## FACTORS AFFECTING KNOWLEDGE, ATTITUDE, AND PRACTICE OF PHYSICIANS TOWARDS MEDICO-LEGAL ASPECTS IN CLINICAL PRACTICE IN MENOUFIA GOVERNORATE HOSPITALS

Fatma Shaban Kandeel<sup>1</sup>, Hala Marawan Gabr <sup>2</sup>, Situhom Elsayed Elagamy <sup>1</sup>

<sup>1</sup> Forensic Medicine and Clinical Toxicology Department, <sup>2</sup> Public health and community medicine Department, Faculty of Medicine- Menoufia University.

**Corresponding author: Fatma Shaban Kandeel** (drfatma84@yahoo.com) (Tel. 01148294300) Tala, Menoufia, Egypt.

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#### **ABSTRACT**

Physicians are subjected to many legal, ethical, and moral obligations. The balance between excellence in patient care and medico-legal requirements establishes a successful clinical practice. Aim: This study aimed to evaluate factors affecting knowledge, attitude, and practice (KAP) of physicians in Menoufia governorate hospitals towards different medicolegal aspects. Material and Methods: Cross-sectional survey study was carried out from the beginning of October 2020 to the end of December 2020 at Menoufia governorate hospitals (both secondary and tertiary care hospitals). The physicians of different specialties who met the inclusion criteria and thoroughly answered questions of a predesigned self-administered questionnaire about knowledge, attitude, and practice towards different medico-legal aspects in clinical field attitude were included. Results: Among 387 studied physicians, the mean age was 38.97±9.58 years. 58.66% were male physicians. 58.40% were specialists. Most of them (67.44%) were working in secondary care hospitals, and 51.94% were surgeons. The duration of experience years was 12.74±7.26. 24.29% had both undergraduate and postgraduate medico-legal education and training. Linear regression analysis showed that the significant independent predictors of high awareness score were experience years, working in tertiary care hospitals and previous both undergraduate and post graduate medico-legal education and training. The significant independent predictors of high attitude score were experience years, specialty, and previous both undergraduate and postgraduate medico-legal education and training. In contrast, the significant independent predictors of high practice score were professional degree, specialty, and previous both undergraduate and postgraduate medicolegal education and training. Conclusion: Significant variations were identified in physicians' knowledge, attitude, and practices towards medico-legal aspects in Menoufia governorate hospitals. Both undergraduate and postgraduate medico-legal education and training significantly affected their awareness, attitude, and practices towards different ethical and legal issues.

**Key Words**: Clinical practice, Attitude, Medico-legal aspects, Physicians

#### **INTRODUCTION:**

Medical ethics It is the applied branch that connect morality rules to healthcare service. A lot of ethical issues have appeared during practicing this service which requires proper and professional dealing. (Clouser 1974; Snyder 2012; Ramana, Kandi and Bompally 2013).

There is a significant similarity and acceptance of basic medical ethics rules

and principles globally, but this does not some exclude differences and modifications according religion, to culture, and laws of these countries. These entail respecting confidentiality, privacy, and providing medical care without discrimination (Ethiopian Medical Association, 2010: Pellegrino 2012; Ahmed 2013; Ewuoso 2016).

There are many legal, ethical, and moral responsibilities in medical practice facing medical practitioners even if there is still a gap in their knowledge and attitude about them (Nanandkar, 2008).

Nowadays, patients have much about their diseases awareness and treatment methods to be followed in such conditions due to easy access to this information on the internet and media. So, doctors must be careful in each step of diagnosis and treatment and take all precautions, especially in medicolegal cases, which require proper recording and documentation for the avoidance of legal responsibility (Thomas 2004; Thomas and Magendran 2020).

#### **AIM**

This study aimed to evaluate factors affecting knowledge, attitude, and practice of physicians in Menoufia governorate hospitals towards different medico-legal aspects

#### SUBJECTS, MATERIAL, & METHOD

Cross-sectional survey study was carried out from the beginning of October 2020 to the end of December 2020 at Menoufia governorate hospitals both secondary and tertiary care hospitals were involved in this study.

