.2. *Fear of professional reputation damage*

Several sources indicate that the reason for not disclosing an error is the fear of damaging one's own or the institution's reputation or prestige. Martinez *et al.* (2013) measured and compared surgical and nonsurgical residents' exposure to negative and positive role modeling for responding to medical errors, and found that nearly one third of surgical (36%) and nonsurgical (28%) residents believed that acknowledging a medical error would negatively impact their career (e.g., evaluations, reputation, or recommendations).¹⁷

9.3. *Prevalent culture of blame in the medical institutions*

In medicine, the predominant culture is to occult medical errors and the common understanding, that only the incompetent and irresponsible physicians make mistakes is strongly rooted.

This attitude is fomented in the traditional models of medical education, where the concept of ineffability is reinforced and therefore, there is few training or education about how to confront medical errors. This concept of ineffability also transfers to the general population, where a false idea prevails that medicine is 'infallible and miraculous', that "doctors should know everything and never make errors".^{18,32} All of this translates in a "shame and blame" culture, which view the causes of errors as mistakes or slips by individual clinicians, who subsequent to the

error, need to be identified and punished.¹² In a survey from Leung and Patil (2017) administrated to fourth year medical students in Hong Kong, the majority agreed that medical errors were inevitable but still over 25% expressed that ‘competent physicians do not make mistakes’.⁵ The culture of negation between the medical community was evidenced also by Borrell-Carrio *et al.* (2005) which in a study carried among primary care physicians in Spain, found that around one third of doctors (28%) affirmed they “never made a mistake”; with an increase from a previous study carried out in 1996 by the same authors, where 18.3% of doctors affirmed to “never having made a serious mistake”.³⁹

This culture of blame flourishes through the fear of being treated harshly. Surgical residents (39%) and nonsurgical residents (20%) reported observing a surgical resident to be treated harshly (e.g., humiliated or verbally abused) for an error.¹⁷ The remedy for medical error and disclosure is not to blame and humiliate an individual physician, but to engage everyone in efforts to fix the system.⁴⁰ In this respect, responsibility should not be confused with blame, although that is too often the case in discussions of medical error and in particular of medical malpractice.³⁸

9.4. *Lack of training in how to disclose errors*

Varjavad *et al.* (2012) showed that prior training about medical mistakes have increased more than four-fold between cohorts from the beginning of the 2000’s and the end: from 11% in 1999–2001 to 54% in 2008–2009.⁴¹ However, there is still a gap of training and education with respect to this topic. In Spain, barely only 20% of health care professionals have received training in how to tackle disclosure to patients after a medical error occurred.¹¹ In Martinez *et al.* study among surgical and nonsurgical residents, only about half of them reported adequate training for responding to medical errors (55% versus 48%).¹⁷ In Coffey *et al.* study among pediatric residents, only 40% reported receiving education on disclosure.³

In a study in Chile, participant physicians indicated that communication of bad news is a frequent and difficult practice, for which they did not receive any formation.¹⁸ And this feeling is not exclusive of doctors in close contact with the patients. It also extends to other medical professionals. In Dintzis *et al.* (2011) study, 40,2% of the surveyed pathologists and laboratory directors’ expressed that one cause for not disclosing errors is that physicians might not be able to adequately explain the error to the patient, and only 21,7% reported having received education or training in error disclosure.¹ In Mexico, Vasquez-Frias *et al.* (2011) mentioned that in a study of doctor–patient communication applied to residents in the National Institutes of Health, 80% showed deficiency in evaluation skills necessary for clinical communication. Also the National Medical Arbitration Commission (CONAMED by its acronym in Spanish) reported that around 50% of the complaints they receive are based on deficiencies in the doctor–patient communication.⁴²

10. Recommendations

Recommended initiatives are:

- Implementation of policies and guidelines for identifying and responding to medical errors, including electronic quality improvement systems and procedures for disclosing significant errors to patients and their family.
- Education and training at all levels on identifying and preventing medical errors and on communicating truthfully and sensitively with patients and their representatives.
- Development of legislation that makes apology statements by physicians related to disclosure of medical errors inadmissible in malpractice actions (“apology laws”).^{10,19,27}

10.1. *Sharing the burden of disclosure*

Disclosing medical failures to patients and also to colleagues and institutions should not be a burden that individual doctors should carry by their own. There should be best practice guidelines, training and instruction available for medical professionals at all levels of their education, starting from the undergraduate level.^{41,43}

As Ghalandarpoorattar *et al.* state, gaps between doctors best intentions and clinical practice can be huge, when it comes to talking with patients about professional shortcomings, flaws in the healthcare system and the consequences of their errors, that the patient has to bear.²³ Training in how to analyze all steps and components in a patient’s treatment that went wrong, and working for the needed institutional change for transparency at the work place, would be a part of such educational programs.⁴ Doctors should also learn to assess how patients hear what they are saying.²⁹

However, the first step in developing a work environment fit for discussing medical errors and learning from them is to admit that there is an immediate need to change patterns of communication with patients, and also with co-professionals. A literature survey with a focus on medical errors and their disclosure reveals that there are several disclosure systems currently used, and an intensive discussion about how they can be improved, so that it is more and more possible to learn from mistakes.

As Coughlan *et al.* (2017) stress, not only patients and patient’s families, but also the medical staff and the healthcare institution suffer from making mistakes, and dealing with fallibility. The authors denote the medical staff as the “second victims”, and the healthcare institution as the “third victims” of a medical error, and they argue that all parties have to develop methods to deal with imperfection and uncertainty embedded in the medical profession itself. The paper underlines the importance of the following factors in coping with failure: Developing institutional and emotional resilience, learning well to document and report medical error,

and making necessary changes, such as establishing support systems responsive to all victims.⁴⁴

10.2. Error reporting systems and disclosure policies

Error report system is a primary component for identifying medical errors, understanding its causes and making system changes to reduce them. National models exist in the U. S. for both mandatory and voluntary error reporting programs. Voluntary error reporting systems usually contribute more to provide practical recommendations than mandatory error report systems.³⁴ However, even if instituted, many healthcare workers are unaware of their existence in their institution.¹ In Chile, the Law 20.584 that regulates the Rights and Obligations of the people in relation with their healthcare and that came into force in the year 2012, determines that is an obligation to inform transparently every adverse event to the patient regardless of the magnitude of the occasioned damage.^{18,22} In Hong Kong, an 'Advanced Incident Reporting System' and risk management task force has been established by the Central Hospital Authority.⁵ Alvarado-Guevara indicates that in Latin-America, there is little legislation about medical errors, and a lack of regulatory organizations to control that established laws to prevent and identify events are respected.⁴⁵

It is important to note though that, both mandatory and voluntary reporting programs will prove useless without a strong, well designed system for analysis and response.³⁴

Up to now, many healthcare institutions continue with a policy of "deny and defend"³³ However, some hospitals in U. S. have adopted a disclosure-apology-compensation algorithm in which errors are disclosed, apologies are made, and compensation is offered to patients if it is determined that the patient suffered injury from the incident, a model that has even reduced payments to patient claims.⁴⁶

It is important that disclosure mechanisms, policies and guidelines are accessible to the healthcare professionals. Raemer *et al.* (2014) suggested that when experienced practitioners receive a cognitive aid in the form of a best practice guideline, they performed better in disclosing and apologizing to patients.⁴³

10.3. Education programs for medical error disclosure

Several education and training programs had been developed around the world. For example, in Korea, an education program was designed for fourth year medical students and interns to improve their understanding and performance of medical error disclosure. This program included practice in error disclosure using a standardized patient, facilitated reflection, feed-back and short didactics for wrap-up in error scenario simulation. Most of the participants of this program (65%) responded that this program made them more confident in coping with medical errors and that let them more prepared to manage this kind of situations.³¹ In U. S., Gillies *et al.* developed a multi-faceted intervention with increasingly applied learning

opportunities for teaching about errors and apologies to a cohort of students in their first year of medical school; and most of them considered the course very useful or useful.⁴⁷

