

Steps towards Developing a Set of Guidelines for Handling Medicolegal Cases in Ain Shams University Hospitals

Sherif Ahmad ElSeginy, Yasser Fouad ElAkid, Soha Khaled Ashry¹

¹ Forensic Medicine and Clinical Toxicology Department, Faculty of Medicine, Ain Shams University.

Abstract

Background: During medical practice, it is inevitable to face cases that have medicolegal depths. The outcome of these cases could be disastrous to both the patient and the physician unless handled in a correct manner. Ain Shams University Hospitals is a major referral center in Cairo, Egypt, dealing with an enormous number of cases on daily basis, including a large number of cases that bear medicolegal weight. **Aim of the Work:** This study is aimed at probing the existing way that MLCs are handled and matching the results to current international guidelines as a first step towards proposing a unified set of guidelines on how to deal with these cases in order to preserve both patient rights and physicians' rights. **Participants and Methods:** A Self-administered structured questionnaire was created and filled by the physicians working in Ain Shams University Hospitals, during the period between November 2021 and June 2022 to assess physicians' way of handling cases that had medicolegal depths. **Results:** 55% - 65% of participants reported that their department does not provide them with knowledge regarding MLCs identification, handling, documenting, reporting, evidence collection, or acting as an expert witness in court. **Conclusion:** There is unequal knowledge among physicians working in ASUH regarding forensic medicine, ethics and proper systematic ways of dealing with medicolegal cases.

Received in original form: 28 December 2022 Accepted in a final form: 10 January 2023

Key words

Guidelines, Expert Witness, Handling Medicolegal Cases, Ain Shams University Hospitals

Introduction

After providing the best healthcare services that could be provided, a healthcare provider is obliged by law to report the medicolegal case to the designated authority. Consequently, the physician must have proper knowledge of both his/her rights as well as the patient rights under the law and have proper knowledge on what is legal and what is not (Patel et al., 2010).

This reveals the important role of physicians as they are the first line that sees the injuries in their nature before surgical intervention or healing changes. Therefore, medical practitioners share the responsibility of the administration of justice by supplying the court with the relevant medical insight to advance informed decisions on legal matters (Wells, 2006).

Ain Shams University Hospitals, a significant referral facility in Cairo, Egypt, manages a sizable number of cases every day, including a sizable number of cases having significant medical-legal implications.

Common medico-legal cases include alleged history of sexual assault, violence, road traffic accidents, firearm injuries, child abuse, poisoning and overdose of substances of abuse, attempted suicide, homicidal injuries, burns (except for minor domestic non-fatal accidental burn injuries) and electrocution (Kumar et al., 2014).

Unfortunately, in developing countries, during under-graduate and post-graduate medical training the awareness about medicolegal issues is not sufficient

and consequently there are major discrepancies in how a medicolegal case is dealt with (Patel et al., 2010).

Sufficient knowledge and information regarding the proper steps of how to handle a medicolegal case, and the duties and responsibilities of a physician is of utmost importance in order to facilitate reaching the best outcome of healthcare as well as helping achieve the concept of justice (Raj et al., 2014).

Insufficient forensic experience while dealing with medico-legal cases may result in destroying, throwing away or losing pertinent evidence, illegible records, partial documentation, or incomplete medical records. Delayed forensic examination, missing subtle injuries because of lack of pattern recognition, and making "educated guesses" about the mechanism of injury will also result in improper presentation of the medical evidence in court (Edussuriya et al., 2012).

In Egypt, about 95% of medico-legal cases were found to be brought to the court under the primary medical report without taking the opinion of the forensic authority. This reflects the seriousness and importance of proper handling of medicolegal cases by physicians in order to save the rights of both patients and physicians (Egyptian Medical Syndicate, 2003).

Aim of the Study

This study is aimed at probing the existing way that medicolegal cases are handled in Ain Shams

University hospitals, a major referral centre in Cairo, Egypt, and matching the results to current international guidelines as a first step towards proposing a unified set of guidelines on how to deal with these cases in order to preserve both patient rights and physicians' rights.

Patients and Methods

Design:

This descriptive cross-sectional exploratory study was conducted on physicians that have worked or still currently work in Ain Shams University Hospitals in different departments with focus on departments engaged in the emergency case setting.

Inclusion Criteria: any physician who works as part of ASU Hospitals with focus on the departments that run the Emergency rooms and the ICU, dealing with medicolegal cases whether suspected or confirmed.

