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## Medical Error Disclosure can Rescue Malpractice Litigation

الإفصاح عن الأخطاء الطبية يمكن أن يقي من التقاضي بسبب الممارسات الخاطئة

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### Abstract

Patient safety is the main goal of each hospital. Many steps can be taken to improve patient's safety by the health-care system. This study aimed to increase awareness about medical error disclosure, which helps to decrease malpractice litigation. Two hundred physicians with different qualifications were asked to complete a questionnaire about medical error disclosure and its impact on the patient's safety and malpractice litigation. The studied group included doctors in different age groups, ranging from 25 to 60 years old. Thirty-one percent of them reported that the main cause of medical errors is poor team design, followed by 27% blaming work pressure. Other causes of medical errors are due to human errors, and 49% were due to miscommunication with patients. Only 35.5% of doctors had the courage to disclose their errors. Most of them fear the negative reaction of patients' families and loss of reputation. Twenty-seven percent of physicians confirmed that it is the right of the patient to know about the error that took place but they did not know how to inform their patients about the error. Medical error disclosure is one of the most important steps towards achieving patient's trust in any healthcare institution.

### المستخلص

تعد سلامة المرضى هو الهدف الرئيسي لكل مستشفى، ويمكن اتخاذ العديد من الخطوات لتحسين هذه السلامة من قبل نظام الرعاية الصحية. هدفت هذه الدراسة إلى زيادة الوعي بالكشف عن الأخطاء الطبية ما يساعد على تقليل التقاضي بسبب الممارسات الخاطئة. طُلب من مائتي طبيب بدرجات علمية مختلفة تعبئة استبيان حول الكشف عن الخطأ الطبي وآثاره على المرضى والتقاضي بسبب الممارسات الخاطئة. وشملت المجموعة التي أجريت الدراسة عليها أطباء من فئات عمرية مختلفة تتراوح أعمارهم بين 25 و60 سنة. رأى 31% منهم أن السبب الرئيسي للأخطاء الطبية هو سوء تصميم الفريق، وتلتها نسبة 27% عزت حدوث الأخطاء لضغط العمل. الأسباب الأخرى للأخطاء الطبية التي تقع هي بسبب الأخطاء البشرية، ونسبة 49% من الأخطاء كانت بسبب سوء التواصل مع المرضى. فقط 35.5% من الأطباء لديهم القدرة على الكشف عن أخطاءهم. معظمهم يخشون من ردود الفعل السلبية من أسر المرضى ومن فقدان السمعة، ولكن 27% منهم أيضاً يؤكدون على أنه حق المريض معرفة حدوث خطأ طبي، ولكنهم لم يتعلموا كيفية إعلام مرضاهم عن الأخطاء. الكشف عن الأخطاء الطبية هو أحد الخطوات الهامة والتي تؤسس لثقة المريض في المؤسسة.

**Keywords:** Forensic sciences, Medical errors, Malpractice, Litigation, Reputation, Disclosure, Rescue.

الكلمات المفتاحية: علوم الأدلة الجنائية، الأخطاء الطبية، سوء الممارسة، التقاضي، السمعة، الإفصاح، الإنقاذ (الوقاية).



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## 1. Introduction

A medical error, defined as failure of a planned action to be fulfilled as intended [1], does not include intentional action that can cause harm to the patient [2]. Stress in the medical working environment and the increase in workload in hospitals and in medical teams may lead to medical errors [3, 4].

The first victims of medical errors are the patients; their lives can change dramatically after the occurrence of an error. The consequences of medical errors can be prolonged hospitalization, stress disorders, or even permanent infirmity [5-7].

It is so important to distinguish between adverse events, medical errors, and negligence. Negligence is the failure to meet a standard level of care. Adverse events are injuries that can occur during the course of medical management. Medical errors are the failure of planned action to be completed [1, 29-32].

Patients' awareness of medical errors has increased, and as a result, complaints and litigation have also increased dramatically [8]. Despite all the efforts to prevent the occurrence of medical errors, they still occur. Therefore, one of the main important components in a doctor-patient's relationship is deciding whether to tell the patient about what happened and how [9].

Although there are no federal mandates obligating doctors to disclose medical errors, most states require that patients be informed about all outcomes, including unanticipated outcomes [10].