White *et al.* (2011) also recommend to start this education and training early, since they noted an overall increase in willingness to disclose errors between the second and fourth year of medical school.² Also, in a 2012 study by Lee *et al.* interns (56.1%) took medical errors less seriously than medical students (74.8%) and their disclosure (46.3% versus 83.1% respectively).⁴⁸

10.4. Apology laws

As mentioned previously, many physicians and medical trainees cite the fear of medical malpractice litigations as an important reason for not disclosing medical errors. Some countries count with laws that prohibit the use of apologies in litigations, so called “apology laws”. As for 2008, there was some level of legal immunity for conveying regret or an apology in 36 U. S. states.^{12,49} Other countries such as Spain for example, do not have such laws.¹¹ It is expected that this “apology laws” would result in more disclosure and less litigation, but is still early to assess this.⁴¹

11. The Situation in Turkey

The lack of any literature about disclosure of medical errors in clinical practice indicates that while acknowledging professional, institutional, political and economic shortcomings in the delivery of healthcare services, medical professionals in Turkey do not yet recognize the role patients play in the web of healthcare delivery. The missing agency of the patient and patients’ families in the intellectual universe of Turkey’s doctors and nurses may be interpreted as a hidden, ignored paternalistic approach yet prevalent in Turkey’s healthcare system.

Although numbers on medical errors in Turkey are not available, Turkey already has an anonymous error reporting system for healthcare professionals. Along with the increasing number of patients’ rights centers in hospitals and civil advocacy groups for patients’ rights, it may be that a pressure from the sides of patients for transparency and open communication can make doctors think about how to talk about medical errors to hospital administrators, lawyers, law makers, minister of health officers and to each other.

The inadequate nature of the Turkish “Professional Safety Insurance”, the mandatory private insurance intended to protect doctors against malpractice cases, may support the need to find other methods of dealing with medical errors, rather than meeting the patients and families at court. Here, the Scandinavian system of “Patient Safety Insurance” may provide a good example, where standing on a legally and financially safer basis, also Turkey’s healthcare professionals would start to consider having honest conversations with patients about personal and institutional guilt, shortcomings and potentials for improvement.

11.1. *Truth telling and the dominant role of patient's families*

Güven (2010), providing a critical overview about doctor's truth-telling practices in oncology in Turkey, argues that in Turkish medical culture, telling the truth about the patient's condition to relatives and going with family preferences is a more common practice, rather than discussing her condition directly with the patient. He suggests that this attitude is related to the paternalistic care model dominant in Turkish healthcare system. In order to make his point clear, he cites from a Turkish clinical ethics text book from 2001: "In communities such as ours, which have blended with eastern cultures and where emotions dominate, [the physician] should never speak directly to the patient by using forthright words such as 'You have cancer, you have approximately this much or that much life left'. Some want to know the answer and ask: 'What do you think it might be?'; whereas others may ask candidly: 'I have cancer, don't I?' However, such patient[s] actually want to hear that they do not have cancer. Even in this situation, the answer: 'Yes, you have cancer' should not be given".⁵⁰

In order to support his argument, Güven cites three broadly laid-out studies: In a study focusing on truth-telling practices of doctors in face of grave prognosis carried out in a Turkish university hospital's radiation oncology clinic, the authors conclude: "In Turkey, the general ability to squarely face the prognosis in severe cases is very limited when compared to that of the patient population in Europe".⁵¹

Another study conducted among doctors in a bigger hospital in Eastern Anatolia shows how most of them think that disclosure of cancer-related information to patients is incompatible with Turkey's cultural context.⁵² Also in a large-scale survey done among Turkish oncologists, a notable percentage of the participants stated that they may never (9%) or rarely (39%) disclose a diagnosis of cancer to their patients.⁵³ According to a study done in a Turkish university hospital 63,4% of the cancer patients were not fully informed about their condition.⁵⁴

As due to the rich cultural diversity in Turkey, it may not be easy to state what is compatible with the culture of a specific patient. Countries with big cultural diversity may experience more communication problems in healthcare, especially if the social groups have strict generalizations and stereotypes about each other. In this context, it may be helpful to engage in a more open conversation with the patient and to assess her personal preferences.

