

# Challenges to radiologists regarding reporting of medico-legal cases (MLC)

## Abstract

During the past few decades, the world of radiologists has been remarkably influenced by the progress in advanced technology. A multi-parametric analysis is required regarding pathological alterations and in-depth details corresponding to each case because of extended the imaging spectrum. The total dependency is mostly upon imaging. Therefore, radiologists need to meet up the complex health quality standards. Radiologists mostly report and scan cases referred from Surgical, Medicine, Pediatrics, orthopedics and Gynecology. And on the other hand they face certain critical issues and challenges in dealing with medico-legal cases. Although they have to follow medical protocols but medico-legal cases are still very difficult to handle. This research highlights all the issues and challenges regarding medico-legal cases faced by the department of Radiology and Emergency of Saidu teaching Hospital Swat. This study was conducted at this Saidu Teaching Hospital Swat, and the study duration was 6 months (April 2021-September 2021). More than 116 people (doctors, radiologists, nurses, and paramedical staff) have participated in this research. Results show that radiologists and other medical staff handle the unexpected and critical challenges in these cases. While writing examination findings, reporting CT scans, MRI, X-Rays and doing ultrasounds, they face political, patient attendant, hospital, and other party pressure to alter the reports to make other party guilty. This article addressed all the issues and challenges that radiologists meet in medical-legal cases.

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## Introduction

### Radiologists and their role in Medico-legal Cases

A radiologist is a medical doctor who diagnoses and treats cases of injury, burns, and numerous critical cases that particularly required the implementation of the laws.<sup>1</sup> The responsibilities of radiologists are to manipulate medical imaging techniques specifically x-rays, magnetic resonance imaging, computed tomography, ultrasound, and fusion imaging.<sup>2</sup> Smith-Bindman R, et al, 2008 They play a crucial in examining, interpreting medical images, and co-linked them with the previous diagnosis results.<sup>2</sup>

An integral part of medical practice in causalities and emergency departments is representing the medico-legal cases.<sup>3</sup> Medico-legal cases are very laborious and sensitive situations to deal with because radiologists face numerous challenges and issues to satisfy the patient's families. More specifically in that case when the family has political power or strong background. They do not realize the circumstances and their consequences. Instead of them they follow their emotions and criticize medical staff including radiologists. Medico-legal cases include cases of injuries and burn, unnatural accident, sexual assault, suspected criminal abortion, unconsciousness, poisoning, and intoxication cases, attempted suicide cases, and many other cases that require legal implications.<sup>4</sup> Every radiologist serves the patients and cannot refuse treatment because radiologists cannot refuse them. Also under the law, every radiologist should fulfill certain requirements during his service. Therefore at a certain point in their life, they come across Medico-Legal cases. Medico-legal cases are major causes of injury, ailment, etc. In that cases, the investigation is conducted by the law enforcement agencies. These laws are essential to fix the responsibility regarding the causation of injury or ailment. Under the section of 44IPC injury is defined as harm or illegally caused to any individual to his/her mind, body, reputation, and property. One of the major responsibilities is reporting medico-legal cases to the nearest police station after giving primary life-saving. So that immediate

action is taken by the police. But certain crucial problems are because of the ignorance of radiologists.<sup>5</sup>

### Medico-legal required urgent assistance?

Medico-legal cases include the cases of suspected sexual assault, criminal abortion, cases of unconsciousness, cases of poisoning, cases of intoxication, cases of death with improper history, cases of self-infliction, cases of injuries, cases of suicide attempts, and others. In-country, if more than 140,000 death occur normally because of road traffic, accidents, 53% of domestic violence give rise to grave injuries, therefore hospital efficiency, and in hand, the law is important to assist the injured.<sup>4</sup>

### The problem caused by doctors in handling medico-legal cases

When doctors treat medical-legal cases they do ordinary errors in some circumstances. Avoidance is a common problem in that cases when the doctors know that hospitalized patients have not good outcomes, they avoid them. Numerous cases are reported which shows that in the presence of relatives doctors avoid patients. Radiologists' defensive mechanisms are also a problem specifically when the victim is in a critical situation. Moreover, communications are a very impressive way to convince the patients, attendants, and opposition. Unfortunately, some of the medical staff are unable to communicate properly about the situation that causes issues.<sup>1</sup> They don't give proper instructions to the people about the liability and rights they have relevant to the critical situation. Furthermore, some medical experts fail to diagnose in numerous circumstances. That gives rise to certain issues and makes the patients and attendants aggressive, and sophisticated.<sup>6</sup> They react to the situation seriously and case the doctor about the complications they created. Also, some situations are pathetic in which doctors do not get the right x-ray, and test reports that lead to unexpected circumstances.<sup>7</sup> Some physicians do not want to spend a lot of time while examining one patient therefore, they diagnose the wrong situation and treatment for it. Particularly in medico-legal cases, the wrong diagnosis leads to the worst outcomes.

