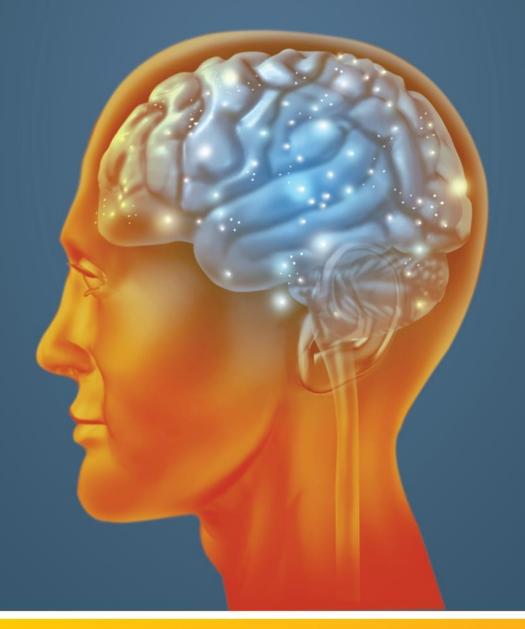
Patient Profiles for Treatment with Clobazam: Prescribing for Epilepsy and Lennox-Gastaut Syndrome



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#### **INTRODUCTION**

Epilepsy is a chronic neurological disorder characterized by recurrent seizures due to abnormal electrical activity in the brain. Seizures can vary in type, severity, and frequency, depending on the individual and the type of epilepsy. Globally, epilepsy is a widespread condition, affecting millions of people, with varying degrees of impact on individuals' lives. Lennox-Gastaut Syndrome (LGS) is a severe form of epilepsy, typically diagnosed in childhood, and is considered one of the most treatment-resistant epilepsy syndromes.

Lennox-Gastaut Syndrome (LGS) is a complex and debilitating disorder that presents with a range of symptoms beyond seizures. The hallmark of LGS is the occurrence of multiple seizure types, including drop seizures, which are characterized by sudden muscle weakness causing the patient to collapse. These seizures are often difficult to manage and can lead to physical injuries. In addition to seizures, individuals with LGS frequently experience cognitive impairment, developmental delays, and behavioral issues. Because of the severity and complexity of LGS, it imposes a significant burden on patients, their families, and caregivers. The need for continuous care and attention makes it one of the most challenging conditions to manage in pediatric neurology (1).

One of the major challenges in managing LGS is that traditional antiepileptic drugs (AEDs) often fail to control seizures effectively. Many patients with LGS require polytherapy (the use of multiple medications) because no single AED is sufficient to manage all the symptoms associated with the disorder. Pharmacoresistance (resistance to medication) is a significant concern for patients with LGS, meaning that they do not respond well to many of the standard therapies available. This highlights the need for alternative treatment options that are specifically designed for more difficult-to-treat conditions like LGS (2).

Given the treatment-resistant nature of LGS, researchers and clinicians are always looking for better therapies that can control seizures more effectively while minimizing side effects. Traditional AEDs often have significant side effects, which can further complicate treatment. Therefore, there is an urgent need for novel therapeutic options that offer better seizure control with fewer adverse effects. This is where Clobazam comes into play.

Clobazam is a benzodiazepine, a class of drugs commonly used for anxiety and seizure disorders. It has anticonvulsant properties due to its action on the GABA (gamma-aminobutyric acid) system. GABA is the brain's primary inhibitory neurotransmitter, and Clobazam works by enhancing GABAergic neurotransmission. This means that it helps to increase the activity of GABA in the brain, leading to a calming effect on neuronal activity. By reducing excitability in the brain, Clobazam can help prevent the abnormal electrical discharges that cause seizures (4).

In clinical practice, Clobazam is often prescribed as an adjunctive therapy for patients with refractory epilepsy, particularly those with LGS. While Clobazam may not be effective as a standalone treatment, it can significantly reduce seizure frequency and severity when added to other medications. This is especially true for drop seizures, which are particularly challenging to manage in LGS patients. Studies have shown that Clobazam can be effective in reducing these debilitating seizures, thereby improving both the quality of life for patients and the overall management of the condition (5).

However, despite the documented benefits of Clobazam in clinical trials, there are still many unanswered questions regarding its real-world effectiveness. Clinical trials often involve a controlled environment where variables are limited, but in real-world settings, patients may present with a variety of comorbid conditions, varying seizure types, and differing levels of response to medications.

Thus, it is important to assess how Clobazam performs in routine clinical practice, including its long-term safety, potential side effects, and overall efficacy. Additionally, the question of optimal patient selection is critical, as not all individuals with LGS may benefit equally from Clobazam. Some may have better responses than others based on genetic factors, comorbid conditions, or their specific seizure profiles (6).

The objective of this study is to gather data on how Clobazam is used in everyday clinical practice for patients with Lennox-Gastaut Syndrome and other types of epilepsy. This includes understanding prescribing patterns—how frequently Clobazam is prescribed, which clinicians are most likely to use it, and the characteristics of the patient populations that benefit from its use. The study will also investigate clinician perceptions regarding Clobazam's effectiveness, its side effects, and its role within the broader context of epilepsy treatment. Additionally, this study aims to provide insights into patient demographics, identifying which patient profiles are most likely to receive Clobazam and how it compares to other therapies in the treatment of LGS (7).