Exclusion criteria: interns, medical students, nursing staff.

Sampling Method:

A self-administered questionnaire was handed out electronically to each physician with both anonymity and confidentiality secured during the stage of data collection.

Sampling:

One stage cluster sampling design was used in this study to select a representative sample of physicians working at Ain Shams University Hospitals. Tool for data collection:

A Self-administered structured questionnaire was used to assess physicians' way of handling cases that had medicolegal depths.

An informed consent was included in the electronic communication along with the questionnaire. The questionnaire has three sections;

The first section assesses the socio-demographic characteristics of the participants, the second section questions the participant's self-perception of the aspects of proper healthcare criteria and/or medicolegal hazards that the physician might encounter, the last section assesses the current procedure that the participant and his/her department follows when encountering a case with medicolegal depths including medical documentation procedures.

Procedure of the study:

The questionnaire was prepared by the researchers using English language. Then, it was revised by a group of experts in the Forensic Medicine and Toxicology Department, Faculty of medicine, Ain Shams University. Based on the opinion of a panel of experts; vague and confusing questions were excluded, some modifications were done; and then the final form was developed. The questionnaire format was filled by the respondent. The questionnaire was distributed electronically to physicians working in Ain Shams University Hospitals using the official email addresses of faculty and staff ending with the domain (@med.asu.edu.eg) which was more convenient for both the researchers and the physicians answering them.

The questionnaire was made relatively short to minimize the time it needed to be completed and encourage physicians that have a high workload at ASUH to participate.

International guidelines of handling medicolegal cases (MLCs) were gathered from multiple resources. Common areas were sorted and those acted as a base upon which a list of proposed guidelines were built. The questionnaire results were matched with the common sorted areas.

Statistical analysis:

The collected data were revised, coded, and entered to a PC using Statistical Package for Social Science (SPSS for windows). Data were analyzed according to the type of data obtained for each parameter. Descriptive statistics were presented as frequency with percentages for categorical variables. Chi-square and Fischer exact tests were applied in case of testing association between two categorical variables. Level of significance is considered when P value is ≤ 0.05 .

Results

The total number of respondent physicians to the questionnaire of the current study was 109. Participants in the current study were grouped in three groups according to their current job and title, namely juniors group (residents and demonstrators), intermediate group (assistant lecturers and lecturers) and the senior group (assistant professors and professors. This grouping was not done based on the years of experience but rather based on the academic level of the faculty, as the level of responsibility and the nature of the assigned tasks in ASU follows the academic level rather than the years of experience.

As shown in table (1) 54.1% were junior physicians either residents or teaching assistants, 33.9% were assistant lecturers and lecturers, 11.9% were assistant professors and professors. Regarding the years of experience, 80.7% had less than 10 years of experience, 13.8% had 10-20 years of experience while 5.5% had more than 20 years of experience. As for the departments of the participating physicians, 48.6% were from the surgical departments, 40.4% were from the internal medicine departments, and 11.1% were from the academic departments.

Table (2) and figure (1) show the list of common medicolegal cases that was inquired about in the questionnaire, the majority of respondents (93.6%) were able to recognize cases of evident sexual assault as MLCs as well as cases of injuries and burns where the circumstances suggest commission of an offense by somebody (92.7%) while the least number were able to recognize vague cases bearing medicolegal weight as MLCs with 77.1%. Cases of vehicular, factory, or other unnatural accident were recognized by 89%, as well as 89% who were able to recognize criminal abortion cases, 84.4% were able to recognize cases of unconsciousness where the cause is not natural or not clear, 89.9% were able to recognize cases of poisoning or intoxication, and 80.7% were able to recognize cases referred from court or otherwise for age determination.

Comparing the knowledge of the 3 groups, Table (3) shows that there was a statistically significant difference between them regarding general knowledge

about medical ethics and the laws governing healthcare practice, while there was no statistically significant difference between the 3 groups regarding knowledge of the Hippocratic oath.

Table (4) shows the responses of the participant physicians regarding their source of knowledge about medical ethics or medicolegal cases, compared to their knowledge about the Egyptian law governing healthcare practice, their source of knowledge about medical ethics or medicolegal cases was undergraduate lectures 16.5%, experience at work 18.3%, while 7.3% answered during training, indicating either the internship year or the first years of residency, and another 7.3% from lectures and seminars, 1.8% answered from their own readings. On the other hand the percentage of the responses who gained knowledge about the Egyptian laws governing healthcare practice, 1.8% stated that they had the knowledge from the undergraduate lectures, 10% by practice during training, 12.8% by experience at work, 2.8% during lectures and seminars.