Although these are some common examples that are part of the wrong examination. But that doesn't mean every radiologist, nurse, the consultant should be treated in the wrong manner.<sup>6</sup>

### Threat, violence, and pressure to the Doctors while leading Medico-Legal cases

Medico-legal cases are the most dangerous because medical staff handles threats and violence. This is so immoral for the doctors. Doctors have to make the right decisions in every critical situation. They are dealing with the life of people. In that case, where patients are already fighting with death only the doctor is hope for the patients. But this pressure, torched, and violence force them to deal with the situation in a faulty manner.<sup>8</sup> In some cases where the doctor tries their best but they don't save the patient life. Their family members don't accept the outcomes. Patient attendants come into the group and threaten the doctor if that they are responsible for the situation. Moreover, in some cases, patient attendants pressurize radiologists to give fake reports and deal with the case illegally. They force the radiologists to give dislocations or fractures even they are not present to make the condition worse for their benefit. In some cases, opposition parties blame the doctor that they take the bribe for medico-legal cases, and make it difficult for them. So, that doctor becomes part of their pressure and refuses to take the case. Moreover, in a critical emergency where the patient has been injured badly, police members take the reports, X-ray, and test results with them. So, they will have evidence this makes issues for the medical staff and is less common but fractures of the patient heal incorrectly.<sup>4</sup>

### Blame to the doctors

Some of the private hospitals where there are good medical facilities and treat high-class individuals. They are threatened by the political parties and other government officials to give a fake report about the patients. If doctors refuse to follow their orders they make it more difficult for the doctor and put them in bribe cases. So, doctors become nervous and listen to their orders. If doctors don't listen to them they blame each member of the hospital.<sup>4</sup>

### Psychological influence

Doctors also have psychological influence from these torched. They are unable to perform effectively. Some of them avoid the situations of medico-legal cases because they know about the consequences. This behavior of political parties and patient attendants should be addressed, and there should be strict laws about these circumstances. So, that everyone should know they will be punished if they threaten the doctor or put the doctor in difficult situations.<sup>4</sup>

### Solutions to deal with Medico-legal Cases

There are some solutions to deal with these cases. Firstly, doctor should not be blamed for the situation and the consequences. As the doctor do their best in each treatment. They are the guards of human beings. Secondly, the opposition should not play blame games for their benefit. The only responsibility of the doctor is the save the victim not to give justifications to the opposition as they are not answerable. Thirdly, victim attendants should not be allowed to come into the group and pressurize the medical staff. There should be laws and implementations of these laws should be required to protect doctors from these individuals. Doctors are not saving one patient life. There are a billion cases per day. And they have to save all of them. The pressure created by one case may have a bad influence on other cases. So, the government should take it seriously and stop these people by assuring the implementation of the laws. Moreover, the life of each

medical person is God gifted. There should be protection for medical staff from these risk-causing, and threat-giving people. Furthermore, police should not take the x-rays, and test with them without the doctor's permission as their mistake will have the worst impact on the victim's life. If the fracture leads to an inappropriate manner doctor should not be responsible.

### Saidu Teaching Hospital radiologists facing numerous challenges in handling Medico-legal Cases

Saidu Teaching hospital deals with a lot of medico-legal cases. In each particular case, they face threat, violence, blackmailing. Each staff member of this hospital is threatened by the political parties, patient attendants, and influential people. Therefore, this article will discuss the challenges, and issues faced by the Saidu teaching medical staff in handling medico-legal cases.

### Methodology

This study was conducted at **Saidu Teaching Hospital** among the staff that was working in the Accident and Emergency Department and Radiology. More than 116 people participated in this study (doctors, radiologists, nurses, and paramedical staff). The study duration was more than 6 months (April 2021-September 2021). A structured questionnaire was administered among medical and paramedical staff which include numerous criteria to assess the attitude and knowledge about the medic-legal practices. All the challenges and issues that MLC was handling were accessed with the open-ended questionnaire. From this questionnaire, we investigate that how many members of staff know of medico-legal cases, and how many of them facing challenges while handling these cases. After collecting the information from the hospital staff answers were analyzed, and calculated with statistical analysis.