Who should disclose the error, what should be disclosed, when and where the disclosure should take place are very important questions faced by doctors after the occurrence of the medical error, this is the right of the pa-

tients to know [11-12]. After the occurrence of an error, doctors are so devastated and depressed by their mistakes that they may conceal them or defend themselves by shifting the blame to someone or something else or even blame the hospital itself [13]. Respect for patient autonomy is so important. Fidelity, beneficence, and non-maleficence are all principles that orient reporting and disclosure policies. Doctors might benefit from accepting the responsibility for errors, reporting them and discussing errors with colleagues, and disclosing errors to patients and apologizing to them [14-15]. When doctors disclose an error, this might help decrease the litigation of malpractice.

This study aimed to collect preliminary data from different categories of doctors regarding 1) the causes of malpractice either due to human error and/or a management fault, 2) the importance of disclosure in preventing litigation from taking place and 3) the causes of fear from disclosure and how to overcome them.

## 2. Materials and Methods

### 2.1 Participants

This study was conducted on two-hundred practicing physicians in Assiut governorate, Egypt, from January to July 2016. The group of physicians involved residents, specialists, consultants and general administrators working in different specializations. The goal of recruiting physicians with different age groups and specialties was to obtain a baseline understanding of each group's attitudes about their action towards medical error disclosure and why they are sometimes hesitant to disclose the error. Consent was taken from all physicians who participated in the study before they filled in the questionnaire, and all participants provided oral and written consent.



## 2.2 Area of Study

Assiut is a large governorate in upper Egypt; it stretches along the Nile. The population in Assiut is approximately 4 million. According to the last estimates in 2015, the majority of the residents (about three million) live in rural areas (Figure- 1) [33].



Figure 1- Map of Assiut governorate (Egypt) [33].

## 2.3 Questionnaire Contents and Administration

All physicians in the study were included with no exclusion criteria. They were selected randomly. The questionnaire assessed the opinion of doctors about the cause of medical error, their reaction towards medical error, non disclosure, and lastly whether disclosure is the best policy (Annex-1).

The questionnaire was judged to be completed and was included in the analysis if more than 50% of questions were answered. Questions with more than one selected answer were not included but were maintained in a separate multiple answer section. Analysis was done by using SPSS program (version 20).

## 3. Results

All returned questionnaires met the inclusion criteria.

The gender, age, occupation and specialty of the participants is presented in Tables-1 and 2. It shows that 75% of the participants were male doctors and 25% of them were females. Most of the participants were in the age group  $25 \leq 35$  years old, 62% male and 11% female. Seventy percent of them worked in medicine while rest 30% worked in surgery.

Table 1- Age and sex distribution of the participant doctors.

Age (Years)	Gender				Total	
	Male		Female			
	no.	%	no.	%	no.	%
$25 \leq 35$	124	62	22	11	146	73
$35 \leq 45$	22	11	26	13	48	24
$45 \leq 60$	4	2	2	1	6	3
<b>Total</b>	<b>150</b>	<b>75</b>	<b>50</b>	<b>25</b>	<b>200</b>	<b>100</b>

Table 2- Occupation and specialty distribution of the participant doctors.

Occupation	Specialty				Total	
	Medicine		Surgery			
	No.	%	No.	%	No.	%
<b>Resident</b>	90	45	40	20	130	65
<b>Specialist</b>	30	15	11	5.5	41	20.5
<b>Consultant</b>	20	10	9	4.5	29	14.5
<b>Total</b>	<b>140</b>	<b>70</b>	<b>60</b>	<b>30</b>	<b>200</b>	<b>100</b>