Menoufia university hospitals, located in Shebin Elkom city; were chosen randomly to represent tertiary care hospitals. Menouf general hospital, Tala district hospital, and Quesina hospital, located in the West, North West, and North East of Menoufia Governorate, respectively, were chosen randomly to represent the secondary care hospitals (fig 1).

The physicians of different specialties who met the inclusion criteria were invited to join the study. Inclusion criteria were Egyptian physicians of any age and gender, working in the selected hospitals, participating in the study.

The sample size was calculated using EPI 7 <sup>TM</sup> info program (Dean et al. 2011).

Based on a 95% confidence interval and a 5% margin of error and according to previous literature (**Richa Singh et al. 2019**). The estimated sample size was 413 individuals. The total number after excluding of non-responders (7) and incomplete forms (19); 387 valid responses were analyzed.

A predesigned self-administered questionnaire (appendix 1) in the English language was developed by the authors. The questionnaire was formulated and carefully revised by the authors.

A pilot survey of 20 physicians further validated the questionnaire. This validation aims to evaluate the time needed to complete the questionnaire and assure that all the questions are phrased clearly and appropriately for comprehension and avoid bias. Moreover, more validation was done for reliability coefficient with Cronbach's Alpha which was of 0.87, 0.83, and 0.91 for knowledge, attitude, and practice domains respectively, indicating acceptable internal consistency (Taber **2018).** The questions were multiple checkboxes questions. The questionnaire was divided into four main parts:

The first part included sociodemographic data of the participants: age in years, gender, specialty, working place, current profession, duration of experience, and previous medico-legal education, and training.

**The second part** included 13 questions about physician knowledge towards dealing with medico-legal cases (MLCS) and had scored from zero to 2.

The correct answer was given two points, "I don't know", one point, and the wrong answer was given zero points. The mean score of all the 13 questions for each participant was summed where the higher the score, the higher the awareness (maximum score was 26)

These questions included: meaning of medico-legal deaths, Medico-legal knowledge about the classification of injuries, presence of medico-legal management protocol, the importance of

death certificate and how to write it, the importance of medico-legal reports and how to write them, the importance of records in MLCs, the importance of time in medico-legal examination, the rights of patients in MLCs, the importance of evidence collection in MLCs and how to collect it and the importance of completing the examination.

The third part included 13 questions about physician attitude towards dealing with medico-legal cases and scaled on a 5 Likert scales (1-5) from strongly disagree to strongly agree (Maximum score was 65).

The questions assessed their opinion towards the importance of death certificate, the importance of forensic protocols in Emergency Room (ER), police notifications in MLCs, the importance of evidence collection, the importance of repots and records in MLCs, considering every case is a probable medico legal case, there is no time to worry about MLCs in ER, consideration of the importance of patient medical needs, appropriateness of overall medical approach in MLCs, the confidentiality of medical reports, management of MLCs should be included in medical curriculum, the importance of training courses to physicians dealing with MLCs.

The fourth part included 12 questions about physician practice towards dealing with medico-legal cases and had scores from 1for (NO) to 2 for (YES) (maximum score was 24)

The practice questions included the following: availability of unified protocol about management of medico-legal cases in their workplaces, questions about the actions taken if MLCs were brought to the hospital, e.g. inform the police, documentation. evidence collection. availability of evidence collection kits, treating the patient, taking the consent before the examination, examination of a female patient in the presence of a female attendant and actual writing of medicolegal reports, safety keeping of medical records of MLCs, documentation of the consent, availability of instruments and well-organized chain of custody for evidence collection until delivered to police authority and considering the physical and psychological support to the patients.

Statistical Package statistically analyzed data for the Social Sciences (SPSS Inc. Chicago, IL, USA) version 23 for Windows (Daly and Bourke 2000).

Number and percentages (No and %) were used to represent qualitative data; Quantitative data were expressed as mean  $\pm$  Standard deviation, where student t-test or ANOVA (with Least Significant Difference [LSD] as post Hoc) were used. A multiple-variate linear regression analysis model was used to assess the association (risk) of independent factor (s) with dependent factor (outcome). The level of significance was set at P-value  $\leq$  0.05.

