Acta Scientific MEDICAL SCIENCES (ISSN: 2582-0931)

Volume 9 Issue 2 February 2025

Research Article

Evaluation of the Quality of Voluntary Injury Certificates at Niamey National Hospital (NNH): About 100 Medical Certificates

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DOI: 10.31080/ASMS.2025.09.2017

Received: December 17, 2024

Published: January 22, 2025

Abstract

Introduction: The voluntary certificate of assault and injury, is a medical act that involves a compulsory clinical examination of the patient and which commits the responsibility of the doctor who signs it. Moreover, the frequency and request for issuance of medical certificate (CM), is increasingly important in the practice of medicine. Thus, the objectives of this work were to evaluate the quality of certificates of voluntary injuries at the National Hospital of Niamey (HNN), to study the validity criteria of interpretative certificates, to identify difficulties related to good practice in the issuance of certificates of assault and injury, to propose a guide for the drafting of medical certificates of assault.

Methods: We studied 100 certificates describing intentional assault and battery. The data collected was captured and analyzed by the Excel software.

Results: The physician's identity was on 100 certificates. Of the 100 certificates studied, the full identity of the victim was reported on 100%. The facts reported by the victim were reported on all certificates, as well as the circumstances of writing. The physical examination was done on all victims. All certificates were signed with the expression "subject to complications" in 100% of cases.

Conclusion: The certificates issued are of good quality. Recommendations concerning the creation of forensic consultation units and reception centres for better treatment of victims of assault.

Keywords: Certificates; Blows and Self-Injury; Niamey National Hospital

Introduction

The doctor is useful to the judicial function because he observes the moral and physical damage of the victims and then allows to know the physical and mental profile of the offenders. Through its qualifications, doctors establish medical certificates which are acts intended to verify or interpret facts of a medical nature. Among these certificates, we distinguish several types including the one of intentional bodily injury (VCD) which is the subject of our present work. Thus, the CBV are essentially aimed at acts that harm the physical integrity of a human being and the person who commits these acts, does so with will and sometimes assumes or not the responsibility for all consequences arising from it, including those he

did not want [1]. The Medical Certificate (CM) can be a civil document, constituting a legal element on which the victim will rely to claim compensation for the damage suffered. Moreover, the CM can be a social piece, allowing a work stoppage following a decrease in physical or mental capacity to perform any or specific work [2,3].

Thus, the physician has the scientific means to assess bodily harm which is one of the constituent elements of offences that harm the human body. He is the first to see the actual injuries suffered, but also to see the total temporary incapacities (TT), psychological trauma or death [1].

Sometimes the doctor (hospital chief) may be mandated by the court to assess certain facts on the one hand or act of criminal appearance on the other: we talk about a function of forensic expert. Thus, our work on medical certificates acté on CBV in Niger and specifically at the National Hospital of Niamey (HNN) will aim to focus on the main lines of establishing and drafting a medical certificate of injuries.

Methods

This was a prospective study that took place over a period of 6 months, from 1 January 2022 to 30 June 2022. This study was conducted at the National Hospital of Niamey (HNN), in the department of anesthesia resuscitation and emergencies (DARU), more precisely within the surgical emergency department. All patients who have brought a request from the police or gendarmerie.

Our study will follow the following methodology by highlighting the study of CBV certificates criteria at the HNN and to assess the assessment of Total Work Incapacity set by doctors.

Results

At the end of the study period, we counted 100 medical certificates describing intentional injuries and we report the results of the parameters studied.

Among our certificates studied, 100% of the cases were all typed and written on paper with a header that included the name of the hospital structure.

The first and last names of the doctor were mentioned on all 100 certificates, or 100% of cases; however, the specialization of the attending physician was mentioned in 82% of cases (82 certificates) and was absent in 18% of cases (18 certificates) (Figure 1).

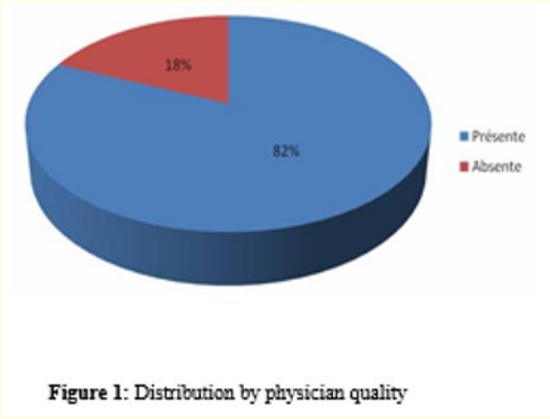

Figure 1: Distribution by physician quality

Figure 1

The professional address of the physician was specified in 90% of cases (90 certificates) and absent in 10% of cases (10 certificates) (Figure 2).

