

# Is It Better to Disclose or Conceal Medical Error When Occur? An Indicative Study from Sohag Governorate Physicians

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## Abstract

### Background:

**Introduction:** Medication errors as one of the commonest medical problems in hospitals are a leading cause of patient morbidity. **Subjects and methods:** three hundreds (300) doctors of different degrees were asked to fulfill the attached questionnaire about medical malpractice (causes, types, preventive measures) and their opinion about disclosure or concealing the errors. **Results:** The studied subjects included variable age groups, with range from 25 to 65 years old. The major cause of medical malpractice reported by the participants was deficient skills 45%, followed by poor contact with patients (35%). Other reported causes are due to stress and work overload (25%). Twelve percent were due to poor team work arrangement. Only 23.7% of doctors decide to disclose their errors and 76.3% prefer to hide the medical errors. The most common error reported by participants was diagnosis errors (23.6%), and then delayed transfer in 21%. The outcome of patients secondary to error was minor in 72.6% and death occurred only in 4.67%. The most reported suggested measure (51%) for prevention of error recurrence was referral of difficult cases followed by performing risky procedures in qualified hospitals (42.6%) and then to encourage doctors to disclose their error 41.3%. **Conclusion:** The current study concluded that the main causes of medical errors were poor contact with patients and deficient skills. The most common mentioned errors were surgery in non-equipped place, unethical conduct and diagnosis error. The participants' response was avoiding similar situations and increase information to prevent recurrence. The majority of participating doctors chose concealing the errors to avoid loss of reputation **Recommendations:** Close monitoring of residents and adequate communication between staff and regularization of duty hours can decrease occurrence of errors. Legal protection for doctors and patients can encourage doctors to disclose their errors.

## Key words

Medical errors, disclosure of error, prevention of error

## Introduction

Increased awareness of patients' rights, the development of medicine, and recent complicated medical procedures lead to increasing the number of medical malpractice claims (Gündoğmuş et al., 1998; Nakajima et al., 2001 and Martin-Casals et al., 2003).

Medical errors (MEs) as one of the most common types of medical problems in hospitals are a leading cause of patient morbidity. It is defined as "a failure in the treatment process which leads to, or may lead to, patient harm". Prevention of medication error can prevent many adverse incidents which negatively affect patients' safety, but due to insufficient poor studies plus wide variations in ME from developing countries, so the reliability of ME evaluation of is questionable (Ava et al., 2014).

There are many causes of medication errors. It may be related to professionalism, material, procedures, environment or regulations; may involve prescribing and ordering; dispensing and distribution; preparation and administration, packaging, and

nomenclature; communications, or use and monitoring of treatment. (Wakefield et al., 2000)

There are many classifications for medical errors, one of them classify errors into three categories: serious, minor and near-miss. A serious error is one which can produce permanent or transient injuries that may be fatal in severe cases, while a minor error leads to harmful effects but are neither permanent nor life-threatening. Last type of error, a near-miss error that could produce harmful effects but did not produce it, due to either medical intervention and correction or it may be corrected accidentally by chance (Bari et al., 2016).

## Aim of the Work

This work aimed to collect data from physicians among different specialties in Sohag governorate regarding:

- 1) The most important causes of medical errors and malpractice.
- 2) The opinion of physicians about disclosure or hiding of the error to patients.

- 3) Types of medical errors they did if occurred, its outcome and how to prevent recurrence of the errors.

## Subjects and Methods

**Participants:** The current study was conducted on three-hundred practicing physicians in Sohag governorate, Egypt, who accepted to participate in this study. Those physicians involved residents, specialists and consultants working in different specialties. Consent was obtained from all participating physicians before they filled in the questionnaire.

**Data collection tool:** The data was collected through a self-administered questionnaire (appendix-1). This questionnaire was used to assess the opinion of Sohag physicians about the cause of medical error, types and their response towards medical errors they did if occurred, and lastly whether disclosure is the best policy or hiding the error is better.

The questionnaire (Appendix-1) was categorized into five sections. Section A: made to describe demographic data of the participants, including the participants gender, age, specialty and position (degree). Section B: assessed the opinion of

the participating physicians regarding causes of MEs. Section C: asked whether they had witnessed or had been part of a ME and the outcome. Section D: explored the attitudes and opinions of participants about disclosure of error in presence and in absence of risk to the patient. Finally, section E found out how to decrease or prevent MEs.

### **Statistical analysis:**

All collected questionnaires were revised and data coded and organized for statistical analysis using IBM SPSS Statistics for Windows version 20. Qualitative data was expressed as number and percentage. Chi-square ( $\chi^2$ ) test was used for comparison of qualitative variables.

### **Ethics considerations:**

Ethical approval for this study was obtained from the Medical Research Ethics Committee of Faculty of Medicine - Sohag University, according to the commitment standard operating procedure guidelines on 12/1/2021 under **IRB** Registration number: **Soh-Med-21-01-13**.

### Appendix-1 Questionnaire: modified from (Yassa and Peter, 2018)

Section A				
Name (optional):.....				
<b>1- Age (years):</b>	25- 35 ( )	>35-45 ( )	>45-55 ( )	>55-65 ( )
<b>2- Gender:</b>	Male ( )	Female ( )		
<b>3- Degree:</b>	General practitioner (resident) ( )		Specialist ( )	Consultant ( )
<b>4- Specialty:</b>	Obstetrics/gynecology ( )		Surgery ( )	Anesthesia ( )
	Orthopedic surgery ( )		Ophthalmology ( )	Pediatric ( )
	Int. medicine ( )	Dermatology ( )	Physiotherapy ( )	Radiology ( )

Section B		
<b><u>In your opinion, why do doctors malpractice?</u></b>		
<b>Causes related to management system:</b>		
Work Overload ( )	Poor teamwork arrangement ( )	Poor supervision ( )
Stress ( )	Bad equipment ( )	
Poor communication between staff ( )		
<b>Causes related to doctor</b>		
Deficient skills ( )	Poor contact with patients ( )	
Error in diagnosis and treatment ( )	Negligence ( )	