#### **Ethical considerations:**

Ethical approval of the study was obtained from the Research Ethics committee at Menoufia Faculty of Medicine, Egypt, and written informed consent was obtained from all participants in the survey after explaining the aim of the study.

#### **RESULTS**

Among 387 studied physicians, the mean age was 38.97±9.58 ranging from years. 57 58.66% male 26were physicians. 58.40% were specialists. 27.56% were residents, and 13.95% were consultants. Most of them (67.44%) working in secondary care hospitals, 51.94% were surgeons. The duration of experience years was 12.74±7.26 and ranged from 2-25 years. Most of them (75.71%) had undergraduate medico-legal education and training (table 1).

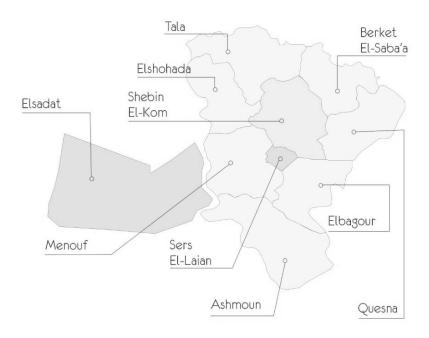
It was evident that physicians working as consultants, those who are working in tertiary care hospitals and the surgical field, more than ten years of experience and had previous both undergraduate and

postgraduate medico-legal education and training had significantly higher knowledge score than others (p-value <0.001, 0.020, <0.001, 0.002 and 0.004) respectively. Gender of the physicians had non -significant effect on medico-legal knowledge score (p-value was 0.322) (table 2)

Physicians who are working consultants, those who are in the surgical field, those who had > ten years of experience and had previous undergraduate and postgraduate medicoeducation and legal training significantly higher attitude score than others (p-value <0.001, <0.001, 0.048 and <0.001), respectively. Gender and health care facility level had non -significant effect on medico-legal attitude score among the participant physicians (p-value 0.387, 0.074 respectively) (table 3)

Physicians working as consultants, those who are working in tertiary care hospitals and surgical field and previous both undergraduate and postgraduate medico-legal education, and training had significantly higher practice scores than others (p-value<0.001, 0.013, <0.001, and <0.001), respectively. Gender of the physicians and years of experience had a non-significant effect on medico-legal practice score (p-value was 0.125, 0.278, and 0.312) respectively (table 4)

Linear regression analysis showed that the significant independent predictors of high awareness score were experience years, working in tertiary care hospitals, and previous both undergraduate and postgraduate medico-legal education and training. (table5). The significant independent predictors of high attitude score were experience years, specialty, professional degree and previous both undergraduate and postgraduate medicolegal education and training (table6). In significant independent contrast. the predictors of high practice score were **Professional** degree, specialty. and undergraduate previous both and postgraduate medico-legal education and training (table7).



**Figure (1)** Menoufia Governorate https://spaintravelexpress.com/en/articles/Egypt/Menoufia-Province%2C-In-Egypt-Nile-Delta.s.29.12960/

**Table (1):** Descriptive statistics of the sociodemographic data among the participant physicians.

Parameter	No (387). (%)
	110 (301): (70)
Age	26.57
Range	26- 57
Mean ±SD	38.97±9.58
Gender:	
Male	227(58.66%)
Female	160(41.34%)
Professional degree	
Resident	107(27.65%)
Specialist	226(58.40%)
Consultant	54(13.95%)
Health care facility level	
Secondary health care	261(67.44%)
Tertiary health care	126(32.56%)
Specialty	
Medical	186(48.06 %)
Surgical	201(51.94%)
Experience years	
Range	2-25
Mean± SD	12.74±7.26
Previous medico-legal education and training	
Undergraduate	293(75.71%)
Both under and postgraduate	94(24.29%)

**Table (2):** Relation between medico-legal knowledge score and different socio-demographic parameters among the participant physicians:

Participant's characteristics	Knowledge score Mean ±SD	Test of significance	P value
Gender: Male Female	18.78±4.27 19.08±1.28	0.992	0.322
Professional degree Resident Specialist Consultant	18.42±3.23 18.59±3.09 20.52±3.91	10.80	<0.001 Post hoc test P1= 0.917 P2=<0.001 P3=<0.001
Health care facility level Secondary health care Tertiary health care	18.59±2.81 19.57±4.25	2.34	0.020
Specialty Medical Surgical	17.69±3.12 21.24±2.51	11.31	<0.001
Experience years ≤10 years >10 years	18.69±3.67 19.45±2.94	2.24	0.026
Previous medico-legal education and training Undergraduate Both under and postgraduate	18.94±3.71 20.12±3.89	2.90	0.004

P1=between bachelor and diploma or master's degree, P2= between bachelor and doctorate degree, P3 between diploma or master's degree and doctorate degree

**Table (3):** Relation between medico-legal attitude score and different socio-demographic parameters among the participant physicians:

parameters among the participa	ant physicians:		
Participant's characteristics	Attitude score Mean ±SD	Test of significance	P value
Gender: Male Female	50.15±11.43 51.04±7.26	0.68	0.387
Professional degree Resident Specialist Consultant	46.42±13.75 50.24±9.13 54.42±7.92	12.01	<0.001 Post hoc P1= 0.016 P2=<0.001 P3=0.012
Health care facility level Secondary health care Tertiary health care	49.49±8.59 51.32±13.77	1.45	0.150
Specialty Medical Surgical	46.34±10.67 57.22±5.49	13.22	< 0.001
Experience years ≤10 years >10 years	48.69±12.43 50.86±8.92	1.98	0.048
Previous medico-legal education and training Undergraduate	47.60±10.81	8.92	< 0.001

<sup>\*</sup>P1=between bachelor and diploma or master's degree, P2= between bachelor and doctorate degree, P3 between diploma or master's degree and doctorate degree

**Table (4):** Relation between medico-legal practice score and different socio-demographic parameters among the participant physicians:

Participant's characteristics	Practice score Mean ±SD	Test of significance	P value
Gender: Male Female	15.56±2.08 15.73±0.96	1.08	0.278
Professional degree Resident Specialist Consultant	15.42±1.90 15.35±1.55 16.72±1.48	20.26	<0.001 Post hoc test P1= 0.944 P2=<0.001 P3=<0.001
Health care facility level Secondary health			
care Tertiary health care	15.45±1.33 16.00±2.28	2.50	0.013
Specialty			
Medical Surgical	15.04±1.67 16.75±1.14	10.42	< 0.001
Experience years			
≤10 years >10 years	15.74±1.68 15.56±1.73	1.01	0.312
Previous Undergraduate			
medico-legal education and training Both under and postgraduate	15.23±1.68 16.86±1.14	8.75	<0.001

<sup>\*</sup>P1=between bachelor and diploma or master's degree. P2= between bachelor and doctorate degree, P3 between diploma or master's degree and doctorate degree

Both under and postgraduate

<b>Table (5):</b> Linear regression analysis for independent factors affecting physical experiments of the control o	sician medico-legal
knowledge score.	

Participant characteristics	Multivariate			
	Unstandardized B	Standardized B	P value	
Professional degree	0.348	0.048	0.294	
Health care facility level	2.937	0.414	< 0.001	
Specialty	-0.069	-0.149	0.237	
Experience years	1.446	0.238	0.037	
Medicolegal education and training	2.766	0.352	0.002	

**Table (6):** Linear regression analysis for independent factors affecting physician medico-legal attitude score.

Doution out above etapistics	Multivariate			
Participant characteristics	Unstandardized B	Standardized B	P value	
Professional degree	-3.331 -0.208		0.002	
Specialty	8.764	0.395	< 0.001	
Experience years	-0.907	-0.119	0.019	
Medicolegal education and training	6.664	0.271	< 0.001	

**Table (7):** Linear regression analysis for independent factors affecting physician medico-legal practice score.

Doutisinant share storicties	Multivariate			
Participant characteristics	Unstandardized B	Standardized B	P value	
Professional degree	1.594	0.614	< 0.001	
Health care level	0.124	0.034	0.423	
Specialty	1.581	0.439	< 0.001	
Medicolegal education and training	1.044	0.262	0.004	

#### **DISCUSSION**

Medical practice is guided by law, ethics, community morals, and professional standards to save patients from malpractice and protect medical practitioners against lawsuits (Alyahya et al., 2018).