**Annex 1- Doctors' Questionnaire.**

Characteristics			
Name( optional) .....			
1- Age (years)	<input type="checkbox"/> 25- 35	<input type="checkbox"/> 35-45	<input type="checkbox"/> 45-60
2- Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
3- Occupation	<input type="checkbox"/> Resident	<input type="checkbox"/> Specialist	<input type="checkbox"/> Consultant
4- Specialty	<input type="checkbox"/> Internal Medicine	<input type="checkbox"/> Surgery	
5-Specify specialty .....			
In Your Opinion, Why Do Doctors Malpractice?			
6- Causes related to systems			
<input type="checkbox"/> Overwork	<input type="checkbox"/> Poor team work design	<input type="checkbox"/> Stress	<input type="checkbox"/> Poor equipment
<input type="checkbox"/> No communication between team	<input type="checkbox"/> Poor supervision	<input type="checkbox"/> Poor goal (money over patient care)	
7-Causes related to human			
<input type="checkbox"/> Poor skills	<input type="checkbox"/> Communication with patients	<input type="checkbox"/> Error in diagnosis and treatment	<input type="checkbox"/> Negligance
8-Your reaction			
<input type="checkbox"/> Avoid similar situation	<input type="checkbox"/> Increase information to decrease recurrence	<input type="checkbox"/> Discuss with colleagues about this malpractice	<input type="checkbox"/> Minimize event
<input type="checkbox"/> Report to supervision	<input type="checkbox"/> Bad emotional experience		
In Presence of Malpractice Risk:			
9-Conceal Because			
<input type="checkbox"/> Litigation costs	<input type="checkbox"/> Loss of doctor patient relationship	<input type="checkbox"/> Loss of reputation	<input type="checkbox"/> No training (how to disclose)
<input type="checkbox"/> Emotional impact of malpractice	<input type="checkbox"/> Negative patient - family reaction	<input type="checkbox"/> I'm my own worst critic	
10-I will disclose because			
<input type="checkbox"/> Patient right to know what happened even if there is litigation risk	<input type="checkbox"/> Proper coming informed consent	<input type="checkbox"/> Increase doctor patient relationship	<input type="checkbox"/> Late disclosure damage doctor patient relationship
<input type="checkbox"/> Effective reporting and learning	<input type="checkbox"/> Decrease litigation of error	<input type="checkbox"/> I want to be treated in the same manner	<input type="checkbox"/> Alleviate feeling of guilt
11-In Absence of Malpractice Risk			
<input type="checkbox"/> I will conceal	<input type="checkbox"/> I will disclose		
How to Prevent Malpractice Recurrence?			
12-System Related			
<input type="checkbox"/> Limited certain high risk procedure to high volume hospital	<input type="checkbox"/> Encourage hospital to report serious medical error to the agency	<input type="checkbox"/> Train doctors to disclose	<input type="checkbox"/> Disclose integrate disclosure policies in quality improvement program
13-Human Related			
<input type="checkbox"/> Give physician more time to spend with patients	<input type="checkbox"/> Increase number of nurses	<input type="checkbox"/> Counting surgical item during invasive procedure	<input type="checkbox"/> Refuse or referral of difficult case



Figures-2 and 3 show the most common causes of malpractice mentioned by doctors in the questionnaire either related to the hospital system or due to human errors. They show that 31% of the causes related to the system were due to overwork (shift hours), and this was followed by 27% due to stress in work, 18% poor team design, and 11% due to miscommunication between the work team. Figure-3 shows the common causes of malpractice related to human errors. It was found that 49% of the human causes were due to miscommunication with patients, followed by 33% due to negligence in following up patients, 12% due to errors in diagnosis and/or treatment, and 6% due to poor skills.

Table-3 indicates the reactions of doctors when malpractice occurred. Most of them, 64.5%, will conceal the medical errors, especially if they already dealt with the er-

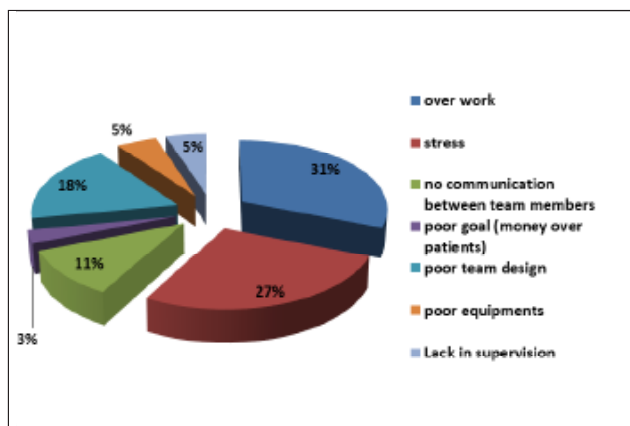


Figure 2- Percentage of malpractice related to the hospital system.