Section C		
<b><u>Type of error you did before if any:</u></b>		
Unethical conduct ( )	Delayed transfer ( )	Diagnosis errors ( )
Not indicated surgery ( )	Faulty anesthetic procedure ( )	
Improper performance of surgical procedure ( )	Surgery in non-equipped place ( )	
Surgical foreign body/towel left in patient after operation ( )		
Inadequate postoperative follow-up( )	Improper treatment ( )	
Improper supervision of resident or other staff members ( )		
<b>Your response:</b>		
Avoid similar situation ( )	Increase information to decrease recurrence ( )	
Discuss with colleagues about this malpractice ( )		
Report to supervision ( )	Bad emotional experience ( )	
<b>Outcome of the case after error occurrence:</b>		
minor ( )	moderate ( )	severe ( )
		death ( )

**Section D****In presence of malpractice risk :**

I will hide the error ( )

I will disclose ( )

**I will hide because**

Litigation costs ( )

Loss of doctor - patient relationship ( )

Loss of reputation ( )

No training (how to disclose) ( )

Emotional impact of malpractice ( )

Negative patient – family reaction ( )

**I will disclose because**

Patient right to know what happened even if there is litigation risk ( )

Proper pre-treatment informed consent ( )

Increase patients confidence in doctors ( )

Late disclosure destroys doctor- patient relationship ( )

Part of effective reporting and learning ( )

Decrease litigation of error ( )

I want to be treated in similar way ( )

Decrease feeling of guilt ( )

**Section E****How to prevent repetition of malpractice?****Administration related**

Perform risky procedures in big qualified hospitals ( )

Encourage hospitals to inform the agency by serious medical errors ( )

Encourage doctors to disclose ( )

**Human related**

Give physician more time to spend with patients ( ) Increase number of nurses ( )

Counting surgical items used during invasive procedure ( )

Refuse or referral of difficult case ( )

**Results**

The total number of participating physicians was 300. Section (A) represented the demographic data. As regards the age and gender distribution of the participants it was outlined in table (1). Where 52.67% of participants were males and 47.33% were females. the vast majority of participants were in age group 25-35 years representing 42.33 % followed by age group >35-45 years represented 35.67% then age group >45-55 years represented 17%, finally, age group >55-65 years represented 5%.

For degree, most of them were specialists (62%) followed by residents with percentage 23.67% and finally consultants (14.33%) as shown in table (2). Different specialties shared in the study but most of them were internal medicine with percentage 28% followed by pediatrics (25.67%) then obstetrics and gynecology (23.33%) , the other specialties shared with small percentages as shown in table (2).

Results of section (B) represented in table (3). It showed the causes of malpractice reported by participating doctors either due to management system or caused by doctors themselves which differs according to the degree of each doctor.

The consultants mentioned that the main cause is poor contact with patients with percentage (48.84%) followed by deficient skills (27.91%) then work overload and poor team work with equal percentage (25.58%). Other causes reported were, poor communication with staff (20.93%), followed by error in diagnosis and treatment (16.28%), the remaining causes represented small percentage as bad equipment (9.3%), stress and negligence have the same percentage (6.98%), combined causes as work overload with stress have the same percentage (4.65%) as poor supervision,

the least cause mentioned was combination of work overload with poor team work arrangement (2.33%).

The specialists have nearly the same opinions, as the main causes mentioned by them were poor contact with patients (44.62%) and deficient skills (43.01%), followed by stress (36.02%) then work overload (24.73%), poor team work arrangement (14.52%), then combination of work overload with stress (12.9%), the other causes represented small percentage as error in diagnosis and treatment (8.06%), poor supervision (6.45%) and negligence (4.3%).

Finally, the residents reported that the main causes were deficient skills (61.97%) followed by negligence (29.58), poor communication between staff and work overload nearly equal percent (26.76%) and (25.35%) respectively. Other causes have small percent poor teamwork arrangement (9.86%), combined factors as (work overload and poor teamwork arrangement) represented (8.45%), last causes reported were stress and error in diagnosis and treatment have the same percent (7.04%).

Section (C) demonstrated types of errors reported by the participating doctors. The most common error mentioned by consultants was surgery in non-equipped place (30.23%) followed by delayed transfer and improper treatment with equal percent (16.28%) then improper supervision of residents and other staff (11.63%), other types of errors occurred were unethical conduct, surgical foreign body left in patients, non-indicated surgery all with the same percent (6.98%) and faulty anesthetic procedure has the smallest percent (4.65%) as shown in figure (1).

Specialists mentioned the most common error occurred was unethical conduct (29.57%) followed by delayed transfer (18.82%) then diagnosis error

(16.13%), other types of errors were improper treatment (13.44 %), improper supervision of residents and staff members (10.75%), faulty anesthetic procedure (5.38%), inadequate postoperative follow up (4.84%) lastly surgery in non-equipped place (1.08%) as shown in figure (2).

Figure (3), showed types of errors reported by residents, from which diagnosis error represented the largest percent (57.74%), followed by delayed transfer (29.58%), then improper supervision of residents and staff members (8.45%), lastly improper treatment (2.82%) and unethical conduct (1.41%).

Responses to the errors which occurred were different also according to the degree. Consultants response mainly was avoiding similar situation with a percent 51.16%, followed by increase information to decrease recurrence (25.58%), then discuss with colleagues about this malpractice (16.28%) and lastly, bad emotional experience (6.98%) as shown in figure (4).

Specialists have more or less similar response to errors as (49.5%) of them stated that they will avoid similar situations in the future, followed by discuss with colleagues about this malpractice and increase information to decrease recurrence with percent (18.82%) and (18.28%) respectively then report to supervision (9.14%) lastly, bad emotional experience (4.3%) as shown in figure (5).

Residents have different response (50.7%) of them reported that they increased information to decrease recurrence and (30.99%) of them discussed with colleagues about this malpractice, (15.49%) had bad emotional experience, (1.41%) of them avoid similar situation, and reported to supervision as shown in figure (6).

