

# *Evaluation of initial medical certificates delivered by emergency doctors*

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## **Abstract**

**OBJECTIVES:** The initial medical certificate (IMC) is the first document delivered to an injured person.

In this work, we propose to analyze the quality redaction of IMC written by emergency doctors and to propose writing recommendations in order to guarantee a better quality of IMC.

**METHODS:** This is a retrospective and descriptive study of all IMCs written by emergency doctors in Mahares Emergency Unit and collected at the regional Hospital of Mahres in Sfax, Tunisia, over a period of 22 months (January 1, 2019 - October 31, 2020).

We included initial medical certificates issued for intentional assault and battery (assaults) and unintentional (primarily traffic accidents, workplace accidents,). We excluded all initial medical certificates that were totally illegible.

**RESULTS:** During this period, we collected 506 IMCs. They were all hand written according to the pre-established model for public sector. 83% of the certificates were perfectly legible. 46% of the physicians used abbreviations in the IMCs.

The surname and first name of the physician were mentioned on 457 certificates (90% of the cases) and his complete identity with his grade and professional address in 6.7% of the cases only. The signature of the physician was present in the vast majority of the certificates (97%), and the stamp was present in only 8% of the cases. The victim's identification (name and surname) was noted in almost all the certificates. However, neither the address nor the occupation of the victim was included in 506 certificates. The majority of prescribing physicians had mentioned the date of clinical examination, the date of the event, as well as the date of writing the IMC (84.8%). The duration of total temporary disability was specified in 91.3% of the cases.

**CONCLUSION:** In our study, the IMC is generally imperfectly and insufficiently written by the doctor. This can have serious medico-legal repercussions for both victim and doctor. Indeed, the victim may lose his rights to compensation and the doctor may be held medical liability.

**KEYWORDS:** Trauma; Incapacity; Medical liability; Initial medical certificate.

## INTRODUCTION

The initial medical certificate (IMC) is the first document delivered to an injured person, or his/her legal representative. It is a particularly frequent and serious act of medical practice as forensic consequences can arise when it's written imperfectly. It may engage the medical liability of the doctor. Therefore, this act must obey writing rules and objective quality criteria to avoid such negative consequences.

In this work, we propose to analyze the quality of IMC-written emergency doctors and to propose writing recommendations to guarantee a better quality.

## METHODS

This is a retrospective and descriptive study of all IMC delivered by emergency doctors and collected at the Emergency unit of the Regional Hospital of Mahres in Sfax, Tunisia, over a period of 22 months (January 1, 2019 - October 31, 2020).

We included initial medical certificates issued for intentional assault and battery (assaults) and unintentional (primarily traffic accidents, and workplace accidents,). We excluded all initial medical certificates that were illegible.

Quantitative variables were expressed as mean with standard deviation. Qualitative variables were expressed in proportions observed in the sample.

## RESULTS

In total, we collected 506 descriptive certificates during the study period.

In our series, all the certificates were written on the official model of the Ministry of Health, brought by Circular No. 2000-72 of 01/09/2000 [1]. In addition, 83% of the certificates were perfectly legible. For the remaining 27%, we had difficulties deciphering some words even after soliciting another reader. Moreover, 46% of the physicians used abbreviations in drafting IMC.

### Evaluation of IMCs content:

- **Administrative data:**

We noted that the hospital structure and the department, as well as the receipt number, were mentioned in the majority of cases (87% and 89% respectively) (Table). However, the requestor of IMC was identified in only 56% of cases. It was the victim or his/her legal guardian in 49% of the cases, and it was a certificate on judicial request in 7% of the cases (Table 1).

- **Identity and professional data relating to the writing doctor:**

The name and the surname of the physician were mentioned on 457 certificates (90% of the cases). However, his complete identity with his grade and professional address were mentioned in only 6.7% of the cases. The signature of the physician was present in the vast majority of the certificates (97%); however, the stamp was present in only 8% of the cases (Table).

- **Data relating to the patient:**

The victim's identification (name and surname) was noted in almost all the certificates. However, neither the address nor the occupation of the victim was included in 506 certificates (Table).

**Table 1: Evaluation of IMC content**

Variable	Modality	Mentioned		Not mentioned	
		n	%	n	%
Administrative data	Hospital and department	440	87	66	13
	Patient file number	396	78	110	22
	Receipt number	449	89	57	11
	Certificate requestor	281	56	225	44
Identity and professional data relating to the doctor writing the IMC	Name and surname	457	90	49	10
	Grade	45	9	461	91
	Place of practice	440	87	66	13
	Mention of the parameters	34	6.7	472	93.3
	Signature	489	97	17	3
	Stamp	39	8	467	92
	Name and surname	501	99	5	1
Data relating to the patient	Age or date of birth	451	89	55	11
	The patient's or legal representative's identity card number (or passport)	402	79	104	21
	Profession	0	0	506	100
	Patient's address	0	0	506	100

• **Date mentioned on the IMC:**

The date of the accident, the date of the initial examination, and the date of writing the CMI were mentioned in 99.6%, 94.3%, and 98.4% of cases respectively. The dating was complete (three dates together) in 429 certificates (84.8% of cases).