Table (5) highlights the comparison between the three groups, regarding knowledge of the first action when encountering a MLC where there was no statistically significant difference between the 3 groups as all groups put caring for the patient as the utmost priority when dealing with a MLC, and the importance of acquiring an informed consent.

When reporting a suspected MLC there was a statistically significant difference between the three groups where junior participants tend to report to their supervisors more than middle and senior participants.

The participants in the current study came from various academic and clinical departments in the Faculty of Medicine in Ain Shams University. These departments were grouped into 3 groups according to their nature namely academic, surgical and medical departments. Comparing the frequency of encountering medicolegal cases between the 3 groups of departments there was a statistically significant difference where surgical departments encountered the cases more frequently while academic departments had the least frequency of encountering cases, this is shown in table (6)

The common international guidelines for handling MLC were sorted in six distinct areas namely

identifying, handling, documenting, collecting evidence, reporting and acting as an expert witness. Participants' knowledge results were matched against the six areas where there was a statistically significant difference between the 3 department groups regarding the knowledge provided by the department to the responding physicians, where clinical departments appeared to have more guidelines on how to deal with MLCs compared to academic departments. This is shown in table (7)

Table 8 shows the matching between the international guidelines and the questionnaire results regarding handling MLCs, where different international guidelines collated 6 main steps, identifying, handling, collecting samples, documenting, reporting, and acting as an expert witness.

More than half of the participants (51.37%) stated that they can identify MLCs while 48.6% stated they could not. As for handling the case, 84.4% stated that caring for the patient was their priority, while 2.75% stated that their priority was to ask for consultation. Regarding the importance of acquiring a consent form, 84.4% chose that it was a priority to acquire a consent form, 1.8% chose that they don't have to acquire a consent, as

As for evidence collection, the percentage of physicians with knowledge on how to properly collect evidence and samples while handling a medicolegal case was 17.4%, 19% stated that they had insufficient knowledge, while 63% were not sure.

As for documenting, 30% agreed to writing a death certificate for a deceased patient during handling a MLC, 9% were neutral, 61% disagreed.

Reporting to the authorities was preferred by 8% while 27.5% chose that they would prefer reporting to their senior supervising doctor and 20.2% chose to report to the hospital management, 3.7% chose to the forensic medicine department and 2.75% chose to ask for consultation.

And lastly, the percentage of physicians with knowledge on how to behave as an expert witness if they were asked by law enforcement to testify in order to help resolve a medicolegal case that they played a role handling was 16.5%, while 65% stated that they had insufficient knowledge, and 18.3% were not sure.

Table 1: Characteristics of the participant physicians

		Frequency	Percentage
Current occupation	Resident-Teaching assistant	59	54.1
	Assistant lecturer-Lecturer	37	34
	Assistant professor-Professor	13	11.9
Duration of work /years' experience?	<10	88	80.7
	10- <20	15	13.8
	≥20	6	5.5
Department	Surgical departments	53	48.6
	Medical department	44	40.4
	Academic departments	12	11

Table 2: The participants' recognition of common medico-legal cases:

Choices	Frequency	Percentage*
All cases of injuries and burns - the circumstances of which suggest commission of an offense by somebody	101	92.7%
All vehicular, factory, or other unnatural accident cases specially when there is a likelihood of patient's death or grievous hurt	97	89.0%
Cases of suspected or evident sexual assault	102	93.6%
Cases of suspected or evident criminal abortion	97	89.0%
Cases of unconsciousness where its cause is not natural or not clear	92	84.4%
All cases of suspected or evident poisoning or intoxication	98	89.9%
Cases referred from court or otherwise for age estimation	88	80.7%
Cases brought dead with improper history creating suspicion of an offense	93	85.3%
Cases of suspected self-infliction of injuries or attempted suicide	91	83.5%
Any other case not falling under the above categories but has legal implications	84	77.1%

Percentage is calculated from total participants (n=109)*

Table 3: Chi-square statistical analysis of the participant groups regarding their subjective knowledge about ethics and laws:

Item	Response	Resident- Teaching assistant		Assistant lecturer- Lecturer		Assistant professor - Professor		P-value
		n	%	n	%	n	%	
Oath knowledge	Yes	47	55.3	28	32.9	10	11.8	0.896
	No	12	50.0	9	37.5	3	12.5	
Do you have knowledge about medical ethics or medicolegal cases?	Yes	21	37.5	22	39.3	13	23.2	<0.001*
	No	38	71.7	15	28.3	0	.0	
Do you have knowledge about the Egyptian law governing healthcare practice?	Yes	8	26.7	10	33.3	12	40.0	<0.001*
	No	51	64.6	27	34.2	1	1.3	

**Statistically significant p-value ≤0.05*

Table 4: Sources of Participants` knowledge about medical ethics or medicolegal cases:

Item	Response	Frequency	Percentage*
Sources of knowledge about medical ethics or medicolegal cases	Undergraduate lecture	18	16.5
	During Training	8	7.3
	Experience at work	20	18.3
	Lecture/ Seminars	8	7.3
	One`s own reading	2	1.8
Sources of knowledge about the Egyptian law governing healthcare practice	Undergraduate lecture	2	1.8
	During Training	11	10.09
	Experience at work	14	12.84
	Lecture/ Seminars	3	2.75
	One`s own reading	0	0.0
	others	0	0

Table 5: Fischer exact test showing the relationship between the current occupation and objective knowledge of participants

Item	Response	Resident-Teaching assistant		Assistant lecturer-Lecturer		Assistant professor - Professor		P-value
		n	%	n	%	n	%	
The utmost priority when dealing with a suspected medicolegal case is	Caring for the patient, saving his life and providing the best healthcare that can be provided	50	54.3	29	31.5	13	14.1	0.320
	Report the case to the authorities (police)	4	44.4	5	55.6	0	.0	
	Report the case to hospital management	4	100.0	0	.0	0	.0	
	Ask for consultation	1	33.3	2	66.7	0	.0	
	Other	0	.0	1	100.0	0	.0	
When acquiring a consent from the patient before handling a Medicolegal case:	you shouldn't proceed without obtaining proper written medical consent	52	56.5	30	32.6	10	10.9	0.281
	you don't have to acquire consent	0	.0	1	50.0	1	50.0	
	verbal consent is sufficient	7	46.7	6	40.0	2	13.3	
Physicians' first action when reporting a suspected Medico Legal Case (MLC) is	Report the case to your senior supervising doctor	51	60.7	26	31.0	7	8.3	0.029*
	Report the case to hospital management	7	31.8	9	40.9	6	27.3	
	Report the case to the Forensic Medicine Department	1	33.3	2	66.7	0	.0	

*Statistically significant $p\text{-value} \leq 0.05$

Table 6: Fischer exact test showing the difference between departments regarding the frequency of encountering MLCs:

		Surgical departments		Medicine departments		Academic departments		P-value
		n	%	n	%	n	%	
How often do you encounter an ethical or legal problem in the course of your work?	Never	1	25.0	1	25.0	2	50.0	0.01*
	Daily	32	55.2	23	39.7	3	5.2	
	Weekly	9	40.9	10	45.5	3	13.6	
	Monthly	10	50.0	9	45.0	1	5.0	
	Yearly	1	20.0	1	20.0	3	60.0	

*Statistically significant $p\text{-value} \leq 0.05$

Table 7: Fischer exact test showing the difference between different departments regarding the knowledge provided by these departments

Item	Choice	Surgical departments		Medicine departments		Academic departments		P-value
		n	%	n	%	n	%	
Does your department provide you with knowledge on how to identify a medicolegal case?	Yes	9	45.0	8	40.0	3	15.0	0.044*
	No	7	30.4	11	47.8	5	21.7	
	Not sure	37	56.1	25	37.9	3	6.0	
Does your department have a clear guideline on how to deal with encountered medicolegal cases?	Yes	22	45.8	22	45.8	4	8.4	0.032*
	No	6	28.6	9	42.9	6	28.6	
	Not sure	25	62.5	13	32.5	2	5.0	
Does your department provide you with knowledge on how to properly document a medicolegal case abiding by the rules of medical ethics?	Yes	10	41.7	10	41.7	4	16.7	0.004*
	No	7	28.0	13	52.0	5	20.0	
	Not sure	36	60.0	21	35.0	3	5.0	
Does your department provide you with knowledge on how to properly collect evidence and samples while handling a medicolegal case?	Yes	8	42.1	10	52.6	1	5.3	0.027*
	No	5	23.8	11	52.4	5	23.8	
	Not sure	40	58.0	23	33.3	6	8.6	
Does your department provide you with knowledge on how to properly report a medicolegal case abiding by the rules of medical ethics?	Yes	9	37.5	12	50.0	3	12.5	0.005*
	No	7	29.2	11	45.8	6	25.0	
	Not sure	37	60.7	21	34.4	3	4.9	
Does your department provide you with knowledge on how to behave as an expert witness if you were asked by law enforcement to testify in order to help resolve a medicolegal case that you played a ...	Yes	7	35.0	11	55.0	2	10.0	0.03*
	No	6	33.3	8	44.4	4	22.2	
	Not sure	40	56.3	25	35.2	6	6.4	