Secondly, healthcare professionals are part of the healthcare culture they are operating in, and they have a role in re-producing or changing it. They have the main part to play in shaping truth-telling practices. Güven gives one example of such positive change: In a survey carried out among cancer patients in a big University hospital in the city of İzmir, 88% of patients were informed about their diagnosis accurately. The author of the study related this result to the fact that the members of the health care team in the study were 'largely European trained' and the department itself has 'made a concerted effort to increase the level of physician-patient communication about diagnosis and prognosis'.⁵¹

Suggesting that it makes life easier for the doctor not to undergo the burden of explaining diagnosis, therapy and possible outcomes to the patient is a risky business. Güven cites a case which demonstrates that ungrounded assumptions by the doctor may lead to serious complications for the doctor himself:

A patient diagnosed with colon cancer undergoes surgery. The patient is not only unaware of the exact nature of his disease (he refers to it as a ‘mass in the abdomen’), but he is also uninformed about the possible consequences of the surgery, probably because explaining these would require more information to be disclosed about the nature of the disease. When he sees the colostomy opening in his abdomen (a normal consequence of the surgical intervention) he becomes very upset. He asks the visiting physician why his consent was not obtained, and things get worse when the physician tells him that they obtained his son’s consent instead. The patient becomes very angry by the physician’s response, and wants to know why they sought his son’s consent for a procedure that would involve his own body and declares that he is going to sue the health care team. It is interesting that, when more information is disclosed, the patient calms down and says that he would have understood the situation if he had been given more details.⁵⁵

Not only doctors, but other care providers such as family and friends may display paternalistic attitudes towards patients, and show traces of a patronizing approach to the sufferer. A disease condition turns a person into a needy, suffering sick one, which in turn makes it easier for her supporters to deprive her of social authority and individual autonomy. Turkish research conducted with the relatives of patients recently diagnosed with cancer reported that 66% of the relatives opposed telling the truth to patients, whereas 71% stated that they would have demanded information if they themselves were suffering from a lethal disease.⁵⁶ Although some families would support withholding information, Turkish oncology patients obviously want to know about their condition and want to share control over their therapy: In a study conducted among 104 Turkish cancer patients, Erer *et al.* reported a very high percentage (92.3%) of patients who thought that physicians should inform patients about their disease and treatment choices.⁵⁷

There is no Turkish study investigating truth-telling practices of medical practitioners in malpractice or near-miss conditions, although the complication rates seem high, especially in specialties involving radical medical interventions. Turkey belongs to the European region of WHO, and according to WHO data, medical errors and health-care related adverse events occur in 8% to 12% of hospitalizations in EU member countries. The rates can be expected to be higher in Turkey.

11.2. *The legal structure framing medical error and error disclosure*

In Turkey, there is no malpractice law especially designed for the needs of patients, doctors, other healthcare providing professionals or healthcare institutions. In the Turkish legal system, doctor’s responsibilities are defined on the basis of the law for the protection of consumers’ rights, criminal law, administrative law or civil law.⁵⁸

Before 2002, when private hospitals started operating, all malpractice cases were filed at administrative courts. Before the strong privatization of healthcare services in the early 2000's, almost every doctor in Turkey was employed by the Ministry of Health under the law number 657, which governs officials' liabilities, and the hospital administration was liable for the compensations due to medical errors. In recent practice, the Turkish government pays for half of all premium costs for practicing physicians who work in public health care institutions. The exact cost of an insurance policy depends on the area of expertise (such as surgery, emergency, surgical oncology, anesthesiology, gynecology...). Physicians' premiums are gradually affected by their history of adverse events and experience.⁵⁹