#### **RATIONALE OF THE STUDY**

Lennox-Gastaut Syndrome is notoriously resistant to treatment, and patients often require multiple medications and therapies to control their seizures. Since **Clobazam** has demonstrated effectiveness in clinical trials, it represents a promising option for patients with treatment-resistant epilepsy. However, real-world effectiveness can differ from trial results due to the diverse patient profiles, comorbidities, and the complexity of managing epilepsy.

The rationale behind this study is to bridge the gap between the controlled settings of clinical trials and the practical application of Clobazam in everyday healthcare. While trials provide evidence of efficacy, they often involve a narrow patient population and controlled environments that may not capture all the complexities encountered in clinical practice. This study aims to evaluate how Clobazam performs in a diverse, real-world cohort of patients with LGS, considering the impact of comorbidities, treatment resistance, and long-term safety concerns. The findings will help determine whether Clobazam can be more widely adopted as a first-line or adjunctive therapy and how it fits into the overall treatment landscape for epilepsy.

#### **STUDY OBJECTIVE**

The primary objective of this study is to assess the real-world usage, effectiveness, and safety of Clobazam in the treatment of epilepsy, with a specific focus on its role in managing Lennox-Gastaut Syndrome. The study aims to:

- 1. Assess Clinician Awareness and Familiarity: Determine how well clinicians are informed about Clobazam, its mechanism of action, and its role in treating refractory epilepsy and LGS.
- 2. Evaluate Prescribing Patterns: Identify the frequency with which Clobazam is prescribed for epilepsy, especially for patients with LGS, and the conditions under which it is chosen over other treatment options.
- 3. Analyze Effectiveness and Safety: Examine clinicians' perceptions of Clobazam's effectiveness in reducing seizures and its safety profile, including common side effects such as sedation and behavioral changes.
- 4. **Explore Patient Demographics:** Investigate the patient populations most frequently prescribed Clobazam, including age groups, comorbid conditions, and the presence of treatment-resistant epilepsy.

5. **Identify Barriers and Opportunities:** Explore challenges to the adoption of Clobazam in routine practice, including cost, side effects, and potential barriers to patient adherence, as well as opportunities for improving its clinical utilization.

#### METHODS

This study uses a mixed-methods approach to gather both quantitative and qualitative data, ensuring a comprehensive view of Clobazam's real-world use. Here are the methods in detail:

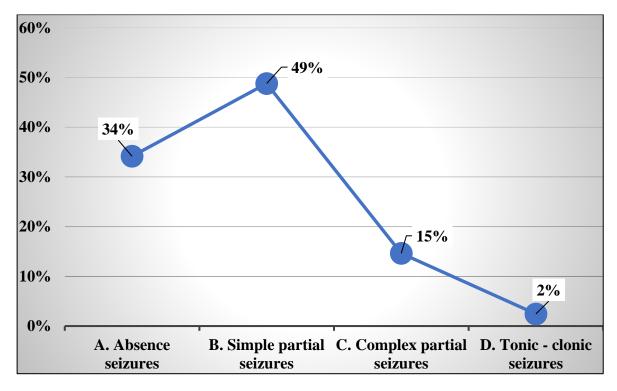
- 1. **Survey Design**: A structured questionnaire will be created to gather information about healthcare providers' knowledge, prescribing practices, and experiences with Clobazam in treating epilepsy, particularly LGS. The survey will include questions about the types of patients prescribed Clobazam, the number of doses used, and the effectiveness observed. It will also inquire about any challenges clinicians face with its prescription or concerns about side effects.
- 2. **Participant Recruitment**: The survey will be distributed to neurologists, epileptologists, and general practitioners who are involved in the care of patients with epilepsy. These professionals will be selected based on their experience treating epilepsy and familiarity with Clobazam. It is crucial to include a broad spectrum of clinicians to understand how Clobazam is prescribed across different healthcare settings and regions.
- 3. **Data Collection**: Data will be collected over a defined period (e.g., 3 months), and responses will be anonymized to ensure confidentiality and eliminate bias. This ensures that the study reflects real-world, unfiltered experiences from clinicians.

- 4. Data Analysis: Collected data will be analyzed using quantitative methods (e.g., descriptive statistics) to identify trends in prescribing practices, effectiveness ratings, and safety concerns. Additionally, qualitative analysis will be conducted to capture detailed clinician perspectives on Clobazam's use and its impact on patient care. The data analysis will help identify any correlations between prescribing practices and patient outcomes, as well as the challenges faced by clinicians when managing LGS.
- 5. Ethical Considerations: Ethical approval will be obtained from relevant authorities, and all participants will provide informed consent before participating in the study. This ensures that the study complies with ethical research standards and that clinicians' data and feedback are protected.