*Statistically significant $p\text{-value} \leq 0.05$

Table 8: Matching between the international guidelines and the questionnaire results regarding handling MLCs

Steps when encountering a MLC	Question	Choice	%
1. Identifying the Case	knowledge about medicolegal cases or medical ethics	Yes	51.37
		No	48.6
2. Handling the Case	The priority of providing healthcare when a suspected medicolegal case presented	Caring for patient	84.4
		Report the case to the authorities	8.25
		Report the case to hospital management	3.6
		Ask for consultation	2.75
		other	0.9
	The importance of acquiring a consent form when handling a medicolegal case	Acquire a consent form	84.4
		They don't have to acquire a consent	1.8
		Verbal consent was enough	13.7
3. Collecting samples for evidence	Importance of evidence collection in MLCs	Strongly agree	36%
		Agree	53%
		Neutral	3.6%
		Disagree	7.3%
		Strongly disagree	0%
4. Documenting the Case	Writing a death certificate in MLCs	Strongly agree	7.3%
		Agree	22%
		Neutral	9%
		Disagree	55%
		Strongly disagree	6.4%
5. Reporting the case	Knowledge about first action when reporting a suspected medicolegal case	Prefer reporting to the authorities	45.8
		Prefer reporting to their senior supervising doctor	27.5
		Report to the hospital management	20.2
		Report to forensic medicine department	3.66
		Ask for consultation	2.75
		other	0
6. Acting as an expert witness	Knowledge on behaving as expert witness	Yes	16.5%
		No	65.1%
		Not sure	18.3%

Discussion

In the present era, doctors frequently find themselves involved in cases with complex medical legal issues. If these issues are not handled properly, they could have serious consequences (Henderson et al., 2012).

Doctors need to be fully aware of both his or her own legal rights as well as the patient's legal rights, as well as what is and isn't ethical. A doctor could be asked to appear in court at any moment as an expert witness to help the court reach the right decision. A physician must follow adequate medical recording procedures to prevent misleading the court with incorrect judgement. Proper education of the roles and responsibilities of a health care provider is of great importance to preserve both doctor and patient rights (Raj et al., 2014).

Unfortunately, there are significant differences in how a medicolegal matter is handled in poor nations due to the inadequate awareness of medicolegal problems during undergraduate and postgraduate medical training (Patel et al., 2010).

This study investigated the existing knowledge and practice by ASU physicians towards MLCs as a first step to assess the need for a unified set of guidelines on how to deal with MLCs.

As regards the characteristics of the responding physicians that work in ASU hospitals, the majority of them were younger physicians who had less than 10 years of experience, whether residents, or teaching assistants (demonstrators) or assistant lecturers, while professors and assistant professors accounted for only 11.9%. This might be attributed to the dissemination procedures where electronic methods preferred by younger physicians were used.

Henderson et al. (2012) found matching results in the study to assess the educational needs of emergency department nurses and physicians. Most of those physicians were residents with less than 5 years clinical experiences.

In another study by Edussuriya et al. (2012), it was found that most physicians in casualty departments dealing with medicolegal cases were young physicians.

When a list of common medicolegal cases were asked about, as cases of suspected or evident sexual assault or cases of suspected or evident poisoning or intoxication the majority of participants were able to recognize that all choices were MLCs, as all choices had above average scores, indicating that a good percentage has this knowledge probably from their undergraduate forensic medicine courses. This

could further be explained by the questionnaire being dispatched to different departments with unequal exposure to MLCs and the responders having had different levels of expertise.