• **Anamnesis data**

The facts and the mechanism of the violence were reported by the victim in 71% of cases. The medical and surgical history was mentioned in 19 certificates (i.e. 4% of cases). The victim's complaints were included in 224 certificates (44% of cases).

• **Clinical examination data:**

Among the 506 certificates, the general clinical examination (blood pressure, pulse, temperature, auscultation, palpation,) was specified in only 43 certificates (8.5% of cases). The general condition (good general condition, altered general condition, conscious and cooperative,

Glasgow coma scale...) was reported in 99 certificates (19.6%).

The psychological evaluation was specified in 32 certificates (6.3% of cases). For physical consequences, the nature of traumatic lesions was mentioned in 80% of the cases. The seat of the lesions was noted in the majority of cases (95%). However, the size and shape of the lesions were only mentioned in 20.8% and 19.6% respectively.

• **Complementary examinations:**

Complementary examinations were done and mentioned in 42.3% of the IMCs, but the result was reported in the IMCs in 39.7% of cases. 175 physicians requested a specialist opinion (34.6% of the cases).

• **Treatments:**

The treatments were specified in 22.7% of the certificates.

**Conclusion of the IMC:**

The causing agent was specified in only 143 of the IMC (28.3% of cases).

The doctor assigned a total temporary disability in 462 certificates (91.3% of cases).

The expression "subject to complications" appeared on all the certificates.

## DISCUSSION

The issuance of medical certificates is an act dictated by deontology (according to article 27 of the Tunisian Code of Medical Deontology) [2]. Thus, the doctor needs to know the rules that authorize the drafting of such certificates and their content.

- *Writing rules of the initial medical certificate*

- *1.1- Effective examination of the patient*

First, the doctor must carry out an anamnesis and an effective personal clinical examination of the patient before writing the certificate.

However, according to circular n°2000/72 of the Minister of Public Health, the initial medical certificate in hospital emergency rooms is not necessarily issued by the doctor who examined the patient. Indeed, any doctor on duty in the emergency room can issue this certificate retrospectively based on the findings made and noted on the medical file or the emergency register by his colleague, the doctor who initially examined the victim.

In our study, the doctor specified the origin of the request of the IMC in 56% of cases.

The certificate must be delivered by hand to the person concerned, except for the minor or the adult lacking legal capacity. In these last two cases, it is the legal representative who must receive the certificate. If the doctor gives the

certificate to a person not authorized to receive it, he risks the implication of his medical liability for disclosure of medical confidentiality [3].

- *1.3- Form rules of the IMC:*

In our study, the certificates were written on the official model of the Ministry of Health, under Circular No. 2000-72 of 01/09/2000 ([1], in all the cases. In addition, 83% of the certificates were perfectly legible. For the remaining 27%, we had difficulties deciphering some words even after soliciting another reader. Moreover, 46% of the physicians used abbreviations in drafting IMC.

The use of the official model of IMC can help doctors to not miss certain necessary elements for good writing IMC especially of illegibility. Thus, an initial medical certificate must obey certain formal rules. It must be clear, precise, complete, measured and fair.

- *1.4- Basic rules of an IMC:*

- *Identity and professional data relating to the medical officer*

The name and the surname of the physician were mentioned on 457 certificates (90% of the cases), however, his complete identity with his grade and professional address was mentioned in only 6.7% of the cases. Complete doctor identification was found in 74% of the study carried out by M. Soumah [4] and 96% in the study carried out by Z. Elleuch [5].

It should be remembered that doctors authorized to write IMC must hold medical doctor's degrees following the provisions of decree n° 93-1440 of 23 June 1993 relating to specialization in

medicine and the legal status of residents [6], of Circular No. 1990/70 [7] and Circular No. 2000/72 of the Minister of Public Health [1]. Residents and interns who do not have a doctorate in medicine are not authorized to issue IMCs.

The signature of the physician was present in the vast majority of the certificates (97%); however, the stamp was present in only 8% of the cases. It was found in published studies [4,8] that the signature and stamp of the doctor were present in all the certificates studied. The signature of the document must be handwritten [9]. This is an ethical obligation according to Article 27 of the Code of medical deontology [2].

- ***Data concerning the victim***

The patient's name and first name were mentioned on all certificates in our study, just like the study carried out by F. Doriat [8], M. Soumah [4], and Z. Elleuch [5]. Indeed, the absence of this parameter cancels the validity of the IMC.

