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RESEARCH ARTICLE

AUDIT OF MEDICO-LEGAL REPORT'S DOCUMENTATION IN THE EMERGENCY DEPARTMENT OF A TERTIARY CARE CENTER HOSPITAL

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Abstract

This article discusses the critical role of emergency department (ED) physicians in managing Medico-Legal Cases (MLCs) and emphasizes the importance of proper documentation in such cases. The study focuses on the level of awareness among ED physicians regarding the appropriate documentation of MLCs encountered during their shifts.The study was conducted in the ED of a large tertiary care centre over one month. We collected 128 MLC forms, with the majority of cases involving patients between 18 and 60 years and occurring during evening hours. The most common causes of MLCs were two-wheeler-related road traffic accidents and pedestrian falls at ground level. The results showed that patient-related information was adequately documented in more than 90% of cases. This included essential details such as patient and bystander information, police station information, incident time, and examination time. However, some critical aspects of documentation, such as recording examination findings at presentation and determining triage priority levels, were lacking or incomplete. Vital signs and both systemic and local examinations were not properly documented in some cases. The forms also contained grammatical errors and abbreviated terms. Discrepancies were noted between documented admission status and actual patient admission. We noted that most physicians correctly documented their names, medical registration numbers, and dates, ensuring accountability. Patients were admitted to specialized units based on clinical and radiological findings, facilitating tailored care.In conclusion, while patient-related information documentation in MLC forms was generally accurate, there were deficiencies in recording examination findings and triage priority levels. Improvement is needed in ensuring complete and accurate documentation of all relevant information in MLC forms, as this is crucial for the proper investigation and management of such cases. The study suggests the need for further training and a follow-up audit to assess improvements in documentation practices.

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Introduction:-

The emergency department (ED) assumes a pivotal role as the primary point of contact for individuals seeking medical assistance, undertaking the critical responsibility of their initial evaluation and management across diverse case types and approaches. While certain cases can be handled within a single department, others necessitate the collaborative efforts of a multidisciplinary team. (1,2)This diversity highlights the significance of ED physicians acquiring specialized knowledge and skills to proficiently address routine medico-legal cases (MLCs).An MLC refers to an injury or illness that necessitates investigation by law enforcement agencies to establish responsibility for its cause. (3,4)The effective management of such cases holds immense importance, requiring the implementation of precise protocols to ensure an appropriate approach to reporting these incidents. In our country, specific situations mandate mandatory reporting to law enforcement authorities. These situations encompass gas gangrene, tetanus, severe burns or violence resulting in multiple injuries requiring admission and emergency services, head injuries, road traffic accidents, accidental fractures, suicides by hanging or poisoning, cases of rape, human bites, animal bites (limited to certain states), snake bites (limited to certain states), pregnancy-related issues, medical termination of pregnancy (MTP), as well as instances of battered babies. (5,6)Additionally, in unfortunate instances of fatalities, each ED physicians have a duty to facilitate post-mortem or forensic examinations as deemed necessary.

ED physicians, serving as frontline providers, commonly encounter challenges in obtaining forensic evidence. Recognizing such cases may be difficult for these physicians, which can be partly attributed to the incomplete or concealed history provided by patients or relatives who may feel frightened or ashamed to disclose the truth behind their injury. These cases prompt ED physicians to involve law enforcement agencies for further investigation, aiming to establish accountability within the framework of the country's laws. Throughout this process, documentation assumes a fundamental role in our legal system, serving as an indispensable component. This audit aimed to assess the level of awareness among ED physicians regarding the proper documentation of Medico-Legal Cases encountered during their shifts.

Methods:-

Study Setting and Period: This questionnaire based audit was carried out in the ED of a well-regarded hospital located in Kolkata, West Bengal, for one month (01.07.2021 - 31.07.2021). In order to preserve the confidentiality of the institution, the name of the hospital has been withheld.

Study design: Our hospital adheres to the practice of preserving duplicate copies of all MLC reports in tsecurity office. **(Figure 1)**


FIRST INFORMATION REPORT

Police Case

Serial No.