#### RESULTS

A total of 84 HCPs participated in the survey. Below is the summary of the responses.

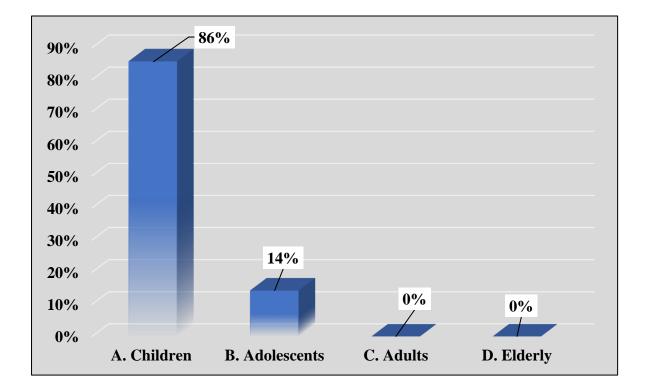
- **1. In your clinical opinion, for which type of seizure do you prefer to prescribe clobazam as an adjunctive therapy?** 
  - A. Absence seizures
  - B. Simple partial seizures
  - C. Complex partial seizures



D. Tonic - clonic seizures

- Absence seizures (34%): A significant portion of clinicians prefer clobazam for absence seizures, highlighting its benefit for this type.
- Simple partial seizures (49%): The majority of clinicians use clobazam for simple partial seizures, indicating it is a commonly prescribed therapy.
- Complex partial seizures (15%) & Tonic-clonic seizures (2%): Clobazam is less commonly used for tonic-clonic and complex partial seizures, with only a small percentage of clinicians prescribing it for these types.

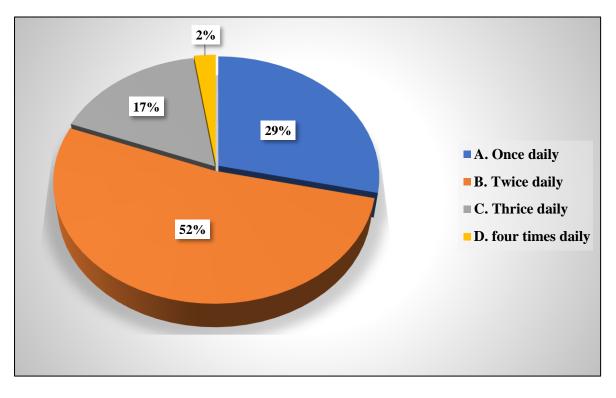
- 2. According to your opinion, for which age group do you consider to prescribe Clobazam for the treatment of Lennox-Gastaut Syndrome?
  - A. Children
  - B. Adolescents
  - C. Adults
  - D. Elderly



- Children (86%): The majority of clinicians consider Clobazam for the treatment of Lennox-Gastaut Syndrome in children.
- Adolescents (14%): A small portion of clinicians prescribe Clobazam to adolescents for treating Lennox-Gastaut Syndrome.
- Adults (0%) & Elderly (0%): None of the clinicians report prescribing Clobazam for adults & elderly in the context of Lennox-Gastaut Syndrome.

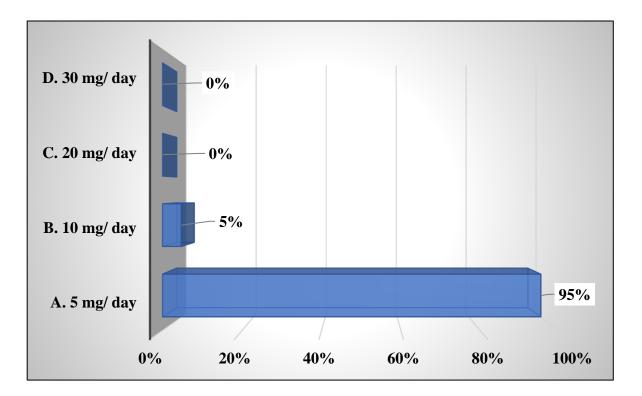
# 3. According to you, what is the typical dosing frequency for Clobazam in the management of Lennox-Gastaut Syndrome?

- A. Once daily
- B. Twice daily
- C. Thrice daily
- D. four times daily



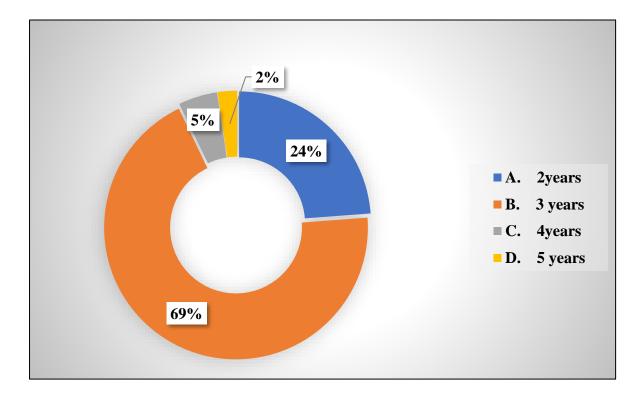
- Once daily (29%): A significant portion of clinicians recommend a oncedaily dosing frequency for Clobazam in Lennox-Gastaut Syndrome.
- Twice daily (52%): Most clinicians prefer twice-daily dosing, indicating its widespread acceptance as the optimal regimen.
- Thrice daily (17%): Some clinicians opt for a thrice-daily schedule to manage symptoms effectively.
- Four times daily (2%): A very small number of clinicians use a four-timesdaily dosing approach.