Figure (7) showed the outcome of the affected patients. It differs from case to case, it was minor in (72.66%) of patients, moderate (16.67%), severe (6%) and death occurred only in (4.67%).

Section (D) described the reactions of doctors when malpractice occurred. Most of them, (76.23%) decided that they will hide the medical errors if

occurred and only (23.67%) of them will disclose it to patients as shown in table (4).

Tables (5) and (6) showed the most common causes that make doctors hide or disclose medical errors, and why they hesitate to tell patients about the errors. Most of them (47.16%) said that they conceal errors due to fear of loss of reputation, followed by 17.9% highlighted the emotional impact of malpractice, 10.48% to avoid loss of doctor - patient relationship, 9.17% fear of the negative reaction from patients' families, 8.3% fear of litigations cost, and lastly 6.99% not trained to disclose. Although most of physicians fear of disclosing errors, 23.67% decided to disclose. As 21.13% of them said that late disclosure destroys doctor- patient relationship and 18.31% mentioned that it is the patient's right to know what happened even if there is litigation risk, while 16.9% reported that it will increase patient's confidence in doctors, 15.49% of them stated that they need to be treated in the same manner if the doctor becomes a patient. Fourteen percentages of them said that effective reporting and learning can make disclosure easy, 11.27% stated that proper informed consent should protect both the patients and doctors. Only 2.82% wanted to decrease feeling of guilt.

Last section (E) showed the suggested methods to prevent repetition of errors. As regards administrative preventive measures (42.7%) of physicians said that performing risky procedures in big qualified hospitals will prevent recurrence of errors, nearly similar percent (41.3%) will encourage doctors to disclose while (16%) stated that it is better to encourage hospitals to inform the agency by serious medical errors.

Concerning human factors, 51.3% said that refuse or referral of difficult cases will save the patients and doctors, 34.3% need to give physician more time to spend with patients, 12.3% stated that increase number of nurses and assistant staff will decrease the occurrence of errors, only 2% said that counting surgical items used during invasive procedure will prevent recurrence of errors.

**Table (1): The relation between age, gender, and degree of the participating physicians (No.=300).**

Characteristics	Degree						Total	
	Consultant (No.= 43)		Resident (No.=71)		Specialist (No.=186)		(No.=300)	
	No.	%	No.	%	No.	%	No.	%
Age (year)								
25- 35	0	0	70	98.59	57	30.65	127	42.33
>35-45	5	11.63	1	1.41	101	54.3	107	35.67
>45-55	23	53.49	0	0	28	15.05	51	17
>55-65	15	34.88	0	0	0	0	15	5
Gender								
Female	6	13.95	46	64.79	90	48.39	142	47.33
Male	37	86.05	25	35.21	96	51.6	158	52.67

**Table (2): Distribution of the participating physicians according to degree and specialty (No.=300).**

Characteristics	Number	Percentage %
Degree		
Consultant	43	14.33
Specialist	186	62
Resident	71	23.67
Specialty		
Anesthesia	11	3.67
Dermatology	11	3.67
Int. medicine	84	28
Obstetrics/gynecology	70	23.33
Ophthalmology	3	1
Orthopedic surgery	18	6
Pediatric	77	25.67
Surgery	26	8.67

**Table (3): The relation between the perceived causes of doctors' malpractices and degree by using Chi-Square test (No.= 300).**

Causes	Degree						Total		P-value
	Consultant (No.= 43)		Resident (No.=71)		Specialist (No.=186)		(No.=300)		
	No.	%	No.	%	No.	%	No.	%	
<u>Causes related to management.</u>									
Bad equipment	4	9.30	3	4.23	4	2.15	11	3.67	<0.001
Poor com. between staff	9	20.93	19	26.76	2	1.08	30	10	
Poor supervision	2	4.65	3	4.23	12	6.45	17	5.67	
Poor teamwork arrangement.	11	25.58	7	9.86	27	14.52	45	15	
Stress	3	6.98	5	7.04	67	36.02	75	25	
Work Overload	11	25.58	18	25.35	46	24.73	75	25	
Work Overload, Poor teamwork arrangement	1	2.33	6	8.45	4	2.15	11	3.67	
Work Overload, Stress	2	4.65	10	14.08	24	12.90	36	12	
<u>Causes related to doctor.</u>									
Deficient skills	12	27.91	44	61.97	80	43.01	136	45.33	<0.001
Error in diagnosis and treatment.	7	16.28	5	7.04	15	8.06	27	9	
Negligence	3	6.98	21	29.58	8	4.3	32	10.67	
Poor contact with patients	21	48.84	1	1.41	83	44.62	105	35	

*P-value was calculated by Chi-Square Test, P- value <0.05 is statistically significant*

**Table (4): The relation between the reaction of the doctors towards medical errors did before and the degree by using Chi-Square test**

Characteristics	Degree						Total		P-value
	Consultant (No.=43)		Resident (No.=71)		Specialist (No.=186)		(No.=300)		
	No.	%	No.	%	No.	%	No.	%	
Response when malpractice occurred									
I will disclose	17	39.53	12	16.9	42	22.58	71	23.67	0.019
I will hide the error	26	60.47	59	83.1	144	77.42	229	76.33	

*P-value was calculated by Chi-Square Test, P- value <0.05 is statistically significant*

**Table (5): The relation between causes of concealing (hiding) and the degree by using Chi-Square test (No.=229).**

In presence of malpractice risk, causes of concealing	Degree						Total (No.= 229)		P-value
	Consultant (No.=26)		Resident (No.=59)		Specialist (No.=144)		No.	%	
	No.	%	No.	%	No.	%			
Emotional impact of malpractice	0		32		9	6.25	41	17.90	<0.001
Litigation costs	8	0.0	6	54.2410.173.39	5	3.47	19	8.30	
Loss of doctor - patient relationship	2	30.77	2	18.645.08	20	13.89	24	10.48	
Loss of reputation	5	7.69	11	8.47	92	63.89	108	47.16	
Negative patient family reaction	3	19.2311.5430.77	3		15	10.42	21	9.17	
No training (how to disclose)	8		5		3	2.08	16	6.99	