Reijnders et al. (2005) found matching results where they referred the misidentification of the MLCs to the lack of postgraduate education and actual on ground forensic training and experiences that are crucial for all physicians, leading to an inability when they have to differentiate between accidental and non-accidental injuries that might bear medicolegal weight.

When the difference in medicolegal knowledge was investigated between the junior, intermediate and senior physicians, the current study proved there was a statistically significant difference between the three groups regarding general knowledge about medical ethics and the laws governing healthcare practice, where assistant lecturers and lecturers appeared to have more knowledge about medical ethics and professors and assistant professors have more knowledge regarding laws governing healthcare practice. While there was no statistical significant difference between the 3 groups regarding knowledge of the Hippocratic oath.

As for the percentage that did, they stated that they mainly got the knowledge only from undergraduate lectures and by only experience at work, although a small percentage reported that their knowledge was gained during training, indicating either the internship year or the first years of residency, and another small percentage from lectures and seminars indicating the lack of a unified source of knowledge for all participants. As for the responders' knowledge about the Egyptian law governing healthcare practice, the majority stated that they didn't have knowledge about the law, highlighting the fact that there is no unified source of knowledge about medical ethics.

Agaronnik et al. (2019) found similar results where practicing physicians might not fully understand their legal responsibilities when caring for people with disabilities which may contribute to persisting inequity in their care.

Singh et al. (2011) also discovered that the majority of medical practitioners were ignorant of the regulations that govern their line of work

Brogen et al. (2009) found that the majority (54%) of respondents in their study could not recall any of the contents of the Hippocratic Oath.

Wong et al. (2004) also found similar results, by surveying the physicians working in their institution and found most of the participants have not had any systematic forensic medicine training apart from work experience and supervision by same subspecialty seniors.

On the contrary, 84.4% of participants had proper knowledge regarding the priority when providing healthcare for the patient in a MLC, while 8.25% answered wrong where they would prioritize reporting to the authorities before caring for the patient, and 3.6% prioritized reporting the case to hospital

management, and, 2.75% would rather ask for consultation before actually caring for the patient.

To further prove the need for hands on forensic training of young doctors, responders were asked about their first action when reporting a suspected medicolegal case, where the majority (45.8%) chose to report to the authorities, 27.5% mentioned they prefer reporting to their senior supervising doctor, 20.2% stated they would report to the hospital management, 3.66% preferred reporting to the forensic medicine department, 2.75% preferred asking for consultation, highlighting the fact that there is no designated place or unified step that they can reach out to when they find themselves entangled in a complicated MLC that they can't handle.

The findings of the current study, shows that there was a statistically significant difference between the three groups of physicians regarding knowledge of the first action when reporting a suspected MLC, where junior faculty appeared to tend to report to their supervisors more than middle and senior faculty. There was no statistical significant difference between the three physician groups regarding knowledge about informed consent.

Most of responders in the current study (84.4%) answered correctly where it was a priority to acquire a consent form especially in cases that are considered medicolegal, 1.8% answered that they don't have to acquire a consent, 13.7% said that verbal consent was enough.

When asked about the doctor's first action when reporting a suspected medicolegal case (MLC) 45.8% answered that they would prefer reporting to the authorities, 27.5% answered they would prefer reporting to their senior supervising doctor, 20.2% would choose to report to the hospital management, 3.66% to the forensic medicine department and 2.75% would choose to ask for consultation.

These results are consistent with the strategy that is advised by Singh et al. (2011) to be taken in the emergency room, which states that the attending physician should be aware that the patient's survival is his or her first concern. It is imperative that he does all in his power to revive the patient and make certain that he is out of harm's way. Up to this point, all of the legal procedures have been put on hold. Hussaini et al. (2013) emphasized that after treatment is complete, the same physician is responsible for compiling comprehensive documentation of all medico-legal situations.

This study tackled the impact of improving the process of dealing with medicolegal cases, where the frequency of encountering medicolegal cases was reported to be on daily basis by the majority of responders indicating the volume of cases that might lead to dire effects unless handled properly.

The present study shows that there was a statistically significant difference between the three groups of departments sectors — the surgical, medical, and academic sectors — with regard to the frequency of encountering medicolegal cases, with surgical departments encountering the cases more frequently

than academic departments, which had the least frequency of encountering cases overall.

