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Original Research Article

Profile of Patients Admitted to the Emergency Department's Shock Unit of the National Hospital of Niamey (HNN)

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Abstract: ***Objective***: To describe the profile of patients admitted to the emergency department's shock unit of the Niamey National Hospital (HNN). ***Patients and Methods*****:** This was a prospective descriptive study conducted over a 3-month period, from December 15, 2023, to March 15, 2024. All patients admitted to the resuscitation units of the medical and surgical emergency departments were included. The variables studied were: age, sex, occupation, origin, mode and reason for admission, clinical and paraclinical data, management, and outcome. Data were entered and analyzed using Microsoft Office 2016 and Sphinx v5 software. Statistical tests were considered significant for any p-value <0.05. ***Results*****:** Three thousand four hundred and twenty (3420) patients were triaged in the emergency department, of whom 100 were admitted to the resuscitation unit, representing an overall frequency of 2.92%. Males accounted for 72% (n=72) of cases, with a male-to-female ratio of 2.57. The mean age of our patients was 34.23 years, ranging from 2 to 94 years. Hypertension was the predominant comorbidity in 32% (n=32) of cases. Stroke was the most common diagnosis, accounting for 34.48% (n=20) of cases. Among patients admitted to the surgical resuscitation unit, 52.38% (n=22) had multiple traumas. Oxygen therapy was administered to all patients. Ninety-eight percent (n=98) of patients received crystalloid fluid resuscitation. During our study, 54.76% of patients underwent surgical intervention. Thirty percent (n=30) of patients were transferred to a short-stay unit. The length of hospital stay was less than 48 hours in 53.00% of cases. ***Conclusion***: The resuscitation room plays a crucial rôle in an emergency department, as it is the place where life-threatening or potentially life-threatening situations are managed. To optimize patient care, it must be well-equipped and staffed with trained personnel.

Keywords: Emergency, Resuscitation, Niamey National Hospital, Niger.

INTRODUCTION

Emergency care is a complex and crucial issue. The Emergency Department is the face of the hospital. Its role within the hospital must be clearly defined, and it must be allocated appropriate resources [1]. The resuscitation room is a reception area within the emergency department for patients with existing or potential life-threatening distress. It plays a crucial role in the initial stabilization of patients before their transfer to specialized services for further treatment [2, 3]. In sub-Saharan Africa, and more specifically in Niger, the challenges related to the management of patients in the resuscitation area are accentuated by limited resources and often inadequate health infrastructure.

PATIENTS AND METHODS

This was a prospective descriptive study conducted over a three-month period, from December 15, 2023, to March 15, 2024. All patients admitted to the resuscitation units of the medical-surgical emergency department were included. The variables studied were: age, sex, occupation, origin, mode and reason for admission, clinical and paraclinical data, management, and outcome. Data were entered and analyzed using Microsoft Office 2016 and Sphinx v5 software. Statistical tests were considered significant for any p-value <0.05.

RESULTS

Three thousand four hundred and twenty (3420) patients were treated in the emergency department, of

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whom 100 were admitted to the resuscitation unit, representing a frequency of 2.92%. Fifty-eight percent (n=58) of patients were hospitalized in the medical resuscitation unit and forty-two percent (n=42) in the surgical resuscitation unit. Males predominated, representing 72% (n=72) of cases, with a male-to-female ratio of 2.57. The mean age of our patients was 34.23 years, with a range from 2 to 94 years. Patients over 60 years of age were the most represented, accounting for 30% (n=30) of cases (Figure 1).

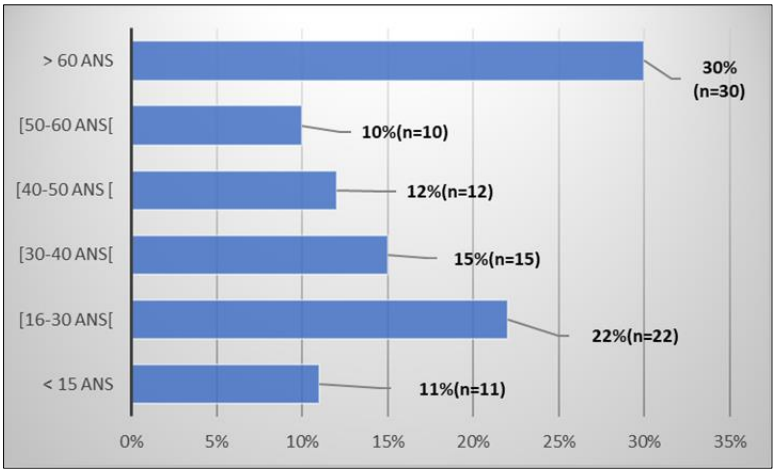

Figure 1: Distribution of patients according to age group

Comorbidities were dominated by hypertension and diabetes, present in 32% (n=32) and 18% (n=18) of cases, respectively. Nineteen percent (19%) of our patients were smokers. Stroke was the most common diagnosis, occurring in 34.48% (n=20) of cases among patients hospitalized in the medical resuscitation unit. (Table I)

