

Epidemiological Profile of War Wounded in the Emergency Reception Department of the Sominé Dolo Hospital in Mopti

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DOI: [10.36347/sjams.2024.v12i01.011](https://doi.org/10.36347/sjams.2024.v12i01.011)

| Received: 24.11.2023 | Accepted: 31.12.2023 | Published: 17.01.2024

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Abstract

Original Research Article

The security crisis experienced by our country in 2012 resulted in numerous injuries and deaths linked to terrorist attacks and this required a reorganization of the care of the injured. The objective of this work was to determine the frequency of war wounded at the Sominé Dolo hospital in Mopti (Mali). We realized a single-center descriptive cross-sectional study relating to the files of patients suffering from war injuries and admitted to the emergency reception department of the Sominé Dolo hospital in Mopti (Mali) during the period between January 1, 2020 and October 31, 2022. This hospital represents the largest reference structure in central Mali with per year. During the study period, 5,404 wounded people of all kinds were admitted to the emergency reception service out of a total of 65,740 patients, i.e. a frequency of 8.22%, and 1,540 war wounded were admitted, i.e. a frequency of 2.34%. The age of war-wounded patients ranged from 6 months to 80 years with an average age of 30.61 years. The patients were divided into 1448 men (94%) and 92 women (6%), giving a sex ratio of 15.74. Patients transported by ambulance to hospital accounted for 62.01%, by plane (18.31%), civil protection (3.38%), other means of transport (16.3%). Half of the injured were received within 6 hours of their trauma. Those injured by firearms represented 79%, and those injured by improvised explosive devices (15%). The mortality rate was 0.39% in the emergency room.

Keywords: Epidemiology, injured, war.

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INTRODUCTION

The Sominé Dolo Hospital in Mopti constitutes a reference structure for war wounded in the fifth region of Mali.

The security crisis experienced by our country in 2012 resulted in numerous injuries and deaths linked to terrorist attacks and this required a reorganization of the care of the injured [1].

This is how the authorities and certain Non-Governmental Organizations (NGOs), in particular the ICRC, set up a bridge for the care of victims in health structures in the center of the country, which enabled the evacuation many injured to the Sominé Dolo hospital in Mopti.

In Mali, very little data exists on war wounded and no study has been carried out on this subject at the

Sominé Dolo hospital in Mopti in central Mali, which is why this work was initiated.

This work can help improve the means and techniques for caring for war wounded. The objective of this work was to determine the frequency of war wounded at the Sominé Dolo hospital in Mopti (Mali).

PATIENTS AND METHODS

We realized a single-center descriptive cross-sectional study relating to the files of patients suffering from war injuries and admitted to the emergency reception department of the Sominé Dolo hospital in Mopti (Mali) during the period between January 1, 2020 and October 31, 2022. This hospital represents the largest reference structure in central Mali with per year.

Included in the study were all cases of injuries caused by firearms (BAF) and/or improvised explosive devices (IEDs).

Not included in the study:

- War injuries dating back more than 1 month
- Patients who arrived deceased,
- Cases of injury due to a public road accident (AVP),
- Voluntary assault and battery (CBV).

The medical files and the hospitalization register were reviewed and data collection was done using a carefully established questionnaire.

The variables studied were sociodemographic characteristics (age, age group, sex, origin, social status, mechanism, years of hospitalization, means of evacuation).

The data were entered and analyzed using Epi info 7.7 software.

RESULT

During the study period, 5,404 wounded people of all kinds were admitted to the emergency reception service out of a total of 65,740 patients, i.e. a frequency of 8.22%, and 1,540 war wounded were admitted, i.e. a frequency of 2.34%

The age of war-wounded patients ranged from 6 months to 80 years with an average age of 30.61 years.

The patients were divided into 1448 men (94%) and 92 women (6%), giving a sex ratio of 15.74. The injured came from the center in 98.39%, from the north (0.9%) and the south (0.71%).

Civilians represented 65.26%, the military (33.25%) and self-defense groups (1.49%). Patients were categorized as yellow (56.04%), green (27.92%), red (15.78%) and blue (0.26%). Patients transported by ambulance to hospital accounted for 62.01%, by plane (18.31%), civil protection (3.38%), other means of transport (16.3%). Half of the injured were received within 6 hours of their trauma. The injured who received pre-hospital care represented 95.13%.

Those injured by firearms represented 79%, and those injured by improvised explosive devices (15%). The death rate was 0.39% in the emergency room.

DISCUSSION

To our knowledge, this is the first study carried out on the epidemiological profile of war wounded in the emergency reception department of the Sominé Dolo hospital in Mopti.

War wounded represented 2.34% of emergency admissions, leading to an increase in the workload for staff with reduced numbers.

The juvenile layer was mainly represented with an average age of 31 years. This result is similar to those reported by other authors [1, 2].

The sex ratio was 16 men to one woman, this proves that men were the most affected. This result is comparable to that reported by Abdoulhamidou A *et al.*, [3].

Civilians represented 65.26%; as in other conflicts around the world, they are paying the high price for this war in central Mali.

The dimension of the ethnic conflict has an important place in this conflict since 98.39% of our wounded came from the center of the country.

Among our injured, 79% were injured by firearms compared to 15% of those injured by improvised explosive devices, comparable to that reported by other authors [4, 5].

Half of the injured were received within 6 hours of their trauma. The time factor plays a vital role in the treatment of seriously injured people.

The transport of the injured was provided by ambulances from the various reference health centers and military garrisons, thus helping to facilitate the evacuation of the injured to the emergency reception department of the hospital.

The mortality rate was very low (0.39%) and is certainly due to:

- The conditioning and transport of the injured within a reasonable time
- The experience acquired by the hospital in terms of caring for war wounded.

CONCLUSION

As elsewhere, civilians pay the high price of this war, once the hospital threshold has been crossed, mortality in the emergency room is very low, indicating experience acquired in the care of war wounded.

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