Mokhtar et al. (2018) found that emergency physicians come into contact with MLCs at a high frequency. Eighty one percent of the responders in their study reported coming into contact with MLCs at variable rates; 42 percent of them come into contact with MLCs on a daily basis, and 21.7% of them come into contact with MLCs on a weekly basis in the course of their practice.

Faul et al. (2015) attributed the prevalence of MLCs to surgeons specialising in either general surgery or its subspecialties, such as orthopaedics, neurosurgeons, or vascular surgeons, to the fact that the nature of work in the ER, where cases with traumatic injuries represent a significant portion of emergency situations, which favours the employment of such surgeons.

The previous points were tackled to highlight the quantity and quality of forensic knowledge objectively, and although most physicians do know most of the correct procedures to handle MLCs, it is very clear that their knowledge does not radiate from a systematic unified source, and that improvement is needed.

Fadare et al. (2012) found similar results in which a comparison of the knowledge base of junior doctors (house officers, medical officers, and registrars) to that of more senior doctors (senior registrars, and consultants), revealed a discernible and statistically significant gap, particularly in regard to the fundamental ethical principles of the junior doctors compared to senior doctors.

In the current study it was also important to find out the actual situation by which departments start preparing their young doctors to deal with MLCs, most responders (36%) stated that they were not sure if their department does have a clear guideline by which they were supposed to handle MLCs, while only 19% stated there were.

The participant physicians were asked about their subjective opinion whether they did have knowledge about medical ethics and medicolegal cases and 48.6% stated that they didn't, despite the ability of most of them to identify MLCs when asked to do so. This highlights the state of uncertainty among participant physicians due to lack of organized explicit learning about handling MLCs.

Most of the responders also denied having been properly prepared to collect evidence and samples while handling MLCs.

The majority of responders also stated that their department does not provide them with systematic advice on how to behave as an expert witness if they were asked by law enforcement to testify.

A study by Barnie et al. (2015), recommended that young physicians need regular training to update their knowledge on dealing with medicolegal cases and is necessary in order to ensure continuous improvement of the quality of health care delivery.

The findings of the current study indicate that there was a statistically significant difference between

the three main department groups — the surgical, medical, and academic sectors — with regard to the knowledge provided by the department to the responding physicians. Clinical departments appear to provide more knowledge and instructions on how to handle a medicolegal case to their young doctors. Although surgical departments deal with a larger number of medicolegal cases, medical departments provide more knowledge than surgical departments to their young physicians.

This study demonstrates that the international guidelines and the results of the questionnaire are consistent with one another with regard to handling of MLCs, however, there is an obvious need for the improvement of how the knowledge is propagated to young physicians.

This study recommends the establishment of a set of unified guidelines, provided that these guidelines stipulate how to accurately identify forensic medical cases, deal with the patient when it is suspected that it is a forensic medical case, record the case and collect samples to be evidence. It should also stipulate how doctors should act as expert witnesses in court.

References

- Agaronnik ND, Pendo E, Campbell EG, Ressalam J and Iezzoni LI (2019): Knowledge of practicing physicians about their legal obligations when caring for patients with disability. *Health affairs*, 38(4), 545-553.
- Barnie B A, Forson P K, Opere-Addo M N A, Appiah-Poku J, Rhule G P, Oduro G & Donkor P (2015): Knowledge and perceptions of health workers' training on ethics, confidentiality and medico-legal issues. *Journal of clinical research & bioethics*, 6(1).
- Brogen AS, Rajkumari B, Laishram J and Joy A (2009): Knowledge and attitudes of doctors on medical ethics in a teaching hospital, Manipur. *Indian Journal of Medical Ethics*, 6(4), 194-197.
- Edussuriya DH, Marambe KN, Abeyasinghe N and Jayawickramarajah PT (2012): Competencies expected from a medical officer in performing medico legal duties: The results of a Delphi study conducted among judicial medical officers in Sri Lanka, *Sri Lanka Journal of Forensic Medicine, Science and Law*; 3(2): 6-14.
- Egyptian Medical Syndicate, (2003): *لائحة آداب المهنة*. Available at: www.ems.org.eg/userfiles/file/kanon/leha.doc
- Fadare JO, Desalu OO, Jemilohun AC and Babatunde OA (2012): Knowledge of medical ethics among Nigerian medical doctors. *Nigerian medical journal: journal of the Nigeria Medical Association*, 53(4), 226.
- Faul M, Sasser SM, Lairet J, Millman NM and Sugerman D (2015): Trauma center staffing, infrastructure, and patient characteristics that Influence trauma center need. *West J Emerg Med*; 16(1): 98–106.
- Henderson E, Harada N and Amar A (2012): Caring for the forensic population: recognizing the educational needs of emergency department