Visit ID

Bed No.:

Age:

Sex:

Name:

Religion

Address:

Identification

Reported/Brought

Relationship

Address:

Incidence Occured:

Date:

Place:

Name of the PS where the incidence occured:

Remarks:

Date & Time of Examination:

History of Occurrence:

Signature of Patient/Party

Mobile No.

Examination:

Whether Admitted or Not:

Under Doctor:

Not Admitted

Prognosis:

Valuables with Patient:

Signature of M.M.O.

Figure 1: the initial information report, also known as the police intimation report, specifically crafted, and employed within our center.

This study included all patients with alleged incidents of road traffic accidents (RTA), falls from height, drowning, or cases where foul play was suspected. MLC forms with incomplete documentation were excluded from the analysis. Each variable from the MLC form was transformed into straightforward objective questions, many of which required "yes" or "no" responses. Multiple determinants were systematically coded, and a simple analysis was conducted to achieve the objective of the study. The gathered data were inputted into Microsoft Excel for Mac Version 16.73 and

analysedaccordingly. Categorical variables were reported in terms of frequencies and percentages, while continuous variables were expressed as means ± standard deviations. Given the restricted sample size of the audit, a basic analysis was performed. We have plans to conduct a comparative audit involving additional private and government hospitals in the city, which is expected to yield substantial statistical findings. Furthermore, the authors have planned a follow-up re-audit after six months to assess any advancements following the sharing of audit results and subsequent training of the emergency department physicians.

Ethical considerations:
The audit was conducted after obtaining approval from the hospital's managing director, medical superintendent, and clinical head (senior author) of the ED. Stringent measures were implemented to safeguard the confidentiality of the analysed data by employing anonymization and de-identification techniques. As the audit did not disclose the names of the patients or the ED doctors at any stage, formal permission from the institutional review board was not sought. However, it is acknowledged that for future multi-centric studies, the necessity of obtaining institutional review board approval will be duly acknowledged and followed.

Results:-

This audit encompassed a total of 128 Medico-Legal Case (MLC) forms collected over one month. Patients under the age of 18 accounted for 13 (10.0%) cases, while those between 18 and 60 years constituted the majority with 104 (81.0%) cases, and patients over 60 years comprised 11 (9.0%) cases. The distribution of cases by time of presentation revealed that the highest number, 54 (42.0%), occurred during the evening hours between 5 pm and 2 am. This was followed by 48 (38%) cases presenting between 8 am and 5 pm, and 26 (20.0%) cases presenting between 12 am and 8 am. The most commonly reported factors leading to MLCs were two-wheeler-related road traffic accidents (RTA), accounting for 64 (49.5%) cases, followed by pedestrian falls at ground level with 31 (24.2%) cases. These details are visually depicted in **Figure 2**.