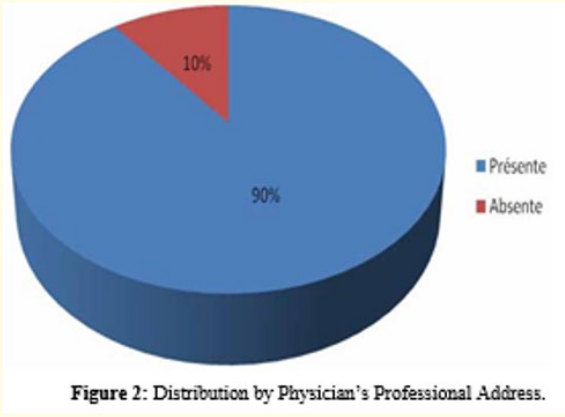

Figure 2: Distribution by Physician's Professional Address.

Figure 2

Regarding the characters related to the identity of the victim, the names, first name and age (or date and place of birth) of the victim were present in 100% of our cases; In addition, 27% of our cases were men compared to 73% of the women. However, 35% of victims were aged 0-15 (35%), followed by 45% for 16-30 years, 12% for 31-45 years (12%) and 8% for 46-60 years (Figure 3).

Neither the address nor the profession of the victim was on any of the certificates.

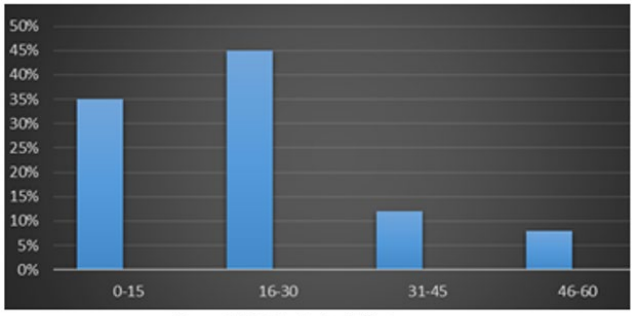

Figure 3: Distribution by Patient age

Figure 3

We also used the requisition address to define the neighbourhood or environment of the CBCs, which allowed us to see that the CBCs came from the Talladje neighbourhood in 62% of our cases and the remaining 38% from other neighbourhoods.

If the date of the examination was noted in 100% of cases; it was not the case at the time of the examination which was never mentioned on all certificates that is to say in 100% of cases it was absent.

On the other hand, all certificates included complaints from victims in 100% of cases. Among the certificates studied, the clinical examination was performed on the day of the CBV, or 95% of cases (Figure 4).

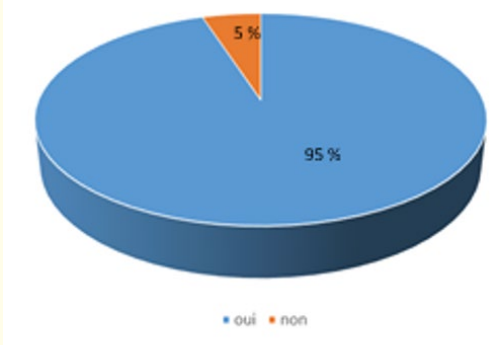

Figure 4: Distribution by Time of clinical examination

Figure 4

The description of physical injuries presented by the victim was found in 100% of cases.

The injuries found are very diverse, both in appearance and severity. By decreasing frequency, they are reported as: Wounds, 44% of cases (covering various parts of the body: scalp, upper and lower limbs, chest, back, abdomen, face, neck); Dermoabrasions, skin, 32% of cases; Bruises, 36% of cases (covering wrists and knees) ; Amputations, 1% of cases (in the hand and mainly the third finger); Swelling, 40% of cases (involving various parts of the body: scalp, upper and lower limbs, chest, back, abdomen, face, neck) (Figure 5).

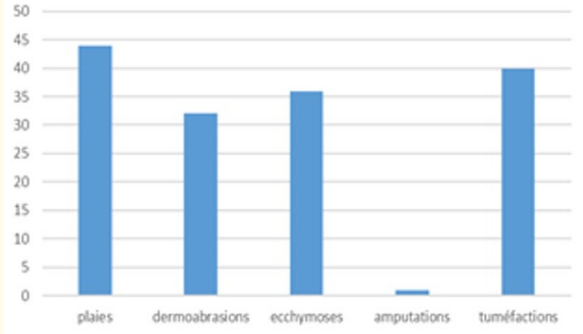

Figure 5: Distribution of physical injuries among respondents.