- 4. In your clinical practice, what is the recommended starting dose of Clobazam for adult patients with epilepsy?
  - A. 5 mg/ day
  - B. 10 mg/ day
  - C. 20 mg/ day
  - D. 30 mg/ day



- **5 mg/day (95%):** The majority of clinicians recommend starting adult epilepsy patients on a low dose of 5 mg/day, highlighting its widespread acceptance as the preferred initial dose.
- 10 mg/day (5%): A small percentage of clinicians suggest beginning with a slightly higher dose of 10 mg/day.
- 20 mg/day (0%) & 30 mg/day (0%): No clinicians advocate for starting at this dose.

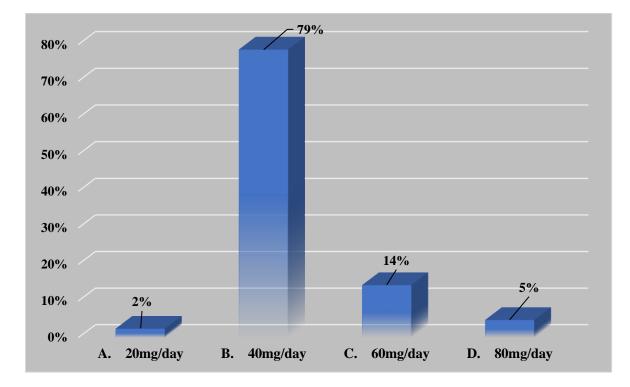
- 5. According to your opinion, at what age can Clobazam be initiated for pediatric patients with Lennox-Gastaut Syndrome?
  - A. 2 years
  - B. 3 years
  - C. 4 years
  - D. 5 years



- 2 years (24%): Nearly a quarter of clinicians believe Clobazam therapy can be initiated at the age of 2 for pediatric patients with Lennox-Gastaut Syndrome.
- **3 years (69%):** The majority of clinicians consider 3 years as the appropriate starting age for Clobazam use in these patients.
- 4 years (5%) & 5 years (2%): A small fraction suggests initiating therapy at 4 & 5 years of age.

# 6. In your opinion, what is the maximum recommended daily dose of Clobazam for adult patients with epilepsy?

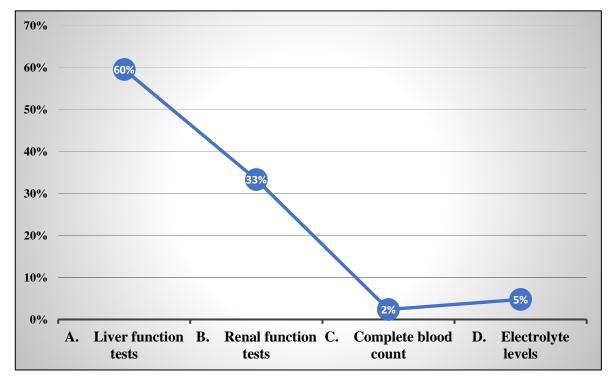
- A. 20mg/day
- B. 40mg/day
- C. 60mg/day
- D. 80mg/day



- 20 mg/day (2%): A very small percentage of clinicians believe the maximum recommended daily dose of Clobazam for adult patients is 20 mg.
- 40 mg/day (79%): The majority agree that 40 mg/day is the standard maximum dose for adult patients with epilepsy.
- **60 mg/day (14%):** Some clinicians consider 60 mg/day as the upper limit for dosing.
- 80 mg/day (5%): A minimal number of clinicians suggest that 80 mg/day is the maximum recommended dose.

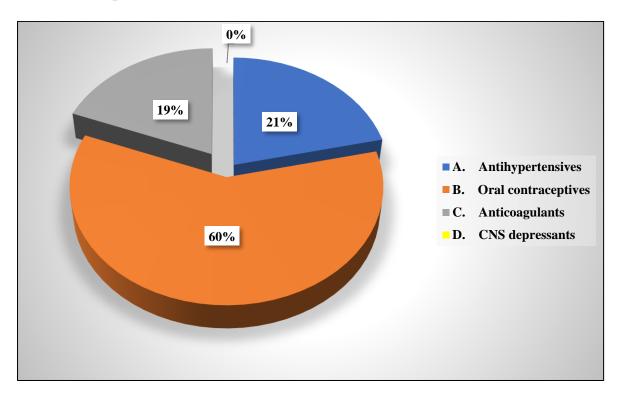
## 7. In your opinion, what monitoring parameter is essential for patients on long-term clobazam therapy?