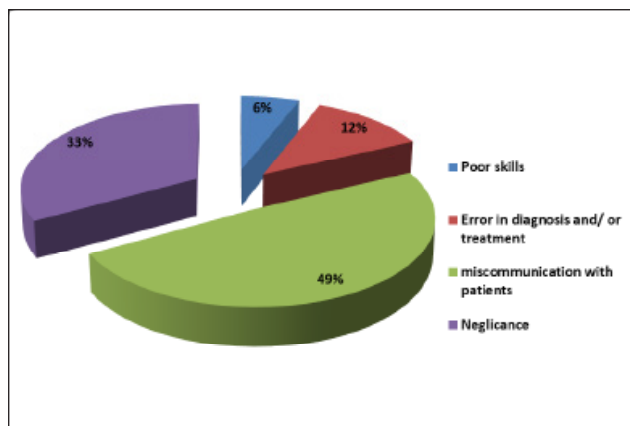


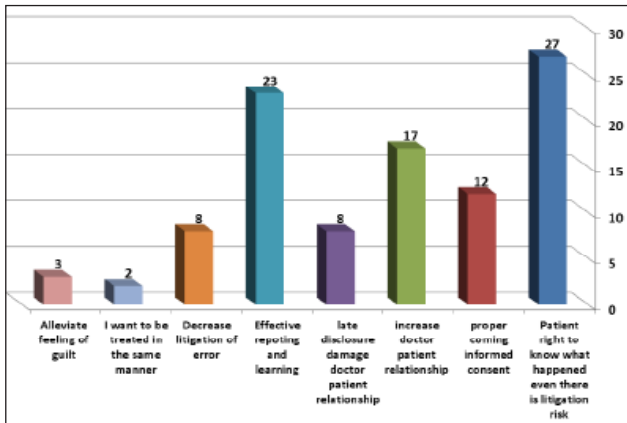
Figure 3- Percentage of malpractice causes related to human errors.

Table 3- Doctors' reaction when malpractice occurred.

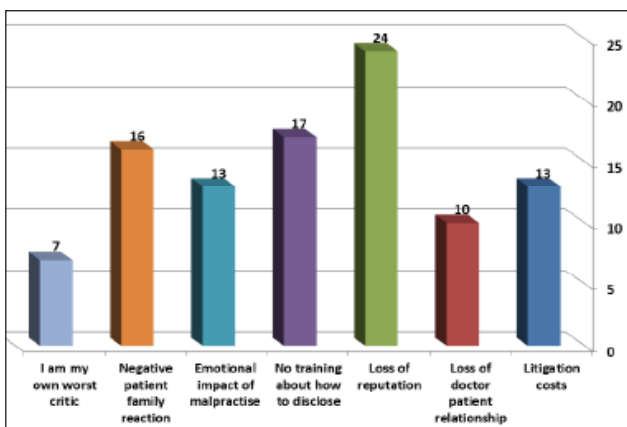
Reaction	Malpractice reaction	
	No.	%
Conceal	129	64.5
Disclose	71	35.5
<b>Total</b>	<b>200</b>	<b>100</b>

ror. Only 35.5% said that it is the right of the patients to know and that they have the courage to disclose their errors.

Figures-4 and 5 show the most common causes that make doctors conceal or disclose medical errors, and why they hesitate to tell patients about the errors. The highest percent (24%) said they conceal errors due to fear of loss of reputation, followed by 17%, who said that they are not trained how to disclose errors. Sixteen percent fear the negative reaction from patients' families, 13% highlighted the emotional impact of malpractice, 13% fear litigations cost, and 10% fear loss of the doctor-patient relationship. Although they fear loss of reputation and patient's reactions, Figure-4 shows the causes that convince them to disclose the error. Twenty-seven percent of them said that it is the patient's right to know what happened even if there is litigation risk, 23% said that effective reporting and learning can make disclosure easy, 17% said that a good doctor-patient relationship can make disclosure easy, 12% stated that proper informed consent can make a doctor safe to disclose the error, and 8% of them stated that if patients know



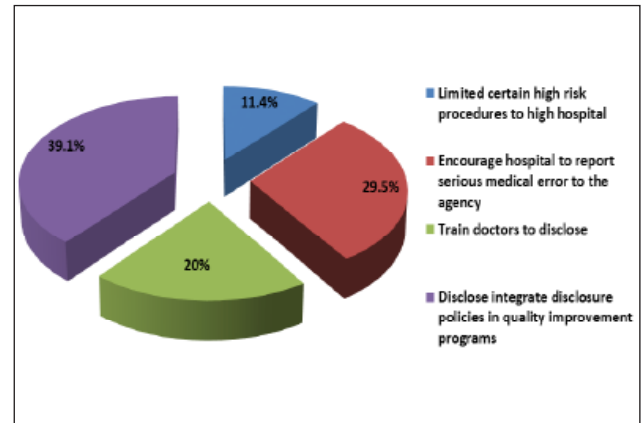
**Figure 4-** Percentage of causes that make doctors disclose the malpractice.



**Figure 5-** Percentage of causes that make doctors conceal the error.

the error late this will make disclosure more difficult. Only 2% of them stated that they need to be treated in the same manner if the doctor becomes a patient.

