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Original Research Article

Profile of paediatric medico legal cases admitted to a tertiary referral hospital over a period of one year

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ABSTRACT

A retrospective study was conducted on the medico-legal cases admitted to the Department of Pediatrics over a period of one year (September 2022-August 2023). A majority of cases reported were accidental poisoning cases (46.47%) among which paint thinner poisoning was the most common. Other cases reported include burns, head trauma, road traffic accidents, fall from height, drowning, hanging and electrocution. A majority of cases reported were in the age group of less than five years. A mortality rate of 3.75% (n=57) was recorded.

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1. Introduction

A medico-legal case is a case of injury or ailment where the attending doctor, after taking a history and a clinical examination of the patient, thinks that some investigation by the law-enforcing agencies is essential owing to the unnatural nature of the injury. The process of providing emergency care is a difficult one in pediatrics more so if this process is complicated by multiple factors, including special legal considerations. Medico legal cases in pediatrics could be accidental, suicidal or homicidal. The study aims to evaluate the fatalities and record the demographic features.

2. Materials and Methods

In the study period of one-year, i.e from September 2022 to August 2023, 213 medico-legal cases involving children admitted to Bapuji Hospital were studied retrospectively. The data thus collected was analyzed to evaluate the spectrum of medico-legal cases.

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3. Results

During the present study period, 14145 children were admitted to the Pediatrics department out of which 213(1.5%) were recorded as medico-legal cases.

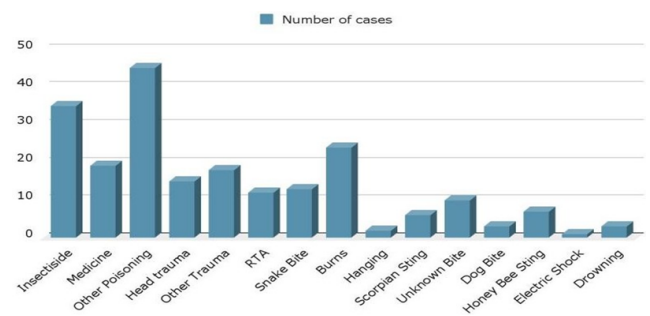


Figure 1: Causes of injury

Figure 1 shows the different causes of hospital admission of which the majority of cases were accidental poisoning (46.47%). Other cases included burns, head trauma, road

traffic accidents, fall from height, drowning, hanging and electrocution.

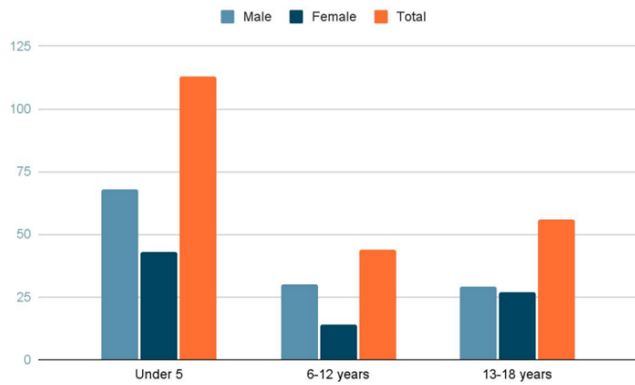


Figure 2: Age and sex wise distribution of cases

Figure 2 shows the age and sex wise distribution of cases and the maximum number of cases were under the age group of 5 years.

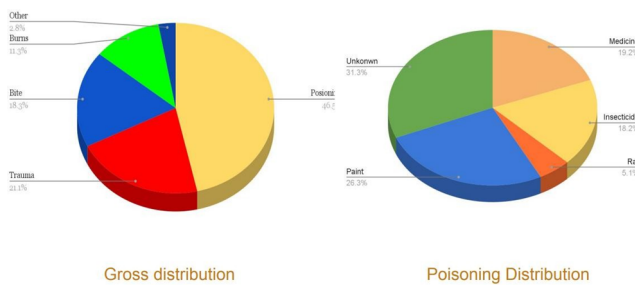


Figure 3: Gross distribution of cases and distribution of poisoning cases

Figure 3 reveals the overall gross distribution of cases and the distribution of poisoning cases.

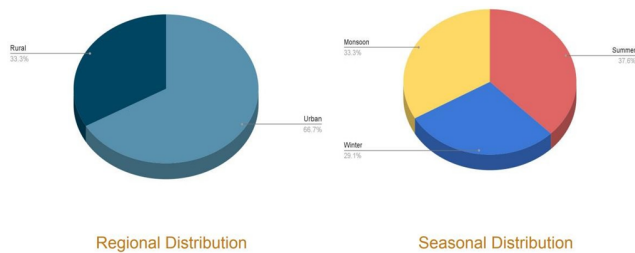


Figure 4: Regional and seasonal distribution of cases

Figure 4 shows the demographic features (regional and seasonal distribution of cases).

4. Discussion

In the present study, only 1.5% of total pediatric cases were found to be medico legal cases which is similar to the

Table 1: Month-wise distribution of the cases

Month	Number of cases	Percentage
September 2022	17	7.98
October 2022	18	8.45
November 2022	09	4.22
December 2022	24	11.26
January 2023	11	5.16
February 2023	15	7.04
March 2023	20	9.38
April 2023	20	9.38
May 2023	25	11.73
June 2023	27	12.67
July 2023	14	6.57
August 2023	13	6.10

study conducted by Ajay et al,¹ and accidental poisoning amounted to a majority of cases similar to other studies.^{2,3} In our study, most of the cases of poisoning were found to be related to paint thinner consumption which was in contrast to the findings of other studies where drug and insecticide poisoning were predominant.⁴⁻¹⁰ This is because paint thinner has a similar consistency to water, can be mistaken to water at night, and can lead to accidental consumption. Our study population was dominated by male children, which was consistent with many studies showing a general tendency to be more prevalent in male children.¹¹ Social and cultural factors contribute to this aspect of negligence towards male progeny. The rural-to Urban case ratio was 1.95:1. This may be because of younger parents, lower education, and lower income in families.¹² Like previous studies,^{4-9,11,13} our cases too frequently presented in the summer season (37.5%). This could be due to summer holidays at school, where children stayed longer at home and spent more outdoor time than any other season and are also susceptible to animal bites.

5. Conclusion

In developing countries, a combination of factors contributing to accidental poisoning among children is likely to exist in households of lower socio-economic groups. Such a family is vulnerable to having a lower standard of housing hence inadequate space to live. The mother has to cope with difficult and time-consuming household chores which minimizes the time to supervise their young ones leading to an increased number of pediatric cases of poisoning and accidental trauma.

Preventive measures are the need of the hour, mainly in the form of spreading awareness among parents, guardians and children.

6. Source of Funding

None.

7. Conflict of Interest

None.

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