### Statistical analysis

The data that was collected in this duration was further analyzed by using spss software. A student t-test was used to identify the association between two variables.

### Results

The study was conducted among the 116 participants that target nurses, residents, consultants, Technicians, senior doctors, radiologists, and other staff. The ratio of these members varied from the original present staff because of the availability of the members at the time of research. The study includes 16 radiologists, 16 consultants, 47 interns, 31 junior residents, and 6 nurses.

Table 1

**Table 1** Study participant's socio-demographic characteristics

Characteristics	Frequency	%
<b>Age</b>		
20-29	108	93.1
30-39	7	6
40-49	1	0.9
<b>Sex</b>		
Female	77	66.4
Male	39	33.6
<b>Designation</b>		
Radiologists	16	13.8
Technicians	47	40.51
Residents	31	26.7
Consultants	16	13.79
Nurses	6	5.2

This table explains the participant's frequency and their interest. The high frequency of paramedical staff shows that they were very interested in this research. They want that these issues and challenges should be addressed properly. Among them 93% were from the age group of 20-29, 6% were from the age group of 30-39, and 0.95 were from the above 40 age group. This means that younger staffs were more facing these medico-legal cases challenges.

### Study participants' knowledge about MCL cases.

Table 2

**Table 2** Participants distribution based on study knowledge

Knowledge	Frequency	%
MLC is death, injury, illness, or natural case.	83	71
In the case of MLC treating doctor decides about the case.	35	30
A detailed history of the patient and clinical investigation is required before professional judgment.	78	67
Sequence of Action	87	75
MLC should be registered when the patient arrives.	98	87
Immediately contact the police and inform them about the MLC case.	54	45
If this case has drug or alcohol issues should be informed the police.	109	94
For medico-legal autopsies, consent is not needed	79	69
Others	97	76

Participants' knowledge was accessed by asking them specific questions about medico-legal cases. It was seen that only 2.6% answered all the questions correctly. Most of them give correct answers to almost 70% of the total questions. Furthermore, 5 of them only give 8 questions correctly.

Table 3

**Table 3** Distribution of participants based on the challenges they faced in Medico-Legal Cases

Correct Responses	Frequency	%
8-May	5	4.3
12-Sep	64	55
13-16	44	37
17-20	3	2.6

Table 4

**Table 4** Comparison of Challenges faces on MLC among different sexes

Sex	Challenges Faces about MLC.	P-Value
Female	11	0.081
Male	13	

On comparing the males and females it was observed that males face more challenges in medico-legal cases than females but statistically, this difference was not significant  $p > 0.05$

Table 5

**Table 5** Comparison of Challenges of MLC among numerous positions

Designation	Challenges mean )SD	P-value.
Nurses	11	<0.0001
Technicians	10	
Residents	7	
Consultant	11	
Radiologists.	16	

Nurses, Juniors, Interns, and Consultants have the same level of facing challenges whereas radiologists face these challenges more. This difference was found to be statistically significant with  $p < 0.0001$

Table 6

**Table 6** Ratio of participants faces challenges while dealing with these cases

Challenges	Frequency	%
No issue faced/ no case attended.	51	49
Unavailability of the authorized person.	33	2.58
Political pressure while dealing with MLC cases	2	1.8
Patient attendants pressurize paramedical staff and come into the groups to threaten them while handling the MLC situation.	28	2.5
Handling police, people, and political violence.	3	2.6
Threats and blackmailing to hospital.	2	1.72
Forced paramedical staff to give a fake report about patient health.	3	2.6
Paramedical staff doesn't take patients seriously and sends them to the general ward.	4	3.98
Opposition parties blame doctors for a bribe	10	8.92
Delayed in report availability causes fracture healing incorrectly.	10	8
Others	6	5.17

This table presents the percentage of the challenges faced by the radiologist while dealing with medico-legal cases. It shows that 49% of radiologists do not face any issues while dealing with medico-legal cases, and some of them are unable to attend these cases. 1.8% of radiologists face severe political pressures. 2.5% handle the patient attendant pressure. 2.6% handle the police, political, and people violence, 4% of medical staff do not take the medico-legal situation seriously, 8.9% blame the doctors for the bribe, 8% of doctors told that due to delay in the report as police take all the documents of these cases a fracture of patient heal incorrectly, whereas 5.1% handle some other challenges.