Figure-6 shows the vision of the doctors about how the hospital management system can decrease the risk of malpractice. 39.1% of them stated that the hospitals should integrate the disclosure policies in the quality improvement programs, 29.5% stated that the system of the hospitals should encourage reporting the serious medical error to the patient's safety monitoring agency, 20% need training on how to disclose and break bad news to patients or their families, and 11.4% supported the restriction of high risk procedures to tertiary care hospitals.



**Figure 6-** How can the hospital management system decrease the risk of malpractice.

## 4. Discussion

Disclosure is a matter of debate. There is a debate between the right of patients to know and the right of doctors to continue their work without fear from law or loss of their reputation. This study addresses when and why doctors should disclose errors and the benefits of that.

This study covered 200 physicians ranging from 25 to 60 years old. They specialized in all branches of medicine and surgery, and their position differed from resident to consultant. The study covered some of the administrators as well.

According to the study questionnaire, the most common cause of malpractice (31%) was due to overwork, followed by 27% due to stress, and then 18% due to poor team design. Rare causes were due to poor goals (3%) such as putting the importance of money over patients, followed by poor equipment (5%) and lack of supervision. In addition, 49% were due to miscommunication with patients followed by 33% negligence. Bari et al., [16] in their research about causes of medical errors, highlight stress and fatigue due to long duty hours as the main cause of malpractice (66%). They also stated causes such as the lack of experience in treating physicians/doctors (52%) followed by deficient knowledge (40%), failure to recognize warning signs



(40%), and faulty communication (36%). Also, West et al. (2006) [17] and West et al. (2009), concluded that medical errors are common in residents and this is usually associated with personal distress [18].

It is a cycle: personal distress and decreased empathy are associated with an increased risk of future errors. Agreeing with the results of this study, Brennan et al., [19] in their study about incidence of adverse events and negligence in patients, found that 27.6% of these events were due to negligence; this was especially higher among the elderly physicians.

In this study, 64.5% of doctors said they would conceal errors and 35.5% said they would disclose them. From those who choose to conceal, 24% would do so due to fear of losing their reputation and legal consequences, and 17% said they were not trained how to disclose errors to patients or their families. Of those who choose to disclose errors, 27% said the patient has the right to know what happened, and 23% said that effective reporting of the case can be valuable. In Egyptian law, doctors can be accused due to medical responsibilities in four legal spheres: firstly, criminal liability in front of an ordinary court; secondly, civil liability also in the ordinary court; thirdly, administrative disciplinary responsibility in his/her job; and lastly, the syndicate disciplinary responsibility in the Medical Syndicate [34].

Lu et al. [28] and Berlin [35], in their study about the disclosure of harmful medical errors, recommended disclosing harmful errors to patients. They said that disclosure and communication with the patient's respect of their autonomy can decrease the malpractice cost. Apologizing can prevent malpractice litigation. Also, Hannawa et al. prove that disclosure can stimulate a healing mechanism in patients [20]. Kolaitis et al. in their study about disclosure

of medical errors in pediatric cases, recommended disclosure to parents and older pediatric patients, especially if the harm is irreversible [21].

Fear of the law is one of the most common barriers to disclose medical errors [22-23]. Crone et al. described that doctors' disclosure of medical errors encouraged truth rather than fear and reprimand [24].

In this study, doctors had the opinion that the hospital management system can decrease the risk of malpractice. 39.1% of doctors said that the disclosure policies should be integrated into quality improvement programs, and 29.5% of them encouraged hospitals to report serious medical errors to the monitoring agency. Twenty percent of them emphasized the need for training on how to disclose, and 11.4% of them advised that high risk procedures should take place in tertiary care hospitals.

Osmon et al. [25] concluded that institutions should develop formalized methods for reporting medical errors to improve patient care. Alduais et al. [26] also added that there are many barriers that prevent doctors from disclosure such as a lack of procedures for reporting errors to patients, fear of punishment, and lack of reporting. All of these can be avoided by improving the quality of doctors' training in how to report errors. Youngson [27] reported that there are many steps which can minimize the severity of reporting of medical errors: detection and documentation of the errors in due time, appropriate remedy of the errors, assessment of the circumstances surrounding the errors, performing a verbal and written apology with event details, and lastly analysis of the event.

## 5. Conclusion and Recommendations

The hospital quality management system should implement effective training programmes for physicians in com-



munication skills, management of medical errors, and disclosure and when the patients and/or their families wish to understand the error. This can effectively rescue the malpractice litigation. Additional studies are required to confirm these observations.

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#### Conflict of interest

None.

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