*P-value was calculated by Chi-Square Test, P-value <0.05 is statistically significant*

**Table (6): The relation between causes of disclosing malpractice and the degree by using Chi-Square test (No.=71).**

Causes of disclosing malpractice	Degree						Total (No.= 71)		P-value
	Consultant (No.=17)		Resident (No.=12)		Specialist (No.=42)		No.	%	
	No.	%	No.	%	No.	%			
Decrease feeling of guilt	0	0.0	0	0.0	2	4.76	2	2.82	0.013
I want to be treated in similar way	4	23.53	1	8.33	6	14.29	11	15.49	
Increase patients confidence in doctors	3	17.65	1	8.33	8	19.05	12	16.90	
Late disclosure destroys doctor- patient relationship	6	35.29	0	0.0	9	21.43	15	21.13	
Part of effective reporting and learning	1	5.88	6	50	3	7.14	10	14.08	
Patient right to know what happened even if there is an error	0	0.0	3	25	10	23.81	13	18.31	
Proper pre-treatment informed consent	3	17.65	1	8.33	4	9.52	8	11.27	

*P-value was calculated by Chi-Square Test, P-value <0.05 is statistically significant*

**Table (7): The suggested measures for prevention of malpractice repetition**

The suggested measures	Total (No.=300)	
	No.	%
<u>Administration Related</u>		
Encourage doctors to disclose	124	41.33
Encourage hospitals to inform the agency by serious medical errors	48	16
Perform risky procedures in big qualified hospitals	128	42.67
<u>Human Related</u>		
Counting surgical items used during invasive procedure	6	2
Give physician more time to spend with patients	103	34.33
Increase number of nurses	37	12.33
Refuse or referral of difficult case	154	51.33

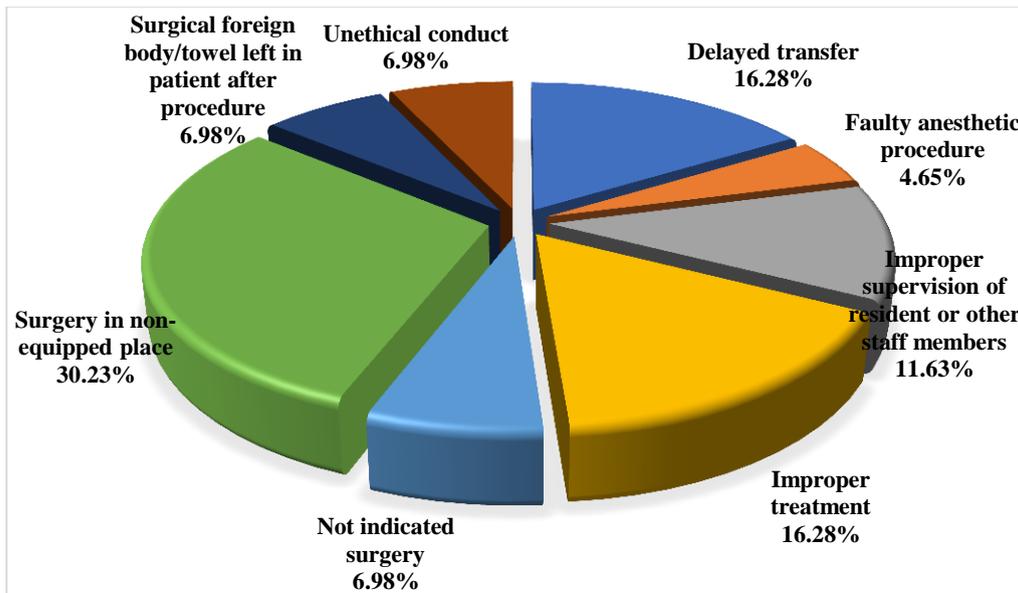


Figure (1): Types of medical errors reported by consultants (No.=43).

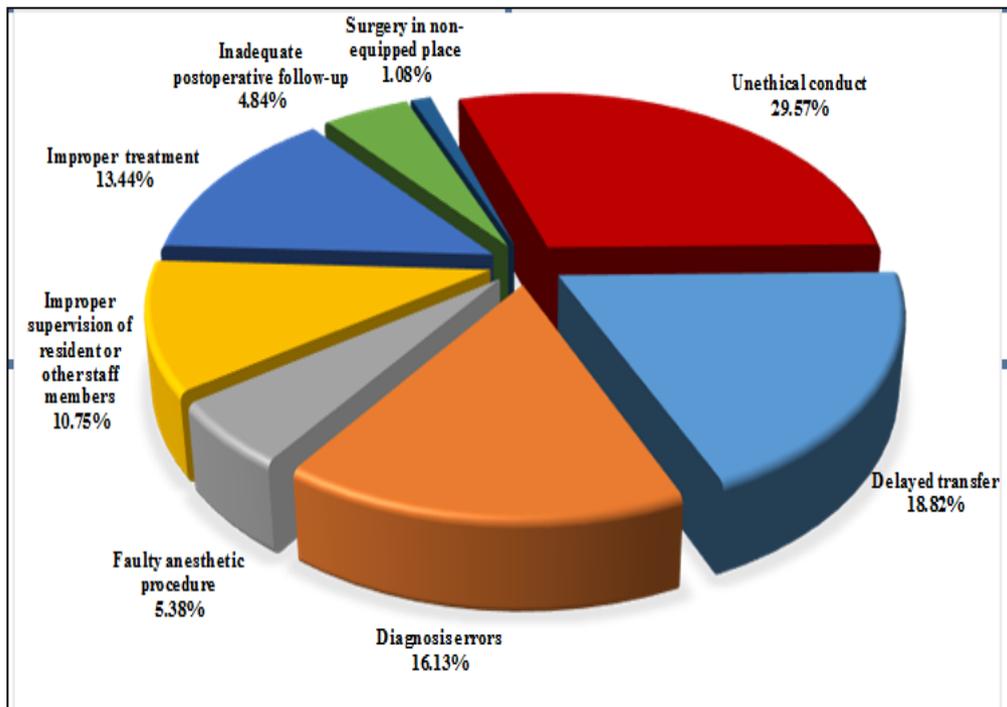


Figure (2): Types of medical error reported by specialists (No.=186)

