

CLINICAL-EPIDEMIOLOGICAL PROFILE OF OCCURRENCES RELATED TO CLINICAL CAUSES IN THE MOBILE EMERGENCY CARE SERVICE (SAMU) IN ANÁPOLIS, GOIÁS, IN THE FIRST QUARTER OF 2023

Bruna Machado Siqueira¹
Agnes Vieira Gonçalves de Avelar²
Beatriz Rocha Rizzo³
Gabriel Costa de Oliveira Teixeira Alvares⁴
Leandra de Oliveira Castro⁵
Constanza Thaise Xavier Silva⁶

Abstract

The Mobile Emergency Care Service (SAMU) is responsible for urgent care, including clinical causes, which are prevalent among the cases attended by this service. **OBJECTIVE:** This study aimed to characterize the clinical and epidemiological profile of clinical cause-related attendances, identifying the number of occurrences, the locations of origin, the relationship with days of the week and time of day, and highlighting the main clinical reasons for care during the first quarter of 2023. **METHODOLOGY:** A descriptive, cross-sectional, and retrospective epidemiological study was conducted using data from Anápolis, Goiás. Data were collected from SAMU attendance records. **RESULTS:** Analysis revealed 2,739 occurrences of clinical causes, with January having the highest number of attendances. Regarding sociodemographic data, there was a prevalence of care for women in January and March and for men in February, with the highest number corresponding to individuals over 60 years old. Most occurrences originated at home throughout the study period. Additionally, the most prevalent time of day was the afternoon in January and March, and nighttime in February. Regarding days of the week, the highest number of occurrences was on Monday in January, Wednesday in February, and Saturday in March. The most common symptoms were general discomfort and abdominal pain, falls from standing height, among others. The most frequent destination was the Emergency Care Unit (UPA).

Keywords: Mobile Emergency Care Service; SAMU; General Symptoms; Epidemiological Studies; Pre-Hospital Services.

INTRODUCTION

The Mobile Emergency Care Service (SAMU) is responsible for attending urgent cases, including those related to clinical causes such as malaise, pain, and respiratory or cardiovascular alterations, which are highly prevalent among adults and elderly individuals (LEFUNDES, 2016; ROCHA, 2014). Analysis of 2,400 attendance reports revealed that 762 cases were related to clinical causes, with a predominance of males (52.8%) and a mean age of 44.1 years. The mortality rate due to clinical causes was higher among women (54.5%),

¹Discente da Universidade Evangélica de Goiás – UniEvangélica, machadosiqueirabruna@gmail.com

²Discente da Universidade Evangélica de Goiás – UniEvangélica, agnesvga@hotmail.com

³Discente da Universidade Evangélica de Goiás – UniEvangélica, beatrizrocharizzo@gmail.com

⁴Discente da Universidade Evangélica de Goiás – UniEvangélica, gabrielcostateixeira7@gmail.com

⁵Discente da Universidade Evangélica de Goiás – UniEvangélica, leaocastro24@gmail.com

⁶Docente da Universidade Evangélica de Goiás – UniEvangélica, constanzathaise@yahoo.com.br

highlighting the importance of effective care to reduce preventable deaths and complications (PITTIERI, 2011). SAMU has shown a positive impact on reducing in-hospital mortality from acute myocardial infarction through reduced response time (OLIVEIRA et al., 2019; TIMERMAN, 2015). However, the transition of pre-hospital care from the Fire Department to SAMU posed challenges, such as deficiencies in integration with other health services and lack of standardization (OLIVEIRA, 2018; MINAYO et al., 2008). This study aims to characterize the clinical-epidemiological profile of occurrences related to clinical causes attended by SAMU in Anápolis, Goiás, in the first quarter of 2023, identifying the main clinical causes and improving care to enhance emergency outcomes and prevent severe complications.

METHODOLOGY

This is a descriptive, cross-sectional, and retrospective epidemiological study conducted in Anápolis, Goiás, using SAMU-192 occurrence records from the first quarter of 2023. Data were collected using a structured instrument created by the researchers based on the information provided in the attendance forms. Inclusion criteria were all individuals attended by SAMU in Anápolis between January and March 2023. Exclusion criteria were records with illegible or incomplete data. Data were transcribed into spreadsheets and analyzed statistically. The study was conducted following approval from the UniEVANGÉLICA Research Ethics Committee, ensuring data confidentiality (Approval Number: 6.723.196).