Due to the benefit of ethical issues, many countries introduced medical ethics teaching in both under and postgraduate curricula in medical schools to increase the professionalism of their physicians. (**Du Bois & Burkemper 2002**).

In the present study gender of the physicians had a non-significant effect on medicolegal KAP scores. Other studies reported inconsistent findings as **Tiruneh et al., 2019** in their study done in Ethiopia, noted that sex has a significant relation with knowledge as male doctors knew less about medical ethics than female ones. **Almoallem et al., 2019** in their study done in Saudi Arabia, noted that female doctors

had lower confidence about their ethics awareness than males.

The current study noted that physicians with increased education level had significantly higher awareness and scores than practice others. The explanation might return to the fact that they are more exposed to medical ethics in their specialization course and continuing their education. They also have the chance to share their practices with colleagues in other countries. This finding was in accordance with results noted by Tiruneh et al., 2019 in Ethiopia and Anup et al. 2014 in his study in Rajasthan.

It was noted that surgeons had significantly higher attitudes and practice scores than doctors working in other medical specialties. This may be explained by the fact that they were more in contact with medicolegal cases as cases of physical and sexual abuse, firearm injuries, and other traumatic cases, which made them

more careful during their dealing with these cases and try to know the proper way for dealing with these cases to avoid lawsuits and punishment. **Kollas 1997** in their study in Pennsylvania, noted somewhat a similar finding that internal medicine residents had insufficient basic knowledge about medicolegal issues. In contrast to this finding, **Shirazi et al.**, 2005 in his study done in Karachi, Pakistan, found that both knowledge and practice of medical ethics were poor among surgeons.

The present study found a significant effect of years of practice (>10 years) on knowledge and attitude scores. It may be explained by the fact that increased years of practice will positively affect the acceptability of information and provide a broader range of interactions and exchange of experience among medical doctors (Iloh et al., 2017). This result was in accordance with those noted in other studies done in Ethiopia (Tiruneh et al., 2019), Saudi Arabia (Alvahya et al., 2018), Nigeria (Gabriel et al., 2018), Iran (Mehralian et al., 2014), Rajasthan (Anup et al., 2014) and Bavaria (Jana et al., 2012). On the other hand, some other studies as those done in Iran (Mahdaviazad, Keshtkar and Emami 2018), India (Jain et al., 2015), India (Kaushal et al., 2015) recognized that education had a dominant effect on doctors' knowledge, attitude, and practice rather than years of experience.

The variation present in these studies regarding this result may be returned to the diverse educational methods and training techniques in different countries and different points of interest in each study (Brannan et al., 2008).

Our result revealed that physicians who had previous undergraduate and postgraduate medico-legal education and training had significantly higher awareness, attitude and practice scores than those with only undergraduate ones. **Imran et al., 2014** in their study in Pakistan entailed that junior resident were more involved in ethical issues due to the limited postgraduate training they were

Smits, Verbeek and perceived. Buisonjé 2002 in their review study noted that postgraduate medico-legal education and training increase awareness and skills improve their experience decision-making policies. Hariharan et al. 2006 in Barbados found that medical schools do not give much attention to training on ethical and medico-legal issues. Many factors were the cause of the defect in postgraduate education and training, so many countries developed legislations to decrease the doctors working hours to counteract fatigue and enhance performance of medical staff. (Holzman and Barnett 2000 (United States of America); Iglehart 2008 (United States of America)).

#### **RECOMMENDATIONS**

Problems that arise during dealing with medicolegal cases have a considerable effect on medical practitioners. So, emphasize the role of postgraduate medico-legal education and training in improving physicians' knowledge, attitude and practices in various medico-legal issues.

There is a need to improve physicians' awareness and attitude, especially residents in secondary health care hospitals in Menoufia governate towards different ethical and legal issues by providing medico-legal continuous education activities and awareness drives. sustainable regular training courses and proper workshops on dealing medicolegal documentation of cases should be conducted on medical staff and all residents to improve their awareness and skills in dealing with these cases.

Similar regular training courses and workshops should be conducted on forensic nurses to improve their awareness and skills in dealing with these cases. They have an essential role in the emergency room in helping medical physicians.

A standard guideline is better created and enclosed in patients' charts or in the emergency department as an assistance

tool for physicians and other health care providers.

Further studies as a follow-up evaluation of medical doctors' knowledge, attitudes, and practices regarding documentation and proper dealing with medicolegal cases are needed in menoufia and other Egyptian governorates hospitals.

#### LIMITATIONS OF THE STUDY

All information was based on the subjective responses of the respondents without verification. So, there may be a tendency to underestimate the violation of the principles of medical ethics.

#### **STRENGTHS OF THE STUDY**

The study is the first trial to assess factors affecting knowledge, attitude and, practice (KAP) of physicians in Menoufia governorate hospitals. Determination of independent predictors of different variables related to awareness, attitude, and practice of medical ethics by logistic regression analysis was also accentuated in the study.

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#### **CONFLICTS OF INTEREST**

There are no conflicts of interest.

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### Appendix 1

Questionnaire to assess knowledge, attitude and practice of physicians towards medicolegal aspects in clinical practice.

Part I				
	Age in years			
	Gender	Male	Female	
	Years of experience			
	Current	Resident	Specialist (diploma	Consultant (MD
	profession		or master's	degree)
			degree)	
	Working place	Secondary care hospitals	Tertiary care hospit	als
	Previous medico-	No	Undergraduate	Undergraduate
	legal education and training		only	and postgraduate

#### Part II

	Question	NO	I DO NOT KNOW	YES
1	Do you know the meaning of medico-legal deaths?			
2	Do you know classification of injuries?			
3	Do you have knowledge about presence of medico- legal management protocol?			
4	Do you know the importance of death certificate?			
5	Do you know how to write death certificate?			
6	Do you know the importance of medico- legal reports?			
7	Do you know how to write medico- legal reports?			
8	Do you know the importance of records in medicolegal cases?			
9	Do you know the importance of time in medico-legal examination?			
10	Do you know the rights of patients in medico-legal cases?			
11	Do you know the importance of evidence collection in medico- legal cases?			
12	Do you know how to collect evidence in medico- legal cases?			
13	Do you know the importance of completing the examination in medico- legal cases?			

#### Part III

	Question	Strongly disagree	Disagree	To some extent	Agree	Strongly agree
1	Death certificate is important					
2	Forensic protocols in emergency rooms are important					
3	Police notification in medico-legal cases is important					
4	evidence collection in medico- legal cases is important					
5	medico- legal reports are important					
6	medico- legal recording is important					
7	We should consider every case as a probable medicolegal case					
#8	There is no time to worry about medico-legal cases in emergency room					
9	We should consider the medical needs of the medico- legal cases					
10	We should consider the overall medical approach in medico- legal cases					
11	Confidentiality of medical reports are important					
12	Management of medico- legal cases should be included in medical curriculum					
13	Training courses to physicians about dealing with medico- legal cases are important					

inverted scoring #

#### **Part IV**

	Question	NO	YES
1	Unified protocols for management of medico-legal cases are		
	available.		
2	Do you inform the police about medico-legal cases?		
3	Do you properly document the medico-legal cases?		
4	Do you properly collect the evidence in medico-legal cases?		
5	Are the evidence collection kits available in your workplace?		
6	Are you considered treating the medico- legal cases?		
7	Do you take consent and document it before medico- legal examination?		
8	Do you examine female patient in presence of a female attendant?		
9	Do you actually write medico-legal reports before?		
10	Do you keep medical records in a safety manner?		
11	Do you consider the physical and psychological support of the		
	medico-legal cases?		
12	Instruments for evidence collection are available and well-		
	organized chain of custody		