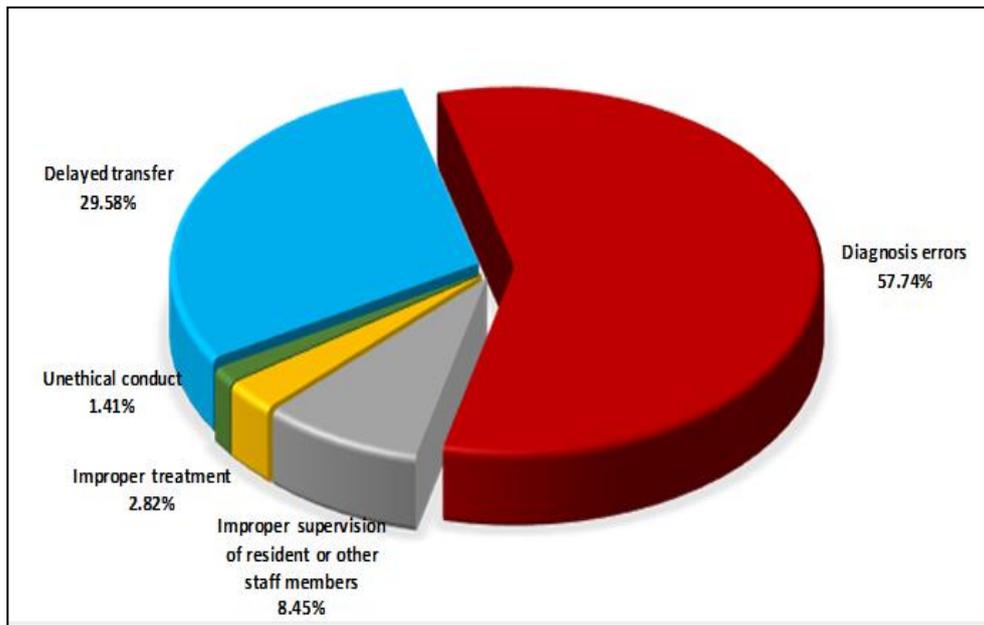


Figure (3): Types of medical error reported by residents (No. 71)

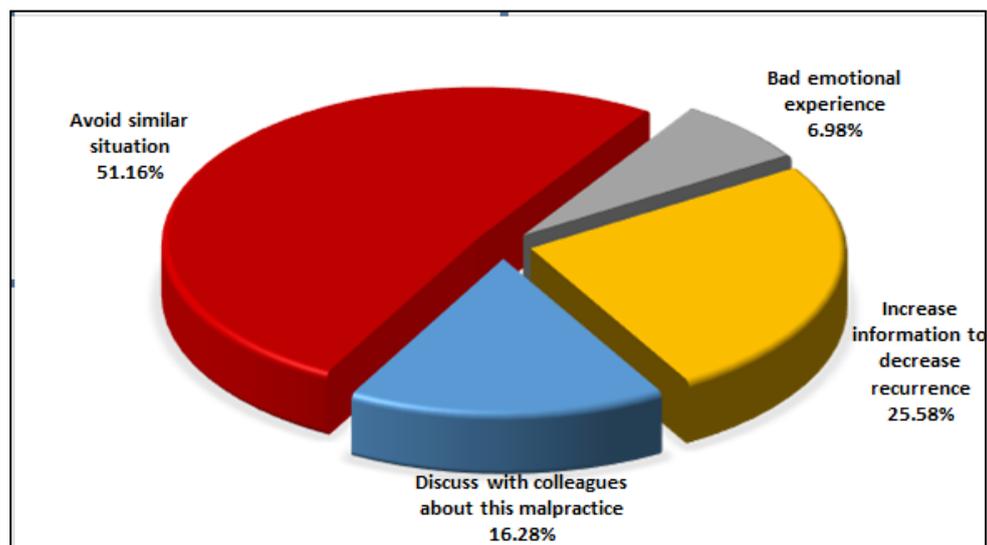


Figure (4): The response of consultants to medical errors they did before (No.=43).

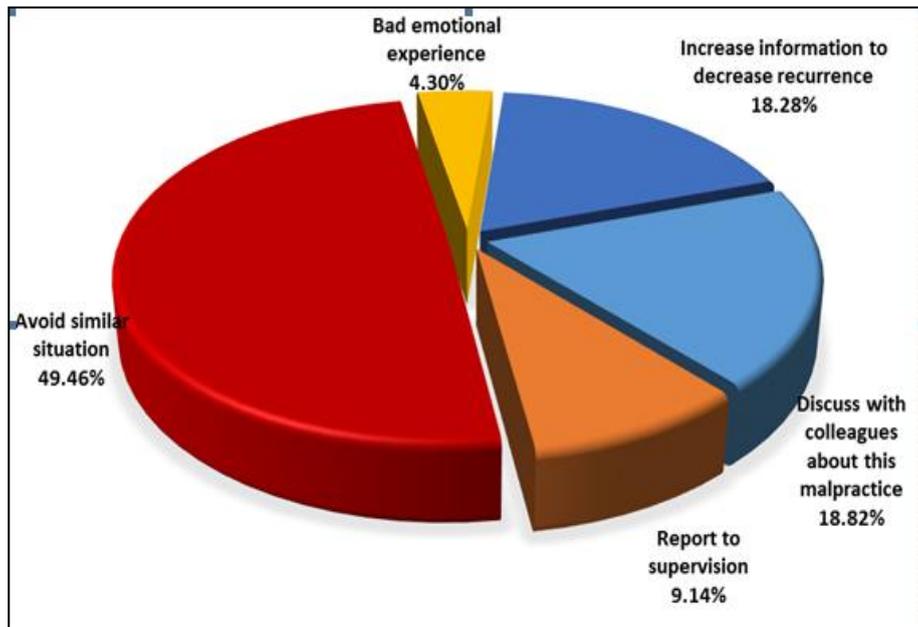


Figure (5): The response of specialists to medical errors they did before (No.=186).

