

CLINICAL-EPIDEMIOLOGICAL PROFILE OF PEDIATRIC CASES ATTENDED BY THE MOBILE EMERGENCY CARE SERVICE (SAMU) IN ANÁPOLIS - GOIÁS, FROM JANUARY TO MARCH 2023

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ABSTRACT

Introduction: The study describes the epidemiological profile of pediatric cases attended by the Mobile Emergency Care Service (SAMU) in Anápolis, Goiás, from January to March 2023. **Methodology:** This is a descriptive ecological study, using as a source of information the pediatric care records from SAMU in the municipality. Absolute and relative frequencies of the selected variables were calculated. **Results:** A total of 216 pediatric cases were recorded between January and March 2023. Most patients were male (53.0%) and aged between 1 and 10 years (62.0%). The main location of occurrence was at home (55.5%), predominantly in the afternoon (35.6%), with most incidents occurring on weekends (29.1%). The main reason for care in January was crises—convulsive, asthmatic, anxiety (31.2%), while in February and March, other reasons such as diarrhea, vomiting, malaise, fever, aggression, animal bites, rescues, prostration, injuries, and penetrating events predominated (39.5%; 42.2%). **Conclusion:** The study highlights the importance of providing specialized care by addressing the main health challenges of the pediatric population (0 to 18 years) in Anápolis.

Keywords: Mobile Emergency Care Services; Clinical-Epidemiological Profile; Pediatric Cases; Anápolis.

INTRODUCTION

Pre-hospital care plays a fundamental role in healthcare assistance, providing immediate and emergency support to victims of accidents, trauma, and other urgent situations. In Brazil, the Mobile Emergency Care Service (SAMU) has played a crucial role in this context, ensuring clinical support and safe transport to appropriate health facilities. A specific and highly relevant aspect of this service concerns pediatric care, which involves unique characteristics and needs compared to adults. Pediatric calls to

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SAMU frequently involve convulsive crises, respiratory difficulties, trauma, and other urgent events, requiring specialized approaches (Zanoni, 2019).

Pediatric cases demand special attention due to the biological and psychological specificities of this group (Santos et al., 2021). Children are particularly vulnerable to accidents and medical emergencies, largely because of their natural curiosity and greater exposure to risks in domestic or recreational environments (Lira & Melo, 2002). Socioeconomic factors, such as low income and limited access to preventive care, may also influence the severity of these situations (Costa; Miranda; Souza, 2013).

In Anápolis, Goiás, SAMU is responsible for a significant number of pediatric attendances. However, detailed studies on the clinical-epidemiological profile of these cases are scarce. A better understanding of these characteristics may support more effective interventions and guide public health policies focused on pediatric populations. Based on this, the present study aims to characterize the clinical and epidemiological profile of pediatric care provided by SAMU in Anápolis, Goiás, between January and March 2023.

METHODOLOGY

This is an epidemiological, descriptive, cross-sectional, and retrospective study conducted in the municipality of Anápolis, Goiás, using pediatric case reports from SAMU-192 from January to March 2023 as the data source. The target population included all children and adolescents aged 0 to 18 years attended by SAMU during the specified period.

The data were obtained from SAMU attendance forms, previously authorized by the Research Ethics Committee of UniEVANGÉLICA (approval no. 4.878.937). The analyzed variables were divided into two groups: sociodemographic characteristics (sex, age group, place of occurrence, time of day, and day of the week) and case-related characteristics (reason for care, outcome, among others). Absolute and relative frequencies were calculated, with the sample defined by convenience based on recorded cases.

Inclusion criteria comprised all individuals attended by SAMU in Anápolis, Goiás, from January to March 2023. Exclusion criteria included records with illegible or

incomplete data. Under no circumstances were personal identifiers such as names or addresses removed from the original SAMU records.