11.3. *The need for standardization in medical liability*

Interestingly, different regulations apply in medical errors, depending on if the error occurred in a public or private hospital: In a private hospital, contractual law applies and the patient may only sue the hospital, due to breach of contract or negligence in the provision of services. Thereafter, the hospital may recover damages from the concerned physician. In a public hospital, administrative law applies and, regardless of who is responsible, the patient can only sue the National Ministry of Health, due to the State's responsibility to provide best healthcare services to its citizens.⁶⁰ After that, the Ministry investigates in how far the hospital or the physician is responsible for the medical error, and may demand recovery of costs from the responsible parties.

Since the Health Transformation Program set into force in 2003, the number of private healthcare institutions increased significantly.⁶¹ In 2003, The Ministry of Health prohibited any private practice by doctors working in a public hospital, so that doctors in public service were now forced either to resign, or to earn less. In addition, the incomes of the doctors working in these hospitals were regulated in accordance with a "Performance Based Salary System," in which every procedure is allocated a constant wage that assigns the quantity, but not the quality of work as the primary basis for determining salaries.⁶² Hence, time-consuming, risky and complicated interventions became less and less preferable, especially for physicians working in private hospitals, with a higher risk of being held liable for compensations. In current practice, lawyers representing patients can bring their files both to administrative courts and to civil courts. Cases against public hospitals still need to be resolved in administrative courts, but lawyers prefer to bring cases against private hospitals to civil courts, as the procedure runs faster and enacting court hearings is possible.⁵⁹ Under these conditions, medical professionals suffer under the lack of specialized malpractice courts, where higher expertise and a more standardized approach could be expected.⁶³

Doctor's Professional Liability Clause was enacted by the Ministry of Health in 2006, and the compulsory private malpractice insurance for physicians was put to force in the same year.⁶⁴ The distribution of incomes from private insurance payments are deemed to be problematic by the Turkish Medical Association

(TTB): According to TTB, only 16,03% of the insurance payments were used to compensate patients' loss and demands due to medical injury, and 84% of the collected resources remained in the hands of the private insurance companies.⁶⁵ TTB suggests a public fund based on institutional litigation and compensation, also more public investment for continuous medical education and improving mechanisms integrated into the medical practice, and a special legal body made up of experts to evaluate malpractice claims.⁶⁶

Durmuş (2017) also sees the lack of any independent expert bodies or expert mediators in Turkey as a serious obstacle in the way of solving existing problems and avoiding medical errors in the future. Expert mediators, be it medical, legal or administrative specialists, can assist all the involved parties (patient and family, doctor, healthcare institution) in gathering evidence, formulating their case, communicating standpoints and coming to a resolution without applying to the court system. In practice, alternative dispute resolution has rarely been applied in malpractice cases: Between 2013 and 2017, 4661 civil disputes have been referred to legal mediators, only 4 of which were malpractice cases. According to Durmuş, as many potential medical malpractice disputes are never litigated, a medical malpractice model that focuses more on mediation-based resolution may best suit the injured parties.⁵⁹

Since 2010, the evaluation of malpractice accusations can be carried out either by the Higher Health Council, the Institute for Forensic Medicine, or the departments of forensic medicine in major medical faculties. According to Polat and Pakış, the lack of autonomous, more specialty-oriented expert boards are the reason for the very long litigation periods, which can take between 4 to 10 years.⁵⁸ As documentation of procedures and access to archival data is very poor, it becomes hard for those expert boards to distinguish between complications and malpractices. On the report of Tümer and Dener, who examined 366 surgical malpractice cases brought to the Higher Health Council between 1995 and 2000, autopsy was performed only in 79.6% of cases of death resulting from medical errors. Approximately half of those claims were found to be groundless, and Tümer and Dener state that uncertainty in evaluation makes even these conclusions problematic.⁶³