RESULTS

Based on the data obtained from the SAMU attendance records in Anápolis-GO from January to March, corresponding to the first quarter of 2023, a total of 2,739 occurrences related to clinical causes were analyzed, excluding records with unclear or insufficient information for the purposes of this study. Specifically, 945 cases were registered in January, 881 in February, and 913 in March.

From the total records analyzed, when considering the sex of the individuals, a variation in prevalence among cases was observed. In January, a predominance of females was noted, with 487 cases compared to males. In February, the majority of cases were male, with 467 occurrences. In March, there was a slight predominance of females, with 457 cases. Subsequently, the analysis of age groups revealed that

clinical occurrences were more prevalent among individuals over 60 years old, while individuals aged 0 to 10 years represented the minority across all months of the evaluated quarter. Regarding the main locations of the occurrences, there was a predominance of home-origin cases throughout the analyzed period. Regarding the time of attendance, most cases in January and March occurred in the afternoon, with 328 and 249 cases, respectively. In February, the majority of cases occurred during the night, with 251 cases. Concerning the day of the week, in January, the highest number of occurrences was on Monday (172), in February on Wednesday (165), and in March on Saturday (156).

Considering the main reasons for the occurrences, a prevalence of “other” cases was observed in January (116) and February (123), which corresponded to conditions such as low back pain, headache, fever, emesis, asthenia, and melena. Conversely, in March, the most prevalent cases were malaise and abdominal pain (23), as shown in Table 1.

Tabela 1 - Motivos das ocorrências relacionadas a causas clínicas do SAMU em Anápolis-GO referentes ao primeiro trimestre de 2023.

Motivos do atendimento	Janeiro	Fevereiro	Março
Dispnéia	58	64	10
Convulsão	84	63	8
Síncope	21	38	11
PCR	23	40	3
Precordialgia e crise hipertensiva	37	49	5
Rebaixamento do Nível de Consciência	12	5	2
Mal estar e Dor abdominal	71	105	23
Queda da Própria Altura	112	70	19
AVE	12	16	0
CA	27	23	1
Constatação de Óbito	1	15	9
Outros	116	123	16

Fonte: Autor

Finally, analyzing the referral destinations of patients attended by SAMU, a general prevalence of UPA (Emergency Care Units) as the destination for the cases was observed, with 579 cases in January, 542 in February, and 89 in March. Additionally, among the referrals, there were cases of death during care or transport, totaling 48, 58, and 12 in January, February, and March, respectively.

CONCLUSION

The analysis of clinical occurrences recorded by SAMU in Anápolis-GO during the first quarter of 2023 revealed important patterns and trends that can guide improvements in emergency services. Out of a total of 2,739 cases analyzed, significant variation was observed across the months. The data indicate a slight predominance of female patients in January and March, while male patients were more prevalent in February. The age distribution showed a high incidence among individuals over 60 years old, highlighting the need for special attention to this group in emergency services. Analysis of service hours revealed that most occurrences took place during the afternoon and evening, with a low incidence during the early morning. Variation in the number of occurrences across the days of the week suggests the need for a flexible and adaptive strategy for efficient resource allocation. The main reasons for occurrences were diverse, with a predominance of cases classified as “others,” including low back pain, headache, and general malaise. This variety underscores the importance of a comprehensive and adaptable approach to managing clinical emergencies. Furthermore, the data showed that most patients were referred to UPA (Emergency Care Units), with a notable number of deaths occurring during care or transport. This finding emphasizes the need for strategies to manage critical cases and ensure efficient integration with other health services. In summary, the results of this analysis provide a solid foundation for identifying critical areas and formulating strategies to improve pre-hospital care in Anápolis-GO. Understanding occurrence patterns and patient profiles will allow SAMU to adapt its practices and protocols for more effective service delivery. For future research, a more in-depth analysis of factors associated with deaths and the implementation of targeted measures to optimize care and clinical outcomes is recommended.

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