RESULTS

During the analyzed period, 216 pediatric cases were recorded by SAMU. Most patients were male (53.7%) and aged 1 to 10 years (62%). The majority of occurrences happened at home (55.5%), with predominance in the afternoon (35.6%) and on weekends (29.1%), as shown in Table 1.

Table 1 – Distribution of pediatric cases attended by SAMU in Anápolis, Goiás, according to time of day and day of the week (January to March 2023).

Horário	n	%
Madrugada (00:00 – 05:59)	29	13,4
Matutino (06:00 – 11:59)	56	25,9
Vespertino (12:00 – 17:59)	77	35,6
Noturno (18:00 – 23:59)	55	25,4
Total	216	100
Dias da semana		
Final de semana (sábado e domingo)	63	29,1
Segunda-feira	32	14,8
Terça-feira	35	16,2
Quarta-feira	23	10,6
Quinta-feira	41	18,9
Sexta-feira	22	10,1
Total	216	100

Fonte: Autor

The main reasons for care varied across the months. In January, the most prevalent causes were convulsive, asthmatic, and anxiety crises, representing 31.2% of cases. These issues are typical among children with chronic conditions such as asthma or febrile seizures, often linked to viral infections common during this season. In February and March, the main causes were other clinical conditions such as diarrhea, vomiting, malaise, fever, aggression, animal bites, rescues, prostration, injuries, and penetrating events, representing 39.5% and 42.2%, respectively, as shown in Table 2.

Table 2 – Distribution of pediatric cases attended by SAMU in Anápolis, Goiás, according to type and reason for attendance (January to March 2023).

Atendimento oferecido pelo SAMU	ANO 2023			
	Janeiro	Fevereiro	Março	Total
	n (%)	n (%)	n (%)	n (%)
Motivos Pediátricos				
Afogamentos	0	2 (2,46)	0	2 (0,9)
Atropelamentos	1 (1,5)	1 (1,2)	1 (1,4)	3 (1,3)
Crises (convulsiva, asmática, ansiedade)	20 (31,2)	12 (14,81)	14 (19,7)	46 (21,)
Dispneia	1 (1,5)	2(2,46)	79,85)	10(4,6)
Engasgo	1(1,5)	1 (1,2)	1 (1,4)	3(1,3)
Intoxicação	2 (3,1)	1 (1,2)	3(4,2)	6(2,7)
Queda, fratura e cortes	7(10,9)	9 (11,1)	7 (9,8)	23(10,6)
Síncope	1(1,5)	3 (3,7)	3(4,2)	7(3,2)
Transferência	14 (21,8)	17 (20,9)	3 (4,2)	34(15,7)
Tentativa de autoextermínio	1 (1,5)	1 (1,2)	1 (1,4)	3(1,3)
Verificação de óbito	1(1,5)	0	1 (1,4)	2 (0,9)
Outros (diarreia, vômito, mal-estar, febre, agressão, picadas de animais, resgate, prostração, ferimentos, evento penetrante)	15 (23,4)	32 (39,5)	30 (42,2)	77 (35,6)
Total	64	81	71	216

Fonte: Autor

This shift in the pattern of emergencies may be linked to the seasonality of viral and gastrointestinal infections, which are more frequent during the summer, in addition to trauma and incidents related to festive activities, such as Carnival.

CONCLUSION

The results highlight the importance of SAMU in pediatric emergency care in Anápolis, especially during weekends and holidays, when the frequency of accidents and acute illnesses among children and adolescents increases. The peak in February, possibly linked to Carnival, underscores the need for appropriate planning during festive periods to ensure a prompt emergency response.

These findings are essential for designing strategies to improve pediatric pre-hospital care and for a more efficient allocation of resources to guarantee timely and effective assistance. Additionally, the results contribute to developing action plans and protocols that can better guide SAMU professionals in managing pediatric emergencies.

ACKNOWLEDGMENTS

Acknowledgments are extended to Prof. Dr. Constanza Thaise Xavier Silva for guidance and to Universidade Evangélica de Goiás for supporting scientific research.

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