Figure 5

The localization of the lesions found was as follows:

Craniofacial mass, 48% of cases (48 cases); Limb involvement, 40% of cases (40 cases), distributed as 36% for upper limbs (36 cases) and 4% for lower limbs (4 cases); Trunk involvement, 20% of cases (20 cases); Pelvic involvement, 4% of cases (4 cases) ; and spinal involvement, 12% of cases (12 cases) (Figure 6).

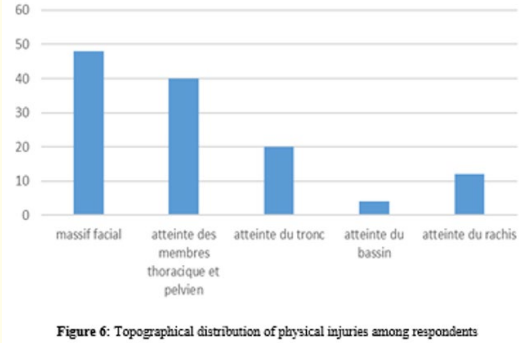

Figure 6: Topographical distribution of physical injuries among respondents

Figure 6

The paraclinical examinations requested by the doctor were included in 32 certificates, or 32% of cases, and absent in 68 certificates, or 68% of cases. The paraclinical examinations found were represented mainly by radiographs (32 cases combined: thoracic and pelvic limbs).

On all the certificates studied, we found a total work disability (ITT) attributed by doctors, which corresponds to 100% of cases.

However, in 99% of cases the ITT was expressed in days and the remaining 1% was expressed in months.

As mentioned above, 1 certificate had an ITT in months and 99 certificates had an ITT in days.

The days of ITT awarded ranged from 0 to 45, with an average of 9.77 days (Figure 7).

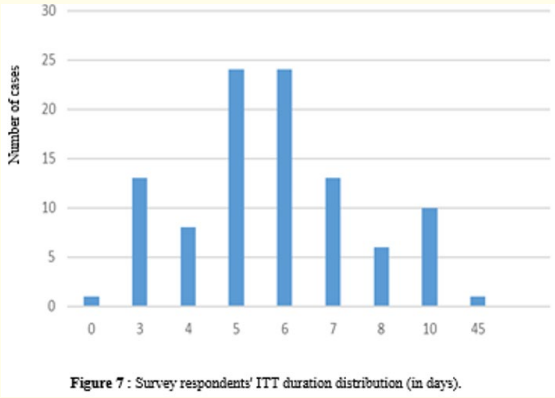

Figure 7 : Survey respondents' ITT duration distribution (in days).

Figure 7

The expression "subject to complications" was used on all certificates, 100% of cases. All certificates were signed by the doctor and "delivered in person" was used, 100% of the time.

Discussion

Our study focused on the quality of writing 100 CBV medical certificates performed at the HNN surgical emergency rooms. In the Nigerian literature, we have found no studies on VBC and the evaluation of the quality of medical certificates for work purposes but also for criminal purposes. Our study shows that the medical certificates produced by doctors working at HNN are well written but with breaches of ethical and criminal rules.

The support used for the writing of certificates was identical, that is to say a paper with the hospital header. Louarn stresses that it is important to use a header paper specifying the professional address of the doctor (administrative residence, medical-social center...) because there may be situations where the judicial services need to contact directly the doctor who issued the certificate (for request for additional information, convening a hearing), hence the importance of mentioning these professional contact details on the said certificate [4].

Regarding readability, Hamdouna recalls that CBV's medical certificates are most often intended for people who are not in the medical profession (lawyer, judicial authorities, social or insurance agent), which is a strong argument to be written in a clear, legible manner while using terms that are understandable to them [2]. Caloni points out in his work the importance of a medical certificate, which must be well drafted in a precise and unambiguous manner [5]. Thus, in our study, we obtained a percentage of 100% for legibility, so our certificates are considered actionable. Our results are similar to those of Ngwa in his CM quality assessment study where he found 96% of certificates readable [6]. In our work, all the certificates are typed contrary Ngwa who in his studies finds that 19% of these cases are typed; and 81% of these certificates written by hand [6].

In our study, the name of the doctor who issued the certificate was always mentioned (100% of cases). According to Roure, the identification of the doctor is an important element in the drafting of a medical certificate [7]; these are confirmed by Louarn who points out that the mention of the quality of the doctor signing the certificate gives probative value to this act [4]. In addition, only Ngwa finds 74% of physician identification notification [6]. According to several authors, any medical certificate must include the complete identification of the person examined (name and first names, age or date of birth, age or date of birth); however, Ngwa meets its requirements in 74% of his cases [6]. According to the work of Traoré [8] and Sall [9], we find more men bringing certificates with percentages of 87 respectively,3% and 67%; contrary to our work, women are the most representative with 73% of our cases compared to 27% of our cases for men. This is more likely because women are more often assaulted than men. On our certificates, the address is not notified but we used the requisition address in order to define it; this is not the case of the works of Sall

[9] who could have benefited from the victims' address on these medical certificates.

Sall in these studies finds that the age group between 16 and 45 years are most affected [9]; which is close to Traoré who in this work finds a more representative age group between 21 and 40 years [8]. While our results are included in the age ranges (0 and 30 years) found by Sall and Traoré [8,9].

Our results are similar to those of Ngwa regarding the examination date which appeared on all certificates (100% of cases) [6]; Moreover, for Ngwa, the time was reported only in 0.5% of the cases whereas in our work there was an absence of examination time [6]; this is contrary to Sall's view that in 100% of these cases the date and time are found on these medical certificates [9]. Thus, according to Grill, the reference to the date and time of the examination, correlated with the date and time of the assault, may help to highlight the discrepancy or compatibility between the date of the alleged facts and the appearance of the bruise, much more, in the case of multiple lesions of different ages, the colour of the bruise (and hence its age) is a guiding element [10]. It is therefore desirable that these elements (dates and times) are systematically noted on all certificates.

In our series, we found that 100% of the certificates mentioned complaints from the victim while for Ngwa it was noted that complaints were reported in 35% of cases, 8% of which were not legitimate and 92% were [6]. The fact that these discrepancies are noted demonstrates the doctor's objectivity, his seriousness, but also his willingness to remain in accordance with the code of ethics and medical deontology.

The clinical examination is a crucial time for the validity of a medical certificate. Thus, on completion of this examination, the doctor will be able to highlight the characteristics alleged by the victim; This is in line with Louarn's work which stresses that it is recommended that the doctor describe the physical and mental signs found during the medical examination [4]. If the medical examination is not intended to make a psychological diagnosis, the physician may note the victim's behaviour and/or emotions (assessment of psychological condition) because these are elements that will testify to the existence of a state of shock secondary to the aggression (post-traumatic shock or post-traumatic stress). This state can be variable, ranging from the simplest manifestations (fear, anxiety...) to much more serious disorders (psychosis, depression...). In 97% of the medical certificates from Ngwa's work, physical injuries were mentioned which is close to our findings and those of Sall [6,9].

The nature of these lesions was variable, with a predominance of wounds (44% of cases) followed by swelling (40% of cases). Thus, the prevalence of wounds was also found in the studies of Ngwa [6] (36.4% of cases), Traoré [8] (32.4% of cases) and Sall [9] (22.4% of cases). Moreover, other studies conducted in France and Morocco [10-12] on CBV found a predominance of other lesions of a different nature from wounds. This is the hematoma and ecchymosis (51% of cases) for the study conducted by Benyaich followed by wounds which occupied the second place (35% of cases) [12]. For the study conducted by Grill and collaborators in the forensic unit of the CHU de Rangueil de Toulouse, bruises were predominant (782 cases), wounds came only in 4th position (201 cases) respectively after dermabrasions and burns (759 cases) and hematomas (295 cases) [10]. Finally, in the study conducted by Le Louarn., *et al*. [4], there was a predominance of bruises and bruises.

The physical lesions found were mainly at the craniofacial massif (48% of cases) and limbs (upper and lower; 40% of cases); our results are quite similar to those of Ngwa [6], Benyaich [10] and Louarn [4] whose predominance was also at the level of the facial mass and limbs. All this leads us to conclude that the majority of physical injuries observed in cases of intentional assault and battery are on "exposed" areas of the body such as the head and limbs, visible by others (area not or little hidden by clothing). Conversely, these lesions are less frequently found in the «hidden» areas (trunk, back...). Unlike some authors [4,6,10], Traoré finds a predominance of head and neck injuries or 45.1% of cases these are explained by the nature of the weapons most used in his work which are sticks and machetes.

The mention of the paraclinical examinations requested and that of the treatment administered appears as a minor requirement which does not influence in any way the practicability of the medical certificate. It is therefore not surprising that we found that only 17% of the certificates of Ngwa's work [6] specified paracletic examinations, whereas our study finds up to 32% of cases of paracletic examination already done. Among our paraclinical examinations, we understand that it is essentially radiological ex-

aminations. Our figures are close to those of Traoré [8] which found 36.3% of cases and far from those of Sall [9] who found 50.2% of cases having performed radiological examinations any topography combined. This predominance of radiology is explained by the fact that radiology is the reference examination for post-traumatic injuries due to VBC. Only Traoré confirms having performed CT scans with 22.5% of the cases.

The validity of a medical certificate is conditioned by the conclusion leading to the determination of the Total Incapacity for Work (ITT) criminal or work. The ITT was present on all certificates or 100% of cases, our results are quite similar to those of Ngwa [6], and Sall [9]. Lasseuguette and all emphasize its importance in assessing the duration of personal ITT [11]. In our series, the average ITT duration was 9.77 days contrary to Ngwa [6] whose average duration is longer (21.22 days) which is very little above the 20-day bar of criminality. This is simply alarming, especially when it is taken into account that the production of a medical certificate of intentional assault and battery with an ITT greater than or equal to 21 days implies the immediate incarceration of the perpetrator before his appearance before the judge. We can think much further by asking how many "innocent" people were thus imprisoned on the basis of these certificates of indulgences whose fixed ITT duration was not justified but negotiated or facilitated for the pleasure of punishing the aggressors.

In addition to the doctor's responsibility, the medical certificate commits the doctor's responsibility by dating it and then signing it while taking into account the day of the examination. Roure [7] requests that the words "delivered by hand" be used to protect the author of the medical certificate from a breach of professional secrecy. In our series, all physicians followed this rule as all certificates were signed by the author.

Conclusion

Our retrospective and evaluative study focused on medical certificates describing intentional injuries, issued during the period from January 1st to June 30th 2022. The framework of the study was the HNN in general and specifically the surgical emergency department.

Our objectives were to study the editorial character of medical certificates issued in the cases of VBC, but also to study the forensic scope of these certificates through the evaluation of the personal ITT issued in these situations.

Competing Interests

The authors declare no competing interest.

Acknowledgements

The authors wish to thank Professor Mohamed SOUMAH for the follow-up and encouragement during the redaction of this document.

Bibliography

1. Programme Régional Annuel de Gestion du Risque, avenant n°23/2004 TBP n°870/2004 67. Le Certificat Médical en Odontologie : Evaluation de la qualité de leur rédaction dans le cadre des accidents du travail et du recours contre tiers (rapport de synthèse).

2. Hamdouna N., *et al*. "Certificat Médical Initial en matière de Coups et Blessures Volontaires". *Espérance Médicale* 11.104 (2004): 184-188.

3. Certificat Médical, article en ligne mis à jour le 02 octobre 2006 par le Pr Barret, consulté le 20 juin (2024).

4. Le Louarn A., *et al*. "Rédaction d'un Certificat Médical en cas de maltraitance chez l'enfant: Evaluation des pratiques des médecins de l'Education Nationale". *Journal de Medecine Legale Droit Medical Impact* 48.7-8 (2005): 469- 477.

5. Caloni M. "Guide Pratique des Certificats Médicaux". 7e édition, MEDIDROIT, (1997): 436.

6. Ngwa HEE. "Evaluation de la qualité des certificats descriptifs de coups et blessures volontaires au Sénégal : De la constatation à la rédaction, Thèse Méd, UCAD". (2010): 218.

7. Roure M. "Formulaires Administratifs, Certificats Médicaux". 2e édition, Abrégé de médecine, (1993): 232.

8. Traore T., *et al*. "Coups et Blessures Volontaires dans un Hôpital Malien de Deuxième Référence: Aspects Cliniques et Thérapeutiques".

9. Sall ADS. "Evaluation de la qualité de rédaction des certificats médicaux de coups et blessures volontaires délivrés au sein d'une consultation médico-judiciaire à Dakar : à propos de 249 certificats médicaux ; Thèse Méd, UCAD". (2015): 179.

10. Grill S., *et al*. "Evaluation de la qualité de la rédaction des certificats descriptifs des constatations de Coups et Blessures Volontaires au sein d'une unité médico-judiciaire". *Journal de Medecine Legale Droit Medical Impact* 49.5 (2006): 166-172.

11. Lasseuguette K., *et al*. "Intérêts et Limites d'un barème indicatif de l'Incapacité Totale de Travail (ITT)". *Journal de Medecine Legale Droit Medical Impact* 47.4 (2004): 123-128.

12. Benyaich H., *et al*. "La Consultation des Victimes de Coups et Blessures Volontaires au CHU Ibn Roch de Casablanca : Etude victimologique transversale de 400 dossiers". *Journal de Medecine Legale Droit Medical Impact* 47.5 (2004): 193-199.