- nurses and physicians. Journal of Forensic Nursing; 8: 170-7.
- Hussaini SN, Kulkarni CS and Batra AK, (2013): Profile of medico-legal cases coming to casualty of government medical college, Akola. Journal of Forensic Medicine, Science and Law; 22: 70-7.
- Kumar H, Mishra K and Bhusana B (2014): A review on duties of doctor in case of suspected poisoning. Indian Journal of Forensic and Community Medicine; 1(1):41-3.
- Mokhtar M, Azab S, Hassan S, and Ez-Elarab HS (2018): Study of handling of medico-legal cases in governmental hospitals in Cairo. Journal of forensic and legal medicine, 60, 15-24.
- Patel AM, Still TE and Vaughan W (2010): Medico-legal issues in endoscopic sinus surgery in Otolaryngol Clin North Am; 43:905-14
- Raj VM, Vasudeva DS and Gagan S, (2014): Guidelines for handling medico legal cases. International Journal of Health Information and Medical Research; 1(1):2-6
- Reijnders JL, Baasbank MV and Gerrit W (2005): Diagnosis and interpretation of injuries: A study of Dutch general practitioners. Journal of Clinical Forensic Medicine; 7(3): 17-23.
- Singh AK, Singh K and Verma A, (2011): Study of medico-legal case management in tertiary care hospital. J Indian Acad Forensic Med; 33: 333-7
- Wells D (2006): Sexual assault practice: myths and mistakes. J Clin Forensic Med.; 13(4): 189-93.
- Wong TW, Beh P, Lau CC and Tung WK (2004): A survey on the involvement of accident and emergency doctors in medicolegal work in Hong Kong. Journal of clinical forensic medicine, 11(2), 75-77.

خطوات نحو تطوير مجموعة من القواعد الإرشادية للتعامل مع الحالات الطبية الشرعية في مستشفيات جامعة عين شمس

شريف أحمد السجيني وياسر فؤاد العقيد و سهى خالد عشرين^١

الملخص العربي

المقدمة: أثناء الممارسة الطبية، لا مفر من مواجهة الحالات التي بها شبهة جنائية. يمكن أن تكون نتيجة هذه الحالات كارثية لكل من المريض والطبيب ما لم يتم التعامل معها بطريقة صحيحة. تعد مستشفيات جامعة عين شمس مركز إحالة رئيسي في القاهرة، بجمهورية مصر العربية، ومن ثم التعامل مع عدد هائل من الحالات بشكل يومي، بما في ذلك عدد كبير من الحالات الطبية الشرعية. **الهدف من الدراسة:** تهدف هذه الدراسة إلى التحقق من الطريقة الحالية للتعامل مع الحالات الطبية الشرعية ومطابقة النتائج مع الإرشادات الدولية الحالية كخطوة أولى نحو اقتراح مجموعة موحدة من الإرشادات للتعامل مع هذه الحالات من أجل الحفاظ على حقوق كل من المريض وأيضاً الأطباء. **المشاركون والطرق:** تم إنشاء استبيان منظم ذاتياً وملئه من قبل الأطباء العاملين في مستشفيات جامعة عين شمس، خلال الفترة ما بين نوفمبر ٢٠٢١ ويونيو ٢٠٢٢ لتقييم طريقة الأطباء في التعامل مع الحالات ذات الشبهة الطبية الشرعية. **النتائج:** أفاد ٥٥٪ - ٦٥٪ من المشاركين أن أقسامهم لا تزودهم بالمعرفة فيما يتعلق بالتعرف على الحالات الطبية الشرعية، أو التعامل معها، أو توثيقها، أو الإبلاغ عنها، أو جمع الأدلة، أو التصرف كشاهد خبير في المحكمة. **الخلاصة:** اتضح عدم تكافؤ المعلومات والمعرفة بين الأطباء العاملين في مستشفيات جامعة عين شمس فيما يتعلق بالطب الشرعي والأخلاقيات والطرق المنهجية المناسبة للتعامل مع الحالات الطبية الشرعية.

^١ قسم الطب الشرعي والسموم كلية الطب جامعة عين شمس جمهورية مصر العربية