Table I: Distribution of patients in medical resuscitation according to diagnosis

Diagnosis	Effective	Percentage (%)
AVC	20	34,48
Severe malaria	16	27,59
Diabetic ketoacidosis	16	27,59
Pulmonary embolism	3	5,18
OAP	1	1,72
Hypertensive crisis	1	1,72
Gastroenteritis	1	1,72
Total	58	100

Among the patients admitted to surgical resuscitation, 52.38% (n=22) of the patients were polytrauma patients (Figure n°2).

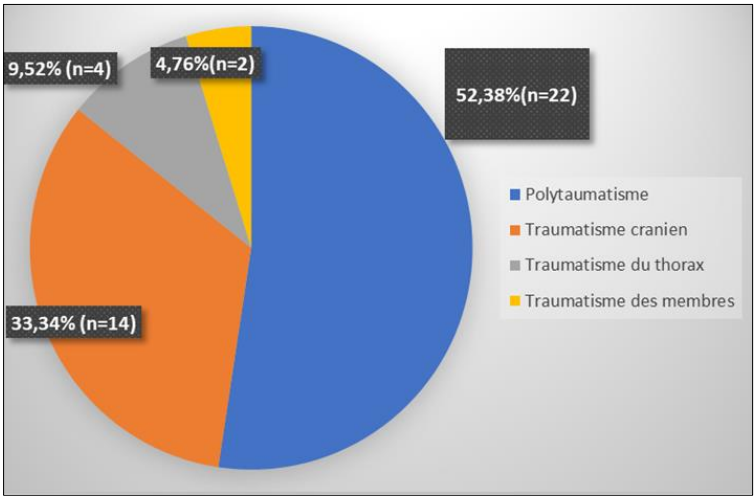

Figure 2: Distribution of surgical resuscitation patients according to diagnosis

Thirty-two percent (n=32) of our patients had a Glasgow Coma Scale (GCS) score below 8. Oxygen therapy was used in all our patients, and 30% (n=30) underwent orotracheal intubation (Table II). Ninety-eight percent (98%) (n=98) of the patients received crystalloid fluid resuscitation.

Table II: Distribution of patients according to the procedure performed

Gesture	Effective	Percentage (%)
Oxygen therapy	100	100
VVP	98	98
Bladder catheter	96	96
Nasogastric tube	40	40
Orotracheal Intubation	30	30

Table III: Distribution of patients according to the care provided in the resuscitation room

Support	Effective	Percentage (%)
Crystalloids	98	98
Painkillers	92	92
Antibiotics	93	93
Antihypertensives	24	24
Antimalarials	16	16
Hemostasis	22	22
SAT-VAT	7	7
Sedatives	38	38
Thrombolysis	0	0

Fifty-four point seventy-six percent (54.76%) of patients underwent surgical intervention. Thirty percent (30%) (n=30) of patients were transferred to a short-stay unit and 18% (n=18) to intensive care (Table IV). The length of hospital stay was less than 48 hours in 53.00% of cases. The outcome was marked by a mortality rate of 20%.

Table IV: Distribution of patients according to their progress

Service	Effective	Percentage (%)
Short-stay hospitalization unit	30	30
Resuscitation	18	18
Transfer to the medical ward	15	15
Inter-hospital transfer	7	7
Discharged against medical advice	10	10
Total	80	80

