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"Clock System" for multiple antiepileptic drugs enhances caregiver adherence, improving seizure management for children with epilepsy at Apollo Children's Hospital, Chennai.

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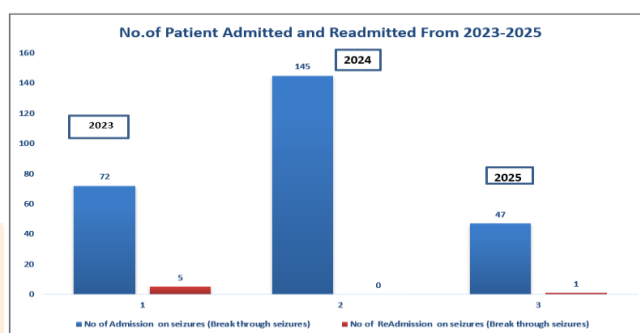
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Abstract

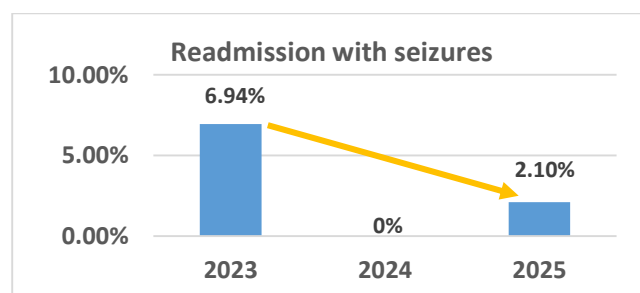
Poor compliance with antiepileptic drugs (AEDs) increases morbidity and mortality rates among children with epilepsy. This study aimed to evaluate the effectiveness of a clock system for multiple drugs of same action in improving AED compliance among caregivers of children with epilepsy.

Introduction

Epilepsy is a chronic neurological disorder affecting millions worldwide. AEDs are the cornerstone of treatment, but poor compliance (1) can lead to increased seizures, morbidity, and mortality. This study implemented a clock system to improve AED compliance among caregivers of children with epilepsy. this study



among caregivers (3). In 2023 we have implemented clock system in hospital for patients and the Readmission with similar complaints was 6.94%. In 2024 after implementing clock system for patient family engagement (PFE) after discharge out of 145 patients 0% Readmitted with similar complaints. In 2025 there was only 2.1% readmitted with similar complaints. Which is 71.1% decreased in readmission happened to 2023.

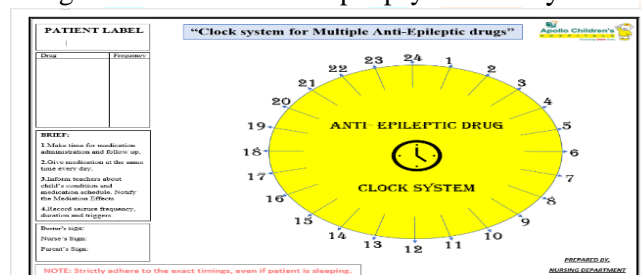


Discussion

The clock system demonstrated effectiveness in improving AED compliance, reducing morbidity and This innovative approach can be adopted in various healthcare settings to improve medication management.

Conclusion

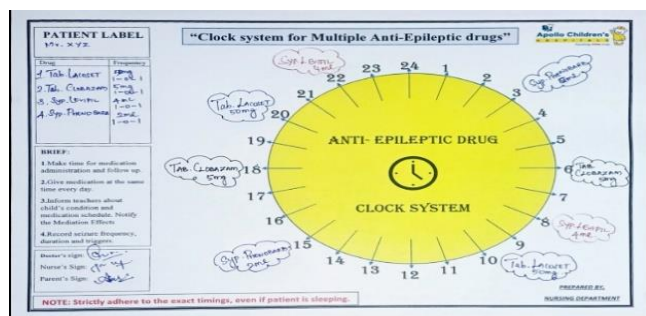
The clock system for multiple drugs of same action is a valuable tool in improving AED compliance among caregivers of children with epilepsy. Its implementation can lead to better seizure control, reduced healthcare costs, and improved patient outcomes.



put in place a clock system

Methods

The clock system was designed to schedule and administer AEDs at precise timings, ensuring continuity of medication with regular intervals. Caregivers of children with epilepsy were counselled on proper drug compliance and a detailed demonstration of exact dose, method of dispensing, and frequency was carried out (2).



Results

This study assesses the effectiveness of implementing a clock system for Multiple Drugs of Same Action to Improve Antiepileptic Drug Compliance among Caregivers of Children with Epilepsy significantly improved AED compliance

Recommendations

Healthcare providers can adopt this clock system to improve medication management and patient safety. Further research can explore the application of this system in other chronic diseases.

AED - Anti Epileptic Drugs

PFE – Patient family engagement

Key Words

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