Also Can *et al.* evaluating 30 malpractice cases brought to the high court (*Yargıtay*) between 1978–2006, criticize evidence gathering mechanisms, which for one thing are problematic due to the long time passing between the realization of event and the verdict: This period lasted 5–10 years in 10 cases, and in four cases, it was over 10 years. From those 30 cases, 16 ended with death, and only in three of them, autopsy was carried out.⁶⁷ Also we can say that, bad documentation of events, ineffective communication patterns, long litigation periods, together with the low rate of successes at court from the patients' side, can account for low numbers of malpractice accusations brought to court. Can and Özkara also add questionable objectivity of evaluating expert boards to their list of problems in malpractice cases.⁶⁷

Durmuş states that the success rate for the patients is relatively low in medical malpractice cases, when compared to other personal injury cases. The author suggests that in most cases, the courts presume that a physician would not make a medical mistake with bad intentions, and implies a relatively mild approach from the side of the legal system to the physicians. He also observes the same tolerance from the side of the patients and patient families, and argues that most patients would very hardly file a complaint against a doctor, as it goes counter to their culturally determined relationship with healthcare providers. He also counts a general lack of literacy with regard to patients' rights and Health Law as one factor which protects doctors from high accountability.⁵⁹

It must be added that doctors traditionally enjoyed quite a high social and political authority in Turkey, and many leading politicians of the early Turkish Republic were doctors. However, this high status is being eroded recently, especially with the establishment of a big number of private medical universities, private hospitals and the transformation of medical services into consumer goods in the free market. However, as Durmuş also observes, consumer rights demand from medical professional better documentation of diagnostic and therapeutic procedures, and a more consumer choice-oriented presentation of possible options in diagnosis and therapy.⁵⁹

11.4. *A root cause: Mistrust between the participants*

Almost all studies with regard to how medical errors are handled in Turkey approach the question from the perspective of physicians, or healthcare institutions. Solaroğlu *et al.* (2014), in their survey carried out among 404 neurosurgeons, establish that most participants consider every patient a potential threat in terms of a medical lawsuit, and 62.6% reported engaging in defensive medicine by avoiding high-risk surgery. 89.6% of the participants stated that they do not believe that the courts can distinguish medical error from complications, which again points to mistrust to the problem-solving capacities of the legal system not only from the sides of patients, but also from the sides of physicians, especially in high-specialization fields.⁶²

Problematic doctor–patient communication is stated as the major problem by physicians who participated in a survey about doctor's perceptions about medical errors.⁶⁸ In this survey carried out among 2194 physician members of the Turkish Medical Association from a variety of specialties, 41.4% stated that the major reason for the occurrence of medical errors is related to the attitude of patients and the public towards healthcare professionals. About 84.7% think that the actuality of media coverage with regard to medical errors is one of the main factors contributing to violence against healthcare providers, indicating that an open discussion with the public with regard to how, where and why medical errors occur is not considered to be a measure which would improve patient safety outcomes; about 37.9% of the participants put the responsibility for medical errors on privatization of healthcare services, 20.7% on insufficient work conditions and only 19.5% relate medical errors

to insufficient education and training in the medical faculties. While suggesting measures for improvement, most participants suggest improvements in healthcare policies and the related medico-legal system, pointing to the fact that the physicians see administration and the legal system as an effective regulating element between doctors and patients.⁶⁸

Rather than direct changes in the doctor–patient relation itself, most would prefer changes in the regulative mechanisms that govern and shape this relationship. These results may partly explain the lack of any studies in Turkey with regard to good disclosure of medical errors to patients: It seems that for the majority of Turkish physicians, the patients are not an equal partner, with whom there are problems of communication in daily practice. Patients rather are powerful counterparts who should be kept in check, controlled and regulated, through effective legal and administrative mechanisms.