The patient's or legal representative's identity card number was mentioned in 79% of cases in our study and 80.7% of certificates in the study carried out by Z. Elleuch [5]. The doctor must obligatorily require an identity document from the patient. In the absence of a national identity card, the doctor must assume the identity of the patient by writing "the patient declaring him to be named ..." In fact, from a deontological point of view, the 27 articles of the Tunisian code of medical deontology provide: "all documents must contain the exact identity of the patient" [2].

From a legal point of view, and concerning the public official doctor, the 195 article of the Tunisian penal code provides: "is punished by six months to one year of imprisonment and a 120 dinars fine, the public official who will have issued a certificate to a person who is unknown to him without having taken care to have his identity certified by two witnesses. The penalty is three years imprisonment and a fine of two hundred and forty dinars if the official was aware of the assumed name "[10].

The age [or date of birth] of the patient was mentioned in 89% of the IMC in our study and the same in 87% of the study by Mr. Soumah [4]. However, neither the address nor the occupation of the victim was included in 506 certificates. The study by M.Soumah [4] found that the patient's address and profession were mentioned in 62% and 1% respectively. The lack of precision of the patient's address, as well as the profession in our study, can be explained by the fact that these parameters are not mentioned in the official ministerial model of the IMC.

### ***1.5- Dates mentioned on the initial medical certificate***

The date of the accident, the date of the initial examination, and the date of writing the CMI were mentioned in 99.6%, 94.3%, and 98.4% of cases respectively. The dating was complete (three dates together) in 429 certificates (84.8% of cases). These dates are important to specify because they constitute the proof of the trauma, allow us to date the injury, and establish the imputability of the alleged facts [4]. As for the

date of writing the IMC, it must be mentioned as disposal Article 27 of the Tunisian code of medical deontology: "documents issued by a doctor must include the date of their issue" [2].

#### **1.6- Anamnesis data**

The facts and the mechanism of the violence were reported by the victim in 71% of cases. According to M. Graser et al [11], the evaluation of a patient's bodily injury may vary depending on the circumstances in which the injury occurred. The victims, with identical functional sequelae, can be assigned a variable compensation depending on the type of accident [5,12].

The victim's complaints were included in 224 certificates [44% of cases]. M Soumah [4] found that 15% of certificates did not mention the victim's complaints. The fact of noting discrepancies between the complaints and the clinical examination testifies to the objectivity of the doctor, his seriousness, and also of his desire to remain in compliance with ethics and medical deontology.

#### **1.7- Clinical examination data**

Among the 506 certificates, the general clinical examination [blood pressure, pulse, temperature, auscultation, palpation,] was specified in only 43 certificates [8.5% of cases]. The general condition [good general condition, altered general condition, conscious and cooperative, Glasgow coma scale...] was reported in 99 certificates [19.6%]. The psychological and physical consequences are important to mention because they may indicate the mechanism of

injury and more exactly the injurious object which is responsible for it.

#### **1.8- Complementary examinations**

Complementary examinations were mentioned in 42.3% of the IMC, but the result was mentioned in 39.7% of cases. 175 physicians requested a specialist opinion [34.6% of the cases]. They were absent in the study carried out by M. Soumah [4] and Z. Elleuch [5] in 83% and 53.3% of the certificates respectively. The mention of complementary examinations is mandatory because it allows us to avoid missing a lesion (Fracture, dislocation) and thus prolong the duration of the TTD. Furthermore, they must be mentioned to be part of a subsequent compensation.

#### **1.9- Treatments**

The treatments were specified in 22.7% of the certificates. The treatments were mentioned in 58.4% of the certificates. The mention of treatment is important and may influence the duration of the TTD. Indeed, Lasseguette has shown that the duration of TTD is increased by the duration of hospitalization and by the duration of immobilization of a limb depriving the person of certain autonomy for the elementary acts of daily life [13].

#### **1.10- Conclusion of the IMC**

In our study, the causing agent was specified in only 143 of the IMCs (28.3% of cases). In the study by Soumah et al [4], the type of weapon used appeared on 244 certificates (98%). The use or attempted use of a sharp force or firearm is of

paramount importance from a legal point of view. Sometimes it proves difficult to pronounce the type of weapon, especially when the victim consults late or when there has been a surgical intervention that has modified the initial appearance of the lesions.