# العوامل المؤثرة في معرفة واتجاهات وممارسات الأطباء حول التعامل مع الجوانب الطبية القانونية في الممارسات الإكلينيكية بمستشفيات جامعة المنوفية فاطمة شعبان قنديل معان عديل المنان عبر السيد العجمي السيد العجمي السيد العجمي المنان عبر المنان عبر

1قسم الطب الشرعى والسموم الإكلينيكية -كلية الطب- جامعة المنوفية 2 قسم الصحة العامة وطب المجتمع -كلية الطب - جامعة المنوفية

يخضع الأطباء للعديد من الالتزامات القانونية والأخلاقية، ويؤدى التوازن بين التميز في الرعاية الصحية للمرضى والمتطلبات الطبية القانونية الى ممارسة طبية ناجحة.

الهدف من البحث: هدفت هذه الدراسة إلى تقييم معرفة واتجاهات وممارسات الأطباء في مستشفيات محافظة المنوفية تجاه الجوانب الطبية والقانونية المختلفة.

مواد وطرق البحث: تم اجراء دراسة مسح عرضي من بداية اكتوبر 2020 حتى نهاية ديسمبر 2020 في مستشفيات محافظة المنوفية (مستشفيات الرعاية الصحية الثانوية والثالثية . (شملت الدراسة الأطباء من مختلف التخصصات الذين استوفوا معايير الاشتمال وقد تم استخدام استبيان تم إعداده مسبقًا ذاتيًا حول المعرفة والاتجاهات والممارسات اتجاه الجوانب الطبية والقانونية المختلفة في المجال الطبي.

النتائج: بين 387 طبيبا خضعوا للدراسة، كان متوسط العمر 38.9 ± 9.5.8. 65.85٪ كانوا أطباء ذكور. 58.40٪ اخصائيون. كان معظمهم (67.44٪) يعملون في مستشفيات الرعاية الصحية الثانوية و12.94٪ كانوا جراحين. كانت مدة سنوات الخبرة 12.74 ± 7.26. 24.29٪ حصلوا على تعليم وتدريب طبي قانوني في المرحلة الجامعية والدراسات العليا. أظهر تحليل الانحدار الخطي أن المتنبئين المهمين والمستقلين لدرجة المعرفة المرتفعة كانت سنوات الخبرة، والعمل في مستشفيات الرعاية الثالثية والدراسات العليا. كانت المؤشرات المستقلة المهمة لدرجة الاتجاه العالي هي سنوات الخبرة، والتخصص، والتعليم والتدريب الطبي القانوني السابق في المرحلة الجامعية والدراسات العليا، في حين كانت المتنبئون المستقلون بدرجة عالية في الممارسات هي الدرجة المهنية، والتراسات العليا.

الخلاصة : هناك عده عوامل تؤثر في معرفة واتجاهات وممارسات الأطباء تجاه الجوانب الطبية والقانونية في مستشفيات محافظة المنوفية. كان لكل من التعليم والتدريب الطبي القانوني في المرحلة الجامعية وما بعد التخرج تأثير كبير في تعزيز وعيهم ومواقفهم وممارساتهم تجاه مختلف القضايا الأخلاقية والقانونية.

#### التوصيات

هناك حاجة لتحسين وعي وموقف الأطباء وخاصة الاطباء المقيمين في مستشفيات الرعاية الصحية الثانوية في محافظة المنوفية تجاه مختلف القضايا الأخلاقية والقانونية من خلال توفير أنشطة التثقيف الطبي القانوني المستمر وحملات التوعية.

يجب إجراء ورش عمل لتدريب الأطباء على الجوانب الطبية والقانونية في الممارسة السريرية والاحتياطات التي يجب اتخاذها لتجنب الدعاوى القضائية غير الضرورية.

التأكيد على دور التعليم بعد التخرج في الطب الشرعي والتدريب في تحسين المعرفة والاتجاهات والممارسات للطباء في مختلف القضايا الطبية والقانونية.