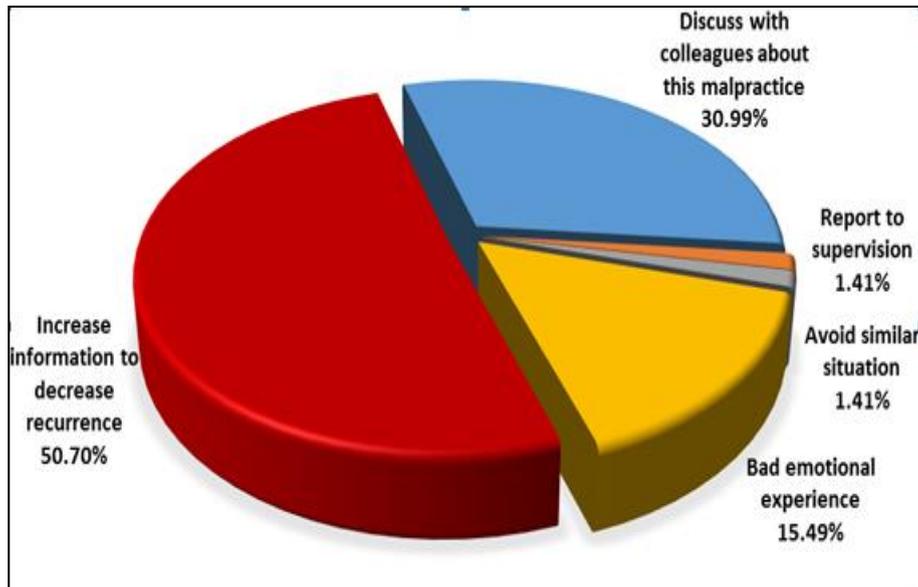


Figure (6): The response of residents to medical errors they did before (No.=71).

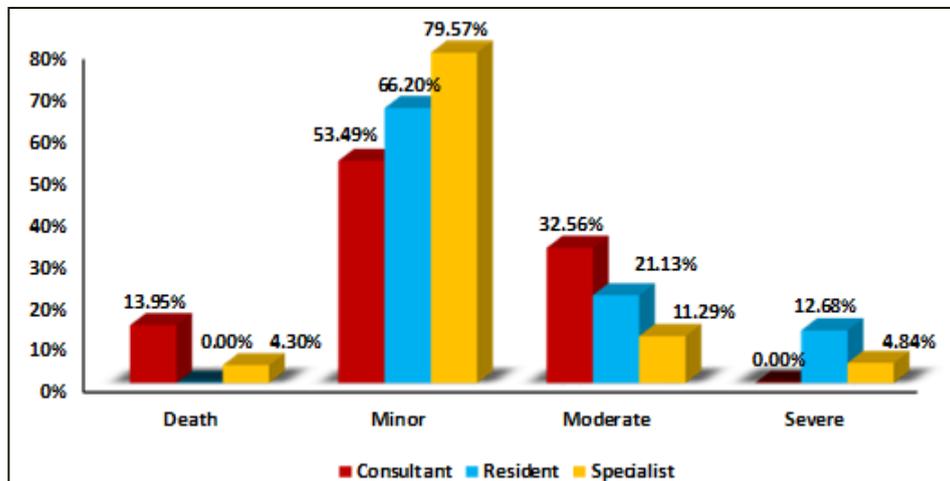


Figure (7): The relation between the outcome of errors and the degree (No.=300).

## Discussion

There is a continuous controversy between the right of patients to know and the right of doctors to conceal the medical errors to avoid loss of their reputation or malpractice litigations. The current study was conducted to detect the most important causes of medical errors and malpractice. The opinion of Sohag physicians about disclosure or hiding of the error to patients. Types of medical errors they did if any, its outcome and how to prevent recurrence of the errors. This study covered 300 physicians from Sohag Governorate. Their age ranged from 25 to 65 years old. It covered different specialties in different branches of medicine and surgery. Different degrees shared in this study from resident to consultant. According to the opinion of participating physicians (consultants and specialists), the most common cause of malpractice in human factors was due to poor contact with patients then deficient skills while residents reported that the main cause is deficient skills then negligence. These results are in agreement with *Brennan et al. (2004)*, in their study about incidence of deleterious proceedings and negligence in patients, they found that 27.6% of these proceedings were due to negligence. While *West et al. (2009)* stated that medical errors are common in residents and this is often associated with personal distress.

The present results are in harmony with *Binny et al. (2019)*, results who reported that medication errors were attributed to multifactor. These factors either active failures as mistakes followed by error-provoking conditions as deficient information and experience, inadequate staffing, with latent failures (e.g. heavy workload) were least mentioned.

For the management system causes both stress and work overload were the main factors for (consultants and specialists) while residents reported that the main causes were poor communication between staff and work overload. These results differ from the study of *Yassa and Peter (2018)*, which was performed in Assiut Governorate, who reported that the most common cause of malpractice (31%) was due to overwork, followed by stress in 27%, and 18% due to poor team design. Rare causes were due to poor goals (3%) such as overbilling, followed by poor equipment (5%) and lack of supervision. In addition, 49% were due to miscommunication with patients followed by 33% due to negligence. Also, *Tully et al. (2009)*, mentioned that the active failure which most frequently recorded was an error due to deficient information about the medications or the patient. There were matters of deficient training or experience, exhaustion, stress, work overload and poor contact between staff members

It is a vicious circle: stress upon physicians and decreased sympathy will lead to increased risk of medical errors in the future.

Medication Without Harm, WHO Global Patient Safety Challenge was published by the WHO in March 2017, to decrease patient harm which occurs due to unsafe medication practices and medication errors. The aim is to obtain worldwide commitment and action to decrease severe, preventable medication-related harm by (50%) in the next 5 years specially by determining

harm resulting from medication errors or unsafe procedures because of defects in healthcare systems (*Donaldson et al., 2017*).