A paper discussing causes and prevention of malpractice in obstetrics and gynecology is an exception to this rule. The authors state that developments in medical care standards have increased patients' expectations from their physicians. A parallel increase in the level of public education with regard to the limits and possibilities of medicine, also an "increase in the sensitivity of communication tools", meaning a more responsible attitude from news providers, is suggested. The authors argue that a big number of medical error claims are unfounded, and say: "Establishing good communication with the patient and next of kin, correctly explaining what will be done and where, and explaining what the consequences of choices are makes it possible to avoid unfounded claims".⁶⁹ How to deal with founded claims, on the other hand, is not touched upon.

11.5. *Lack of numbers, lack of feedback mechanisms*

Almost all studies point to the need for better tools of archiving and documentation. In order to provide solid data for systematic improvement, Turkish Ministry of Health established a web portal open to the public, where medical errors can be reported anonymously.⁷⁰ However, the practical use of the information gathered is questionable: The reporting tool does not permit the user to share in which specific hospital the medical error occurred; the mistakes are very broadly categorized such as: surgical mistakes, laboratory mistakes etc., and as any manual entry is not possible, no specific information with regard to the mistake can be reported. Besides, entries can be done by anyone using a personal laptop, and it is not clear how the credibility is secured in such an open system. Since 2012, all bigger hospitals (with more than 50 beds) are required to have their institutional error reporting systems, and those institutional portals permit more detailed error reporting, with the availability of manual entries. However, public access to where and why medical errors occur is absolutely not given in this system.

In a study conducted by Vural (2014) in a bigger hospital in Western Turkey among 200 clinical professionals (nurses, pharmacists, technicians, doctors and

emergency staff), the participants also stress the lack of any feedback mechanisms as the biggest obstacle in improving patient safety. Although 75,5% of the respondents regard systematical errors as the root cause of most medical errors, they would prefer to have specific centers in the hospital for error reporting, where they could get feedback after reporting, be informed about which precautions have been taken and learn about any progress done in the most problematic areas. The survey participants would prefer collective evaluation of medical errors, but stressed that they could benefit from feedback on professional performance, and regular reports about errors in the institution to the workers, and administrative efforts to overcome them.⁷¹

12. Conclusion

Disclosure of medical errors to patients is neither a standard practice, nor a part of the standard medical ethics' curriculum. However, the changing role of the patient in biomedicine, developing into a collaborator and active partner in the medical therapy process, requires new communication skills from physicians and also from healthcare institutions. It is unreal to think that doctors had never made or would make mistakes, but today, no loss is supposed to be wasted, and errors that are acknowledged can supply the opportunities of learning on "how to avoid errors and how to disclose such errors". Honest disclosure of medical mistakes to patients and their family may serve the medical profession in its theoretical quest for understanding of and intervening into the mechanisms of the body, moreover, it may serve to compensate and alleviate the losses and suffering of patients and patients' families. Medical societies around the world are admitting to have committed mistakes, apologizing to patients and patients' families, compensating losses as far as possible and making sure mistakes will not be repeated, and this seems to be a slow and gradual, but global move.

Resistance to the existing medical culture and the push for change is already apparent in society and appear in mass media. The rising number of medical faculties in Turkey may provide new possibilities for expanding the existing curriculum, especially through training in the doctor-patient communication and through the development and use of educational modules focusing on how to disclose medical errors. This is a fertile field for Turkish specialists of medical ethics and bioethics. The recent rise of interest in those professions (e.g., the increasing number of PhD programs in bioethics) seems to create for the development of a new medical culture, feeding from international experiences in dealing with medical errors. Also, the increasingly interdisciplinary approach to medicine and bioethics in Turkey, where more numbers of historians, sociologists and anthropologists develop an interest in and do research on medical practices, may contribute to future research on how to improve the doctor-patient relationship from a power struggle, to a cooperative effort through mutual sharing of knowledge, experience and even, the stories of committed errors.

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