- A. Liver function tests
- B. Renal function tests
- C. Complete blood count
- D. Electrolyte levels



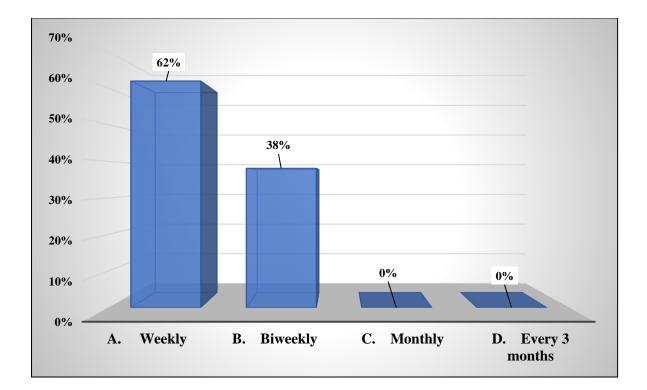
- Liver function tests (60%): The majority of clinicians emphasize the importance of monitoring liver function in patients on long-term Clobazam therapy.
- **Renal function tests (33%):** A significant portion of clinicians prioritize renal function monitoring to ensure patient safety.
- **Complete blood count (2%):** Very few clinicians consider routine blood counts essential for monitoring during Clobazam therapy.
- Electrolyte levels (5%): A small number of clinicians highlight the need to monitor electrolyte levels in patients receiving Clobazam long-term.

- 8. According to you, which of the following drug interactions should be monitored closely when prescribing clobazam?
  - A. Antihypertensives
  - B. Oral contraceptives
  - C. Anticoagulants
  - D. CNS depressants



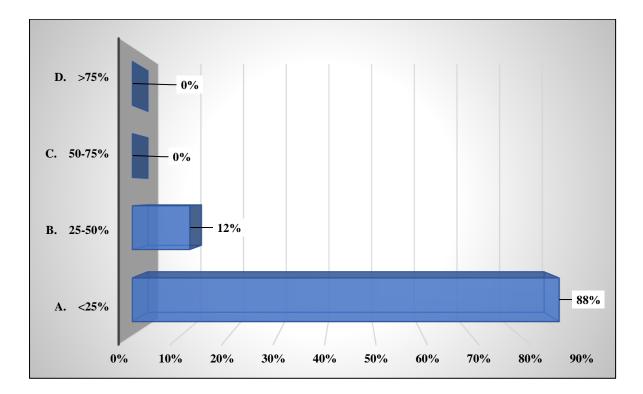
- Oral contraceptives (60%): The majority of clinicians stress closely monitoring interactions between Clobazam and oral contraceptives due to potential efficacy reduction.
- Antihypertensives (21%): Some clinicians highlight the need to monitor interactions with antihypertensives to avoid adverse effects.
- Anticoagulants (19%): A smaller group focuses on potential interactions with anticoagulants, which could impact clotting profiles.

- 9. In your clinical practice, how often do you typically titrate the dosage of clobazam in adult patients with epilepsy to achieve optimal seizure control?
  - A. Weekly
  - B. Biweekly
  - C. Monthly
  - D. Every 3 months



- Weekly (62%): Most clinicians prefer weekly dosage titration of Clobazam in adult epilepsy patients, ensuring a balance between efficacy and tolerability.
- **Biweekly (38%):** A significant proportion of clinicians favor biweekly adjustments, allowing more time to observe patient response.

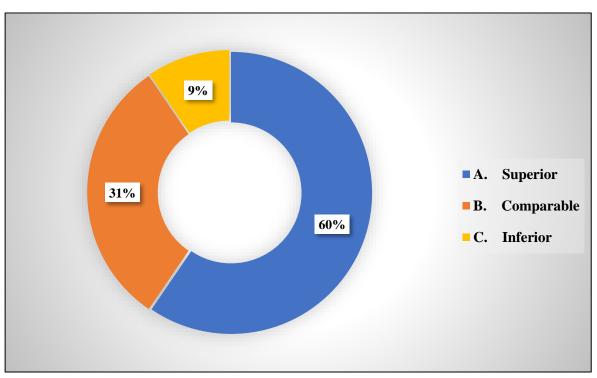
- 10. When prescribing clobazam for Lennox-Gastaut Syndrome, what percentage of your patients have shown a noticeable reduction in seizure frequency?
  - A. <25%
  - B. 25-50%
  - C. 50-75%
  - D. >75%



- <25% (88%): The vast majority of clinicians observe that less than 25% of their patients experience a noticeable reduction in seizure frequency with Clobazam for Lennox-Gastaut Syndrome.
- 25-50% (12%): A smaller group reports that 25-50% of their patients benefit from a reduction in seizure frequency.

# 11. In your opinion, how does the efficacy of clobazam compare to other antiepileptic drugs in the management of Lennox-Gastaut Syndrome?

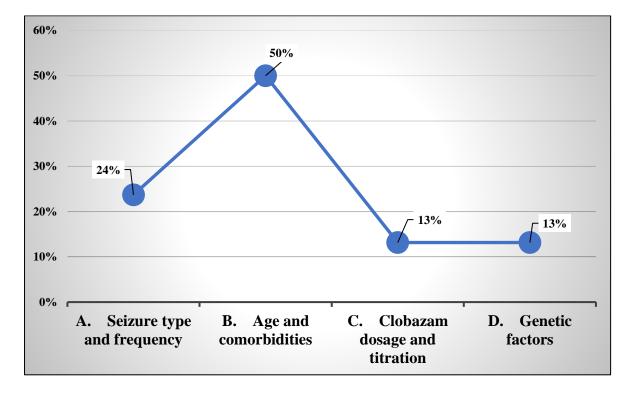
- A. Superior
- B. Comparable
- C. Inferior



- Superior (60%): The majority of clinicians believe Clobazam demonstrates superior efficacy compared to other antiepileptic drugs in managing Lennox-Gastaut Syndrome.
- **Comparable (31%):** A significant portion considers Clobazam's efficacy to be on par with other treatments.
- Inferior (10%): A minority perceive Clobazam as less effective than alternative antiepileptic drugs for this condition.

# 12. In your opinion, what factors contribute most to the variability in clobazam's efficacy among patients with epilepsy?

- A. Seizure type and frequency
- B. Age and comorbidities
- C. Clobazam dosage and titration
- D. Genetic factors

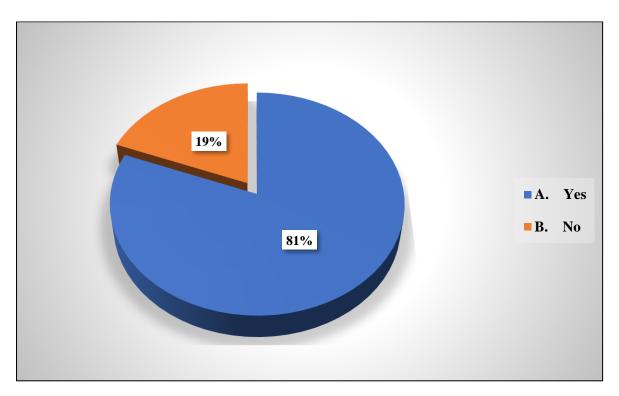


- Seizure type and frequency (24%): Some clinicians attribute the variability in Clobazam's efficacy to differences in seizure characteristics.
- Age and comorbidities (50%): Half of the clinicians believe patientspecific factors like age and accompanying health conditions significantly influence treatment outcomes.
- Clobazam dosage and titration (13%) & Genetic factors (13%): A smaller group highlights the combined importance of proper dosing, adjustment, and genetic variability in determining efficacy.

- 13. In your experience, how would you rate the efficacy of clobazam as an adjunctive therapy in reducing seizure frequency in patients with epilepsy?
  - A. Very Effective
  - B. Moderately Effective
  - C. Slightly Effective
  - 65% 70% 60% 50% 40% 30% 18% 15% 20% 3% 10% 0% Very effective **B.** Moderately C. Slightly Ineffective D. A. effective effective
  - D. Ineffective

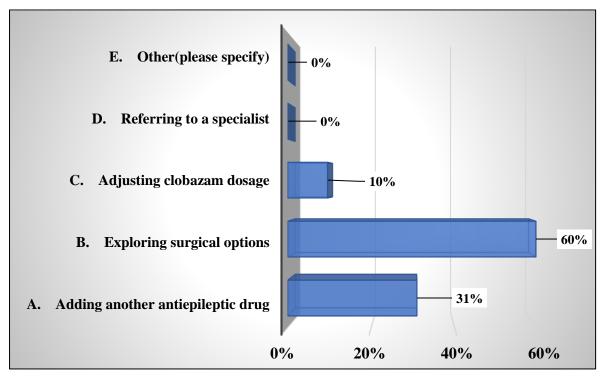
- Very effective (18%) & moderately effective (15%): A small percentage of clinicians rate Clobazam as either highly effective or moderately effective in reducing seizure frequency in patients with epilepsy.
- Slightly effective (65%): The majority of clinicians find Clobazam to be only slightly effective as adjunctive therapy in reducing seizure frequency.
- Ineffective (3%): A very small number of clinicians view Clobazam as ineffective in reducing seizure frequency.

- 14. In your clinical practice, have you encountered cases where clobazam's efficacy decreased over time in patients with epilepsy or Lennox-Gastaut Syndrome?
  - A. Yes
  - B. No



- Yes (81%): A significant majority of clinicians report encountering cases where Clobazam's efficacy diminished over time in managing epilepsy or Lennox-Gastaut Syndrome.
- No (19%): A minority of clinicians have not observed a decrease in Clobazam's efficacy over time in their practice.

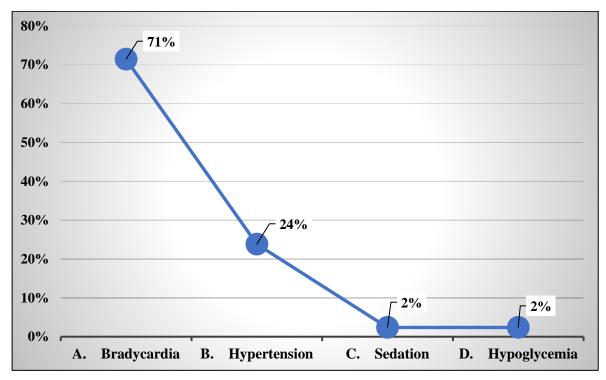
- 15. In your clinical practice, what strategies do you typically consider for adjunctive therapies in patients who do not respond adequately to clobazam?
  - A. Adding another antiepileptic drug
  - B. Exploring surgical options
  - C. Adjusting clobazam dosage
  - D. Referring to a specialist
  - E. Other (please specify)



- Adding another antiepileptic drug (31%): Some clinicians consider adding another antiepileptic drug to enhance seizure control in patients who do not respond well to Clobazam.
- Exploring surgical options (60%): A majority of clinicians explore surgical options for patients with inadequate response to Clobazam, often when other therapies fail.
- Adjusting Clobazam dosage (10%): A small portion of clinicians consider adjusting the Clobazam dosage to improve efficacy.

## 16. In your experience, which of the following is a common adverse effect associated with clobazam use?

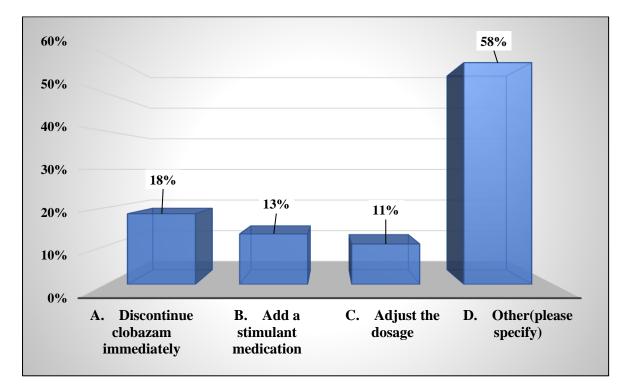
- A. Bradycardia
- B. Hypertension
- C. Sedation
- D. Hypoglycemia



- **Bradycardia (71%):** A majority of clinicians report bradycardia as a common adverse effect associated with clobazam use.
- Hypertension (24%): Some clinicians observe hypertension as a possible adverse effect, though less common than bradycardia.
- Sedation (2%): A small percentage of clinicians experience sedation as an adverse effect, though it is not as prominent.
- **Hypoglycemia (2%):** Very few clinicians identify hypoglycemia as a side effect of clobazam.

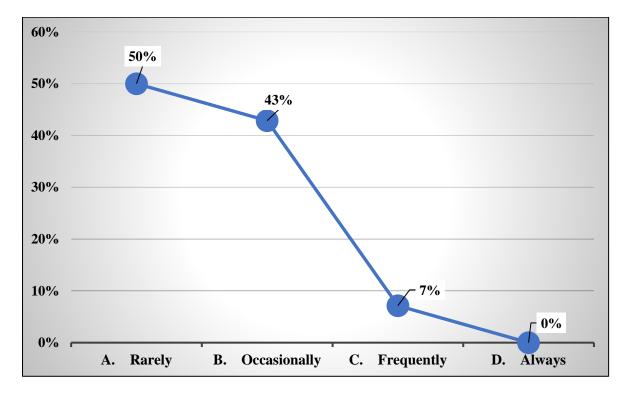
## 17. In your clinical practice, what is your recommended approach if a patient experiences excessive sedation while on clobazam therapy?

- A. Discontinue clobazam immediately
- B. Add a stimulant medication
- C. Adjust the dosage
- D. Other (please specify)



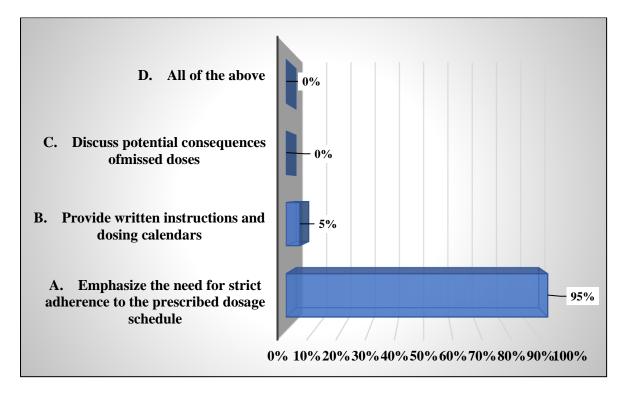
- Discontinue clobazam immediately (18%), Add a stimulant medication (13%) & Adjust the dosage (11%): A small portion of clinicians would choose to stop clobazam therapy immediately if excessive sedation occurs, while others might consider adding a stimulant or adjusting the dosage to mitigate.
- Other (please specify) (58%): The majority of clinicians would consider alternative approaches, possibly including switching medications or adjusting the treatment regimen based on the patient's response.

- 18. In your clinical practice, how often do you adjust the dosage of clobazam in patients with epilepsy or Lennox-Gastaut Syndrome to optimize efficacy?
  - A. Rarely
  - B. Occasionally
  - C. Frequently
  - D. Always



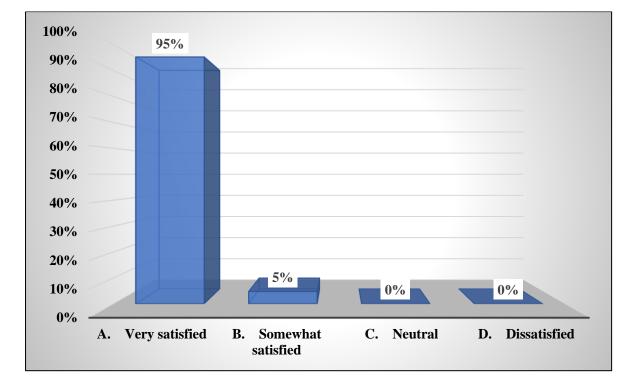
- **Rarely (50%):** Half of the clinicians report rarely adjusting the dosage of clobazam to optimize efficacy in patients with epilepsy or Lennox-Gastaut Syndrome.
- Occasionally (43%): A significant portion of clinicians occasionally adjust the dosage as needed to optimize treatment outcomes.
- Frequently (7%): A smaller percentage of clinicians frequently adjust the dosage in their practice.

- 19. In your clinical practice, how do you counsel the patients or caregivers regarding the importance of adhering to the prescribed dosage regimen of clobazam?
  - A. Emphasize the need for strict adherence to the prescribed dosage schedule
  - B. Provide written instructions and dosing calendars
  - C. Discuss potential consequences of missed doses
  - D. All of the above



- Emphasize the need for strict adherence to the prescribed dosage schedule (95%): The vast majority of clinicians emphasize the importance of strict adherence to the prescribed dosage regimen when counseling patients or caregivers about clobazam.
- **Provide written instructions and dosing calendars (5%):** A small portion of clinicians provide written instructions and dosing calendars to assist with adherence.

- 20. In your clinical experience, how satisfied are patients and caregivers with the efficacy of clobazam in managing epilepsy or Lennox-Gastaut Syndrome?
  - A. Very satisfied
  - B. Somewhat satisfied
  - C. Neutral
  - D. Dissatisfied



- Very satisfied (95%): The majority of clinicians report that patients and caregivers are very satisfied with the efficacy of clobazam in managing epilepsy or Lennox-Gastaut Syndrome.
- Somewhat satisfied (5%): A small portion of clinicians indicate that patients and caregivers are somewhat satisfied with its efficacy.

#### SUMMARY

This study provides valuable insights into the clinical practice of prescribing Clobazam for the management of Lennox-Gastaut Syndrome (LGS) and other seizure disorders. The data highlights the widespread use of Clobazam, particularly in children and for specific seizure types, along with its clinical benefits and challenges.

#### Prevalence of Seizure Types Treated with Clobazam:

- Absence seizures (34%): Clobazam is commonly prescribed for absence seizures, with 34% of clinicians indicating its frequent use for this type.
- Simple partial seizures (49%): The majority (49%) of clinicians favor Clobazam for simple partial seizures, making it one of the most commonly prescribed therapies.
- Complex partial seizures (15%) & Tonic-clonic seizures (2%): Clobazam is less commonly used for complex partial seizures (15%) and tonic-clonic seizures (2%), indicating its primary use for certain seizure types.

#### **Patient Demographics:**

- Children (86%): The majority (86%) of clinicians consider Clobazam for the treatment of Lennox-Gastaut Syndrome (LGS) in children, reflecting its primary use in pediatric cases.
- Adolescents (14%): A small portion (14%) of clinicians use Clobazam for adolescents with LGS.
- Adults (0%) & Elderly (0%): Clobazam is not prescribed for adults or elderly patients with LGS, as none of the clinicians report using it for these populations.

### **Dosing Preferences:**

- Once daily (29%): A significant portion (29%) of clinicians recommend a once-daily dosing schedule for Clobazam in LGS.
- Twice daily (52%): Most clinicians (52%) prefer a twice-daily dosing regimen.
- Thrice daily (17%): Some clinicians (17%) opt for a thrice-daily dosage for better symptom control.
- Four times daily (2%): A very small percentage (2%) use a four-timesdaily dosing schedule.

## **Dosing Initiation and Maximum Dose:**

- **5 mg/day (95%):** The majority (95%) of clinicians recommend initiating Clobazam therapy with a 5 mg/day dose for adult epilepsy patients, making it the most accepted starting dose.
- 10 mg/day (5%): A small portion (5%) initiate treatment with a 10 mg/day dose.
- Maximum Dose:
- 40 mg/day (79%) is the most commonly accepted maximum dose for adult patients.
- 60 mg/day (14%) and 80 mg/day (5%) are considered upper limits by some clinicians.

## Age of Initiation:

- 2 years (24%): A quarter of clinicians consider starting Clobazam therapy