In the present study, the participating physicians reported different types of errors they did, which differs according to the degree of each one. The most frequent error reported by specialists was unethical conduct in the form of deficient informed valid consent. Informed consent represented an important ethical issue before dealing with patients. Valid informed consent must be obtained from the patient before starting treatment or physical investigation for him as it is an essential ethical principle. The term informed consent in medicine defined as providing enough information for a patient to make an informed and rational choice. This principle reflects the right of patients to decide what occurs to their own (*Heena et al., 2014*).

While the residents mentioned that the most common error is diagnosis error. *Binny et al. (2019)*, in their systemic review stated that, prescription errors were the most common errors mentioned.

*Li et al. (2020)*, in their retrospective study of medical malpractice claim in China reported that of all (3175) medical error claims (91.8%) were due to a medical technology error while 5.8% were medical ethics related errors, 0.9% were medical product errors and 1.6% were medical management errors.

The health care process in hospitals is very complicated and sensitive, so any minimal negligence in the physicians' duties can lead to defects.

In the current study, 76.3% of doctors reported they would conceal errors and 23.7% said they would disclose the occurred error. These results are in agreement with the results of *Yassa and Peter (2018)*, who mentioned that 64.5% of doctors said they would conceal errors and 35.5% said they would disclose them. Those who choose to conceal, most of them (47%) would do so due to fear of losing their reputation and legal consequences, and (17%) due to fear of emotional impact of malpractice, and (10%) fear of loss of doctor-patient relationship. Of those who choose to disclose errors, (21%) stated that late disclosure destroys doctor-patient relationship, (18%) said the patient has the right to know what happened, and (16%) said that disclosure will increase patients' confidence in doctors. Error disclosure represents physicians' honesty and truthfulness, which can decrease patients discomfort, develop trust in physicians, and improve the patients emotional response; it also covered their need to be informed about the quality and manner of their care and increase awareness of their present condition, which will help the physicians to obtain informed consent for the management of damages resulted from the error and reduce in turn the compensation (*Mohammad et al., 2019*).

Also, *Erik et al. (2014)*, stated that if an error occurs, disclosure is an essential step of the coping process for both patient and physician. Patients need to know what has happened because this will help them to take decisions about follow-up treatment. Also,

disclosure is important to the physicians involved because they are the second victims of the errors. These incidents can produce negative emotional feedback up on the physicians. Additionally, disclosure can be considered an important part of strengthening the doctor- patient relationship. *Alduais et al. (2014)* stated 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.

In the current study, doctors had the opinion that the hospital management system can decrease the risk of malpractice. Of the participants 42.7% said that performing risky procedures in qualified hospitals will prevent recurrence of errors and 41% will encourage doctors to disclose. While 16% stated that it is better to encourage hospitals to inform the agency by serious medical errors. For human factors, 51.3% said that refuse or referral of difficult case will save the patients and doctors, 34.3% need to give physician more time to spend with patients, 12.3% stated that increase number of nurses and assistant staff will decrease the occurrence of errors, only 2% said that counting surgical items used during invasive procedure will prevent recurrence of errors. These results differ from the results of *Yassa and Peter (2018)*; in their study in Assiut Governorate, where doctors had the opinion that the hospital management system can reduce the risk of malpractice. As 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. The need for training on how to disclose reported by 20% of them and 11.4% advised that high risk procedures should take place in tertiary care hospitals.

*Zamzam et al. (2019)*, stated many potential methods by health care providers that may help in decreasing ME incidents included the following as mentioned by the physicians; increasing awareness about medical responsibility; encouraging employees and auditors to report, perform regular assessment and evaluation, creation of a conducive working environment. Other suggestions were also reported including encourage communication between all departments, encourage reporting and discussing possible errors, development and preparation of new hospitals to decrease patient crowdedness per hospital.

## Conclusion

The current study included 300 practicing physicians from Sohag Governorate. The main causes of medical errors reported by the participants were poor contact with patients and deficient skills. The participants' response was to avoid similar situations and increase information to prevent recurrence of error. The majority of participating doctors chose concealing the errors to avoid loss of reputation many preventive measures suggested by the participants to avoid recurrence of errors, the main measure was to perform risky procedures in well-equipped hospitals and

referral of difficult cases to more qualified personnel and hospitals. This will save both doctors and patients.

## Recommendations

- Close monitoring of residents and adequate communication between staff and regularization of duty hours should be applied which can decrease occurrence of errors.
- Legal protection for doctors and patients is mandatory as it can encourage doctors to disclose their errors.
- Finally, physicians should be aware toward medical errors as this will assist managers in planning to improve physicians' professional skills and maintain trust in the patient-physician relationship.

## References

- Alduais AM, Mogali S, Al Shabrain B, Al Enazi A and Alawad F (2014): Barriers and strategies of reporting medical errors in public hospitals in Riyadh city: A survey-study. *J. Nurs. Health Sci.*, 3:72-85.
- Ava M, Alireza A, Molouk H, Mohammadreza J, Seyed H K, Farzaneh D, Kheirollah G (2014): A review of medication errors in Iran: sources, underreporting reasons and preventive measures. *Iran J. Pharm. Res.*, 13(1): 3-17
- Bari A, Khan RA and Rathore AW (2016): Medical errors; causes, consequences, emotional response and resulting behavioral change. *Pak. J. Med. Sci.*, 32(3): 523-528.
- Binny T, Vibhu P, Katie M, Abdulrouf P, James M, Wessam E, Moza A and Derek S (2019): Medication errors in hospitals in the Middle East: a systematic review of prevalence, nature, severity and contributory factors. *European Journal of Clinical Pharmacology*, 75:1269-1282.
- Brennan TA, Leape LL, Laird NM, Hebert L, Localio AR, Lawthers AG, Newhouse JP, Weiler PC, Hiatt HH (2004): Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice Study I. *BMJ Qual. Saf.*, 13(2):145-151.
- Donaldson LJ, Kelley ET, Dhingra-Kumar N, Kieny MP and Sheikh A (2017): Medication without harm: WHO's third global patient safety challenge. *Lancet*, 389:1680-1681.
- Erik R, Manda H B and Kees A (2014): Explaining the unexplainable—the impact of physicians' attitude towards litigation on their incident disclosure behavior. *Journal of Evaluation in Clinical Practice*, 20: 649-656.
- Gündoğmus ÜN, Ersoy N and Biçer Ü. (1998): Analysis of the higher health council's decisions in respect of ethics. *Toplum ve Hekim.*, 13:8-14.
- Heena K, Ramandeep S G, Simarpreet S, Amarinder K and Tarun N (2014): Informed consent: Corner stone in ethical medical and dental Practice. *J. Family Med. Prim. Care.*, 3(1): 68-71.
- Li H, Shengjie D, Ziyi L, Yao Y, Suwei Y, Yujie C, and Guohong L (2020): Retrospective analysis of