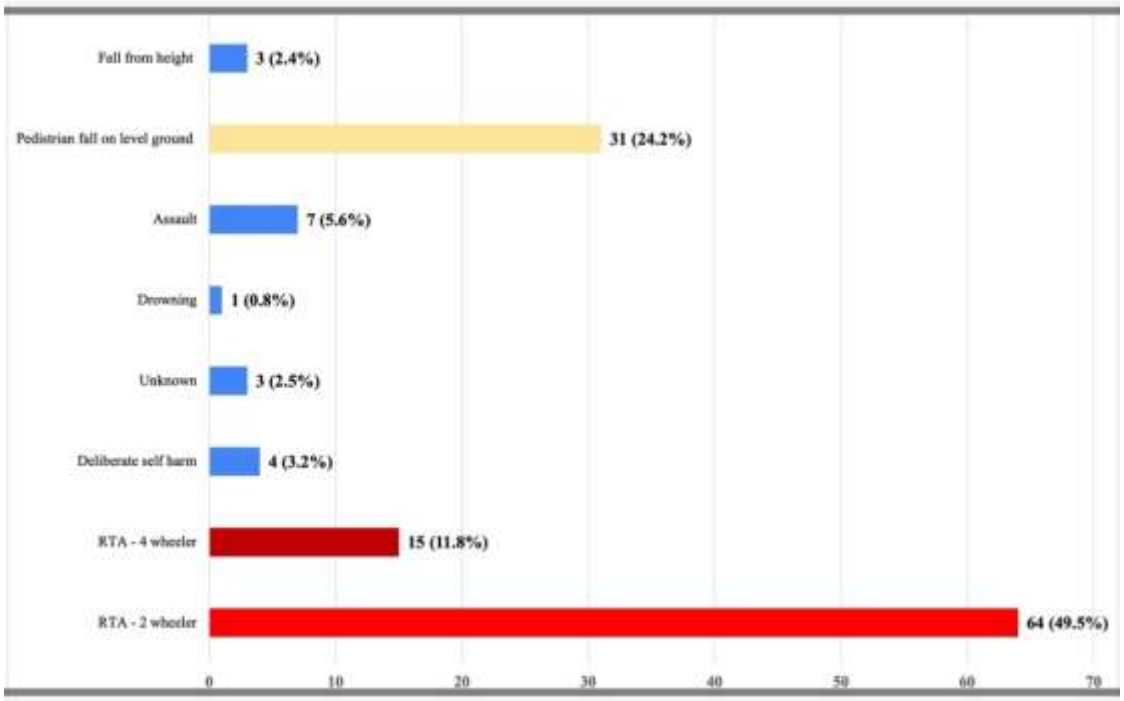

Figure 2:- Rationale of a Medico-Legal Case (MLC) intimation.

The results of the audit demonstrated that patient-related information was appropriately and comprehensively documented in the majority of cases, accounting for more than 90% of the total. This documentation encompassed crucial details, including the names and contact numbers of the patient's relatives or bystanders, their signatures, the specific police station associated with the incident, the precise time of the occurrence, as well as the date and time of the patient's examination in the ED. For precise and accurate details, please refer to **Table 1**, which presents the specific responses captured during the audit.

Serial no's	Variables (documented correctly)	Frequency n (%)
1	Relatives or bystanders' details (Y/N)	111 (84.1)
2	Signature of patient's relative (Y/N)	125 (94.7)
3	Contact number of patient's relative (Y/N)	126 (95.5)
4	Name of police station – where the incidence had occurred (Y/N)	120 (90.9)
5	Date and time of incidence (Y/N)	126 (95.5)
6	Date and time of examination in the Emergency Department (Y/N)	124 (93.9)

Table 1:- Assessment of accuracy in documenting patient-related information: Audit findings.

On the contrary, it was observed that certain critical aspects of documentation, specifically the recording of examination findings at presentation and the determination of triage priority levels, were not executed properly. This inadequacy extended to the incomplete documentation of vital signs upon presentation, as well as the improper documentation of both systemic and local examinations. Furthermore, numerous grammatical errors and the use of abbreviated forms were evident in these forms. Additionally, discrepancies were noted between the documented admission status and the actual admission of patients. These findings have been systematically documented and are presented in **Table 2.**

Serial no's	Variables (documented correctly)	Frequency n (%)
1	Documentation of vital signs at presentation. (Y/N)	60 (45.5)
2	Documentation of systemic examination at presentation. (Y/N)	53 (40.2)
3	Documentation of local examination at presentation. (Y/N)	76 (57.6)
4	Any grammatical or spelling errors in the above-mentioned documentation (Y/N)	73 (55.3)
5	Was the prognosis correctly mentioned? (Y/N)	113 (85.6)
6	Whether the patient was actually admitted as per documentation? (Y/N)	68 (51.5)
7	Actual admission of these victims. (Y/N)	65 (49.3)

Table 2:- Assessment of accuracy in documenting clinical findings at presentation and triage priority levels: Audit findings.

Figure 3 provides a noteworthy observation, indicating that a majority of physicians took care to document their names, medical registration numbers, and date. This attention to detail ensures proper identification and accountability.