The doctor assigned a total temporary disability in 462 certificates (91.3% of cases). TTD wasn't mentioned in 8.7% of the cases. This can be explained by a lack of understanding of the notion of TTD in its criminal sense. Treating doctors often assess the duration of time required for stabilization of injuries, rather than evaluating the TTD which is defined as the time during which the victim is incapacitated and cannot perform the acts of everyday life [4]. Currently, there is no objective scale for evaluating the TTD available to doctors who are required to write IMC. Despite the existence of recommendations from the High Health Authority (HHA) since 2011 [14], confusion continues to reign among doctors around the concept of total temporary disability. The TTD estimation must take into account the objective lesions (seat, nature, and severity of the lesions), their functional impact, and the duration of care needed[15].

## **RECOMMENDATIONS**

The drafting of initial medical certificates is an act of daily practice.

Our study showed that the quality of writing the IMC suffered from several shortcomings. We

therefore offer some recommendations to guarantee a better quality of writing:

- ✓ Provide continuing medical education about writing IMC
- ✓ Using the official model of the Ministry of Health is helpful. Indeed, this form avoids the omission of certain necessary elements that the doctor must mention. However, the current form requires some correction. It is considered necessary to:
  - Add a section devoted to the patient's complaints
  - Allocate more space for writing to allow the doctor to make a good description of the lesion and to mention the specialist's opinions as well as the results of the complementary examinations carried out.
  - Separate the duration of total temporary disability and the duration of work stoppage so that the patient understands that these two entities are different.
- ✓ Making an indicative scale of evaluating TTD.

## **CONCLUSION**

According to our study, the IMC is generally poorly and insufficiently written by the doctor. This can have serious medico-legal repercussions for both the victim and the doctor. Indeed, the victim may lose his rights to compensation and the doctor may be held medical liability. Therefore, we encourage doctors to know and respect the writing rules of

the IMC, and this through continuing medical training.

cases at the forensic unit in Habib BOURGUIBA University Hospital in Sfax, Tunisia. *Forensic Science International: Reports*. 020;2:100106.

**Declaration of interest:** none

## REFERENCES

1. circulaire n°2000/72 du ministère de la Santé Publique Tunisie
2. République Tunisienne. Décret n°93-1155 du 17 mai 1993 portant code de déontologie médicale. *Journal Officiel* n° 40 des 28 mai et 1er juin 1993.
3. Pouillard DJ. *Les Certificats Médicaux*. 2005;13.
4. Soumah MM, Ngwa HEE, Ndiaye M, Sow ML. *Qualité des certificats de coups et blessures volontaires sur adultes à Dakar et Diourbel, Sénégal. Pan African Medical Journal*. 2011;10.
5. Elleuch Z. *Evaluation Medico-Legale Des Certificats Medicaux Initiaux Pour Coups Et Blessures. Thèse en Médecine. Faculté de médecine de Sfax*; 2017.
6. Décret n°93-1440 du 23 juin 1993, relative à la spécialisation en médecine et au statut juridique des résidents. *Journal Officiel de la République Tunisienne*, N°50. 06 juillet 1993: 941-3.
7. Circulaire n°1990/70 relatif à la perception d'honoraires pour le certificat médical descriptif
8. Doriat F, Peton P, Coudane H, Parant JM, Honore B. *Evaluation de la qualité des Certificats Médicaux produits par les consultations Médico-judiciaires de Lorraine. Journal de médecine légale droit médical*. 2003;46(7-8):511-6.
9. Welsch S. *Responsabilité du médecin: risques et réalités judiciaires. Litec*; 2003.
10. Code pénal Tunisien. Publication de l'imprimerie officielle de la république Tunisienne
11. Graser M, Manaouil C, Montpellier D, Loriau J, Jardé O. *La normalisation des indemnisations en réparation du dommage corporel: barème, forfait ou indemnité en rapport avec le préjudice. Journal de médecine légale droit médical*. 2004;47:64-8.
12. Chariot P, Dedouit F, Rey-Salmon C, Bourokba N, Rougé-Maillart C, Tournel G. *Examen médical des personnes victimes de violence: fréquence des facteurs aggravants au sens du Code pénal, hétérogénéité des pratiques. La Presse Médicale*. 2012;41(=):e553-8.
13. Lasseuguette K, Lorin De La Grandmaison G, Bourokba N, Veniel D, Durigon M. *Intérêts et limites d'un barème indicatif de l'Incapacité Totale de Travail (ITT). Journal de médecine légale droit médical*. 2004;47(4):123-8.
14. Zribi M, Amar WB, Feki N, Khemekhem Z, Hammami Z, Bardaa S, et al. *Evaluation De L'incapacite Totale Temporaire Et Etude Des Consequences Medico-Legales: Activite Du Service De Medecine Legale De Sfax Evaluation Of Temporary Total Incapacity And Forensic Impact. JIM*. 2018; 55-6.
15. Bardaa S, Dhouib H, Karray N, Kammoun J, Hammami Z, Maatoug S. *Intentional interpersonal violence: Epidemiological and analytical study about 973*