- medical malpractice claims in tertiary hospitals of China: the view from patient safety. *BMJ.*, 10: e034681.
- Martin-Casals M, Iguada JL, and Feliu JS (2003): Medical malpractice liability in Spain: cases, trends and developments. *European Journal of Health Law*, 1:153-181.
- Mohammad M, Bagher L, Seyed MT, Saharnaz N, Masud Y, and Fatemeh S N (2019): A study of validity and reliability of the questioner entitled physicians approach to and disclosure of medical errors and the related ethical issues. *Medical Ethics and History of Medicine Research Center*, 12(2):1-15.
- Nakajima K, Keyes C, Kuroyanagi T and Tatara K (2001): Medical malpractice and legal resolution system in Japan. *JAMA.*, 285:1632-1640.
- Tully MP, Ashcroft DM, Dornan T, Lewis PJ, Taylor D and Wass V (2009): The causes of and factors associated with prescribing errors in hospital inpatients. *Drug Saf.*, 32(10):819-836.
- Wakefield BJ, Wakefield, DS, and Uden-Holman, T (2000): Improving medication administration error reporting systems. Why do errors occur? *Ambulance Outreach*: 16-20
- West CP, Tan AD, Habermann TM, Sloan JA and Shanafelt TD (2009): Association of resident fatigue and distress with perceived medical errors. *Jama.*, 302(12):1294- 1300.
- Yassa HA and Peter A F (2018): Medical error disclosure can rescue malpractice litigation. *Arab Journal of Forensic Sciences & Forensic Medicine*; 1 (7): 859-868.
- Zamzam A, Mohammad S, Alan MJ, Abdullah MA (2019): Medical errors: Healthcare professionals' perspective at a tertiary hospital in Kuwait. *PLOS ONE*: 1-14.

## هل من الأفضل الإفصاح ام إخفاء الخطأ الطبي اذا حدث؟ دراسة استرشادية من أطباء محافظة سوهاج

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### الملخص العربي

**المقدمة:** تعتبر الأخطاء الطبية واحدة من أكثر المشاكل الطبية شيوعاً في المستشفيات وهي السبب الرئيسي لاعتلال المرضى. **طريقة البحث:** : طلب من ٣٠٠ طبيب على اختلاف درجاتهم استيفاء الاستبيان المرفق حول الممارسات الطبية الخاطئة (الأسباب والأنواع والإجراءات الوقائية) ورأيهم في إفشاء أو إخفاء الأخطاء. **النتائج:** اشتمل المشاركون في البحث على أطباء من فئات عمرية مختلفة تتراوح اعمارهم من ٢٥ إلى ٦٥ سنة. وقد كان السبب الرئيسي لسوء الممارسة الطبية الذي ذكره المشاركون في البحث هو نقص المهارات بنسبة ٤٥٪ ، يليه ضعف التواصل مع المرضى (٣٥٪). الأسباب الأخرى التي تم الإبلاغ عنها هي بسبب الإجهاد وعبء العمل الزائد (٢٥٪). بينما ١٢٪ كانت بسبب سوء تنظيم فريق العمل . ٢٣.٧٪ فقط من الأطباء قرروا الإفصاح عن أخطائهم و ٧٦.٣٪ يفضلون إخفاء الأخطاء الطبية. كان الخطأ الأكثر شيوعاً الذي أبلغ عنه المشاركون هو اخطاء في التشخيص (٢٣.٦٪) ، يليه تأخر نقل المرضى في ٢١٪. هذا وقد كانت نتيجة الخطأ طفيفة في ٧٢.٦٪ من الحالات بينما وقعت الوفاة في ٤.٦٧٪ فقط. لهذا كان الإجراء المقترح الرئيسي بنسبة (٥١٪) للوقاية من تكرار الخطأ هو تحويل الحالات الصعبة والحالات التي تتطلب إجراءات محفوفة بالمخاطر الي المستشفيات المؤهلة لذلك (٤٢.٦٪) يليه تشجيع الأطباء على الإفصاح عن أخطائهم بنسبة ٤١.٣٪. **الخلاصة:** خلصت الدراسة الحالية إلى أن الأسباب الرئيسية للأخطاء الطبية التي أبلغ عنها المشاركون هي ضعف الاتصال مع المرضى ونقص المهارات. وقد كان الخطأ الأكثر شيوعاً هو الجراحة في مكان غير مجهز ، وعدم الالتزام بأداب المهنة والخطأ في التشخيص. وقد كان رد فعل المشاركين على هذه الأخطاء هو تجنب المواقف المماثلة وزيادة المعلومات لمنع تكرارها. و لحسن الحظ ، كانت النتيجة الرئيسية لهذه الأخطاء طفيفة. وقد اختار غالبية الأطباء المشاركين إخفاء الأخطاء لتجنب فقدان السمعة بين المرضى. **التوصيات:** ويمكن تقليل حدوث هذه الأخطاء عن طريق المتابعة الدقيقة للأطباء للمقيمين والتواصل الكافي ما بين فريق العمل وتنظيم ساعات العمل يمكن أن يقلل من حدوث الأخطاء. كما يمكن أن يشجع توفير الحماية القانونية للأطباء والمرضى الأطباء على الكشف عن أخطائهم.

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