## Discussion

It was observed that out of 116 participants including Technicians, nurses, radiologists, residents, consultants, and other 90% belonged to the age group of 20-29, 30-39 include 6%, and more than 40 include 0.9%. In all of these 45 were females, and 55 were males. So, all age groups experienced threat, violence, and worst outcomes in medico-legal cases.

One study shows that doctors and medical professionals don't take interest in medico-legal cases they recommend emergencies to the general ward. Another study shows that awareness is needed among medical experts about medico-legal cases. This study includes the numerous age groups among then 25 years to 35 years were 35%, 72% were from the 35-45 years, and 20% from the 40-50 years.<sup>9</sup> Another relevant study was conducted in which medico-legal challenges were investigated among health experts. Numerous age groups and both sex were part of this research and they conclude that females face more challenges than males.<sup>10</sup> Another study from Egypt shows that handling medico-legal cases were so pathetic in government hospitals. This study includes more than 500 participants. All of them are from numerous age groups, but common point is that all of them were threatened, blackmailed, and face different difficulties particularly in medico-legal cases. This study also shows that the age threats will be low. They come to the point this is because when the person gets experienced they easily handle these cases, or simply they avoid medico-legal cases.<sup>11</sup>

In this study 72% response accurately that MLC is injury illness or death. A similar response was observed among the study conducted at Aurangabad where 69% of the staff know about the medico-legal cases. They know how to deal with the case, how to treat, stabilization, first aid, and intimating police. Another study shows that the study participant knew that police have to be intimidated about MLC before discharging the patients from the hospital.<sup>12</sup>

In present study shows that most of the study participant faces challenges in handling MLC, same research was conducted by Kheir, he concluded that the study participant was blamed in MCL situations. Hospital is bound to maintain legal records, therefore, they have to deal with each situation wisely. Another study shows that doctors, nurses, and other hospital staff deal with medico-legal cases with difficulty. They were pressured, and in some cases, they were forced by the opposition to treat patients unfairly. If doctors ignore opposition they blame the doctor for the bribe, corruptness, and other things.<sup>13</sup>

## Conclusion

Medico-legal cases are very sensitive issues they should be handled according to the legal instructions. The current study shows that doctors and other medical staff are under pressure while dealing with such cases. And numerous critical cases that particularly required implementation of the laws. The responsibilities of radiologists are to use medical imaging techniques specifically x-rays, magnetic resonance imaging, computed tomography, ultrasound, and fusion imaging. They play a crucial in examining, interpreting medical images, and co-linked them with the previous diagnosis results. So, radiologists are very important no one should threaten them and put them in difficult situations. Medico-legal cases are very difficult and sensitive situations to deal with because radiologists face numerous challenges and issues to satisfy the patient's families. Medical experts fail to diagnose in numerous circumstances. That gives rise to certain issues and makes the patients and attendants aggressive, and sophisticated. They react to the situation seriously and case the doctor about the complications they created. In some cases, where the doctor tries their best but they don't save the patient life. Their family members don't accept the outcomes. Patient attendants come into the group and threaten the doctor if that they are responsible for the situation. Moreover, in some cases, patient attendants pressure radiologists to give fake reports and deal with the case illegally. They force the radiologists to give dislocations and fractures even they are not present to make the condition worse for their benefit. In some cases, opposition parties blame the doctor that they take the bribe

from victim attendants for medico-legal cases, and make it difficult for them. So, that doctor becomes part of their pressure and refuses to take the case. Moreover, in critical emergencies where the patient is injured badly, police members take the reports, X-ray, and test results with them. So, they will have evidence this makes issues for the medical staff and is less common but fractures of the patient heal incorrectly. This study shows that Saidu Teaching Hospital Swat is facing challenges while dealing with medico legal cases. Doctors, nurses, and other paramedical staff are continuously fighting to treat the victim. Moreover, doctors are threatened by the victim attendant, political parties, and other government influential people. That makes these conditions worse, and they don't lead the cases wise-fully because of this unexpected pressure caused by the peoples. Furthermore, hospitals also face difficulty while implementing laws regarding the medico-legal cases because they are pressurized by the oppositions parties as they want the structure of the case will be according to their desire. Therefore, the community needs to understand that doctors are our life safer, guard of our life, particularly when the victim is already fighting with a critical condition, they should support the doctor instead of blaming, pressurizing, and bad showing bad manners, this will lead to the worst consequences, not only for the doctor health but for sure victim treatment and recovery.

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## Conflicts of Interest

All Authors declared there is no Conflict of Interest.

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