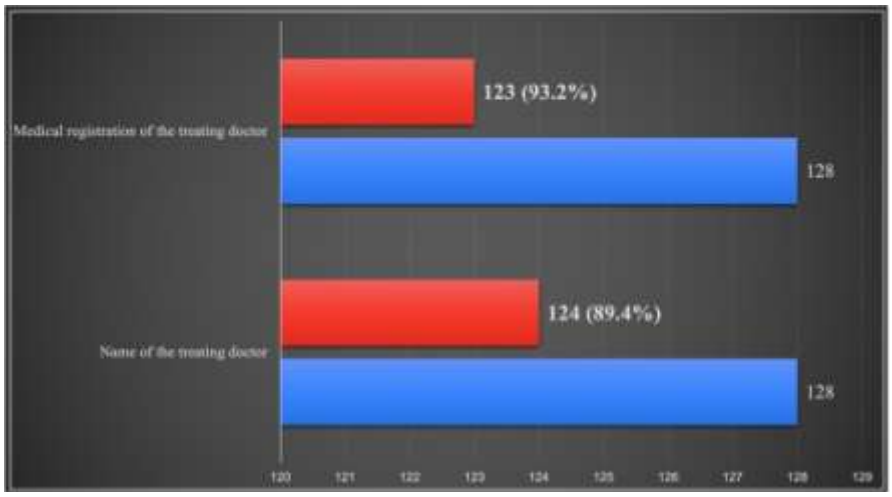

Figure 3: -Accuracy of details of the treating doctor.

Additionally, based on their clinical and radiological findings, patients were admitted to different specialized units as illustrated in **Figure 4**. This approach facilitates appropriate and tailored care for each patient, enhancing the overall management of cases within the healthcare facility.

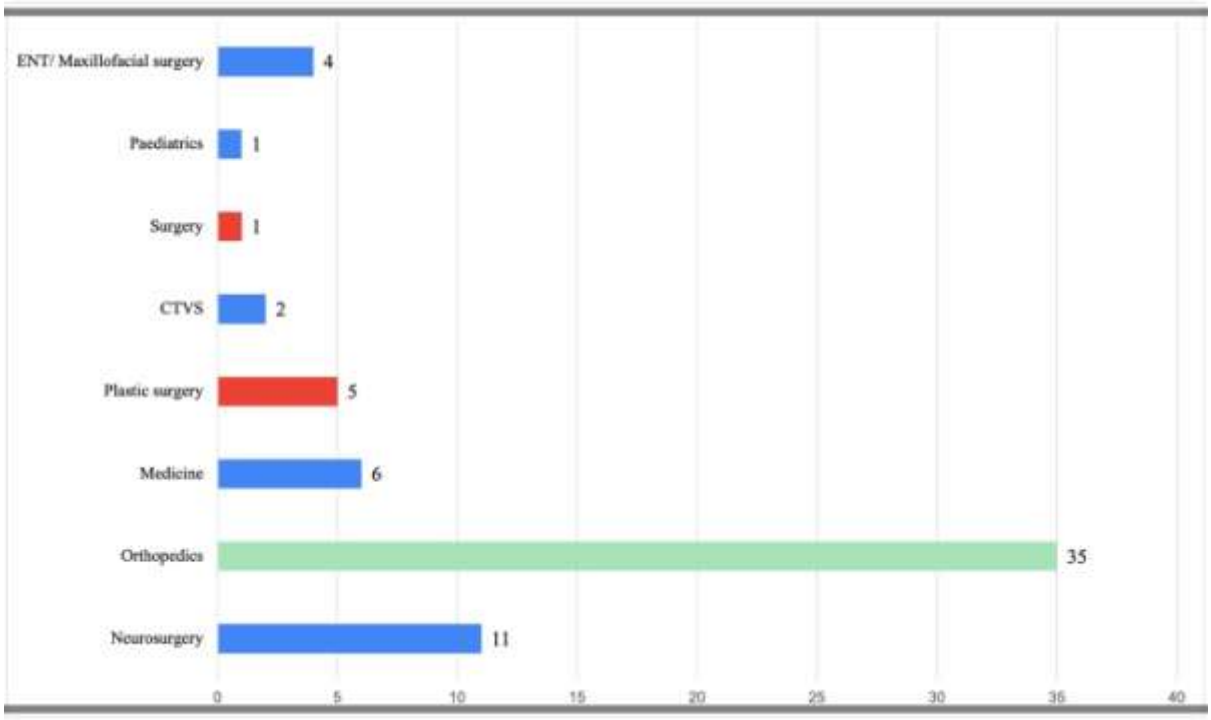

Figure 4:- Emergency department disposition and admitting unit.

Discussion:-

In the fast-paced and high-pressure environment of the ED, where urgent care is provided to critically ill patients, time is of the essence. A multidisciplinary approach involving various healthcare professionals is often necessary, each contributing to the same medical record. However, amidst this intensity, the importance of MLC documentation can sometimes be overlooked, considered secondary or of low priority. Nevertheless, it becomes evident that precise medical documentation holds significant value, particularly within the ED setting. Not only does it contribute to proper patient management and facilitate clear communication among healthcare professionals, but it also serves as valuable legal evidence when required. Therefore, recognizing the crucial role that accurate documentation plays in patient care, as well as its legal implications, is imperative in the ED.(4,7)

The purpose of this audit was to assess the accuracy of MLC documentation in one of the prominent hospitals in India. Specifically, the focus was on evaluating the completeness and quality of filling these forms. The findings revealed substandard practices in various areas of form completion. Within the present form, a specific row was designated for recording the victim's anatomical mark. However, it was concerning to note that only two-thirds of the forms contained the correct identification markings for two anatomical locations. This raises significant concerns, as it implies that in the future if an ED doctor is summoned, there may be no means of identifying the victim. It is important to consider that the physicians who initially attended to the patient during the incident may not be present, necessitating the presence of another physician in their absence. This highlights the importance of accurate and comprehensive documentation, enabling effective communication and continuity of care in such circumstances. It was observed that many MLC forms had wrong or nil vital signs and systemic examination findings at presentation, accompanied by noticeable grammatical errors. Such errors were unexpected from experienced doctors, indicating a possible lack of awareness regarding the medico-legal significance of these forms. Furthermore, a few forms lacked the crucial information of the physician's name and medical registration number, which could potentially lead to significant medico-legal consequences in the future. Another concerning aspect was the absence of accurate ED disposition details in most forms, with some forms containing generalized statements. This may be attributed to physicians either not taking the time to complete the forms at the time of disposition or simply forgetting to include the necessary information. However, it is worth noting that the majority of patient-related details were correctly filled in the forms, which is an encouraging indication.

In our department, it was also observed that none of the doctors had received proper formal training on how to document MLC forms. These findings align with a study conducted in Cairo, Egypt, where writing the medico-legal report was identified as the most challenging aspect of handling medico-legal cases. (9–11)However, the results differ from a study conducted in Hong Kong, where a majority of ED physicians had experience in writing medico-legal reports. (12)These contrasting findings underscore the importance for policymakers in these hospitals and the country to prioritize training programs or courses on writing medico-legal reports.(3,5,12)

Our Recommendations:-

To ensure accuracy and quality, all MLC reports need to undergo cross-verification by the on-call ED consultant. These reports should be diligently written at the time of ED disposition, following a thorough and correct decision-making process. Additionally, a follow-up re-audit after six months should be planned to assess any improvements achieved during that period. This iterative process of cross-checking, timely documentation, and subsequent auditing will enhance the overall management of MLC cases within the ED.

Conclusion:-

The documentation of patient-related information was found to be accurate in the majority of cases, which is a positive aspect. On a more positive note, it is encouraging to see that the majority of forms included the name and registration number of the attending physicians, reflecting good practice in ensuring accountability. However, when it came to the examination findings at presentation and triage priority levels, there were deficiencies in most patients' records. In a few cases, this information was completely omitted. It is concerning to note that only two-thirds of the MLC forms included correct anatomical identification markings at two specified locations.

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Conflicts of interest:
There are no conflicts of interest.

Data availability statement:
We are willing to share the data that underlies the findings presented in this article upon request, making it accessible to reviewers, readers, and the journal.

None.

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