DISCUSSION

The resuscitation service represented 2.92% of the overall activity of the emergency department at Niamey National Hospital; our result is similar to that of Hanaa B. in Morocco, who reported 2.80%, and higher than that of Oumar C. in Mali, who found 0.66% [1-3]. Males predominated in 72% (n=72) with a male-to-female ratio of 2.57. Hanaa B. and Passébon J. also reported a male predominance with male-to-female ratios of 5.14 and 1.8, respectively. This predominance could be explained by the hyperactivity of men; they constitute the most active and most exposed group [1-4]. The mean age of our patients was 34.23 years, with a range from 2 to 94 years; the over-60 age group was the most represented, accounting for 30.00% (n=30) of cases. Berrada O. in Morocco reported a mean age of 38 years, while Passébon J.'s study reported a mean age of 61.9 years. This difference could be explained by the diversity of causes of life-threatening emergencies in France and the fact that the African population is relatively younger [4, 5]. Comorbidities were dominated by hypertension and diabetes, present in 32% (n=32) and 18% (n=18) of cases, respectively. Bahri M *et al*., reported that the main comorbidities in their study were hypertension (37.7%) and diabetes (36.2%). This predominance was also observed by Mobio N'kan Michael P *et al*., who reported that hypertension (16.9%) and diabetes (8.5%) were the main pre-existing conditions [6, 7]. Stroke was the most common diagnosis among our patients in the medical resuscitation unit, accounting for 34.48% (n=20) of cases. Our result is higher than that reported by Hanaa B. (19.5%) and Diombana (27.27%) [1-8]. Polytrauma patients represented 52.38% (n=22) of the patients in the surgical resuscitation unit; Oumar C. and Diombana K. reported a predominance of polytrauma, with 23.21% and 17.6% of cases, respectively [3-8]. Oxygen therapy was used in 98.00% (n=98) of our patients, 98% (n=98) of patients received crystalloid fluid resuscitation, and 30% (n=30) underwent orotracheal intubation. Bahri M *et al.,* reported that oxygen therapy was initiated in 28.5% of

patients and 10% of patients underwent orotracheal intubation [6]. The mortality rate was 20.00%. Our result is similar to that of Keita M *et al*., which was 18.5%, and higher than that of Mbutiwi F *et al*., who found a case fatality rate of 12.3%. [9, 10].

CONCLUSION

The resuscitation room plays a crucial role in an emergency department, as it is the primary site for managing existing or potential life-threatening emergencies. Efforts must be made to promote pre-hospital care, improve patient transport, identify patients with life-threatening conditions upon arrival, and ensure the prompt delivery of paramedical care.

Conflict of Interest: None

BIBLIOGRAPHICAL REFERENCES

1. Hanaa B. Evaluation de l'activité de la salle de déchocage : Etude rétrospective à propos de 2667 cas au CHU Ibn Sina Rabat. Thèse de doctorat N° 161, 2012, Université Mohammed V SOUISSI, Rabat (Maroc). P147
2. Pierre M, Laurent M, Catherine B, Pierre C, Jean-Louis, Jean-Emmanuel de LA C et al. Recommandations concernant la mise en place, la gestion, l'utilisation et l'évaluation d'une salle d'accueil des urgences vitales (SAUV). *JEUR, 2003, 16, 1S165-1S170.*
3. Oumar C. Profil épidémio-clinique des patients admis aux déchocage du service d'accueil des urgences du CHU Gabriel Touré. Thèses de doctorat en médecine, Université de Bamako,2024. P81.
4. Passébon J. Epidémiologie des urgences vitales potentielles aux urgences adultes du CHU d'Angers. France ;2016. Thèse de Médecine N°6656F.
5. Berrada O. La salle d'accueil des urgences vitales du centre hospitalier Universitaire Ibn Rochd de Casablanca. Thèse de Médecine., Université Hassan II de Casablanca (Maroc),2006.
6. Behri M, Demni W, Bahria W, Hajji R, Sahnoun I, Rebhi M et al. Pathologies médicales en salle d'accueil des urgences vitales : Caractéristiques épidémiocliniques, thérapeutiques et évolutives des patients. Service des urgences de l'Hôpital Mongi Slim la Marsa. 27ieme Congrès national et 8ieme Congrès Francophone de la Réanimation. 30 novembre au 03 décembre 2023. Hôtel The Russelior Hammamet. P247.
7. Mobio N'kan Michael P, Kouamé Koffi I, Ango Privat D, Bédie Yao V, Koffi B, Traore S. Profil des patients admis aux services d'accueil des urgences médicales d'un centre hospitalier universitaire à Abidjan. Rev Afr Anesth Med Urg. Tome 29 n°3-2024.
8. Diombana K. Profil épidémio-clinique des patients admis en SAUV de l'Hôpital du Mali. Thèse de Med 2020. P68.
9. Keita M, Camara B, Fomba S et al. Caractéristiques des patients admis au service d'accueil des urgences du Centre Hospitalo Universitaire du Point G, Bamako, Mali. Mali Sante Publique 2014 ; IV (001& 002) : 31-7.
10. Mbutiwi F, Meert P, Malengreau et al. Profil épidémiologique des patients admis aux urgences médicales des Cliniques Universitaires de Kinshasa (République Démocratique du Congo). Annales Africaines de Médecine 2012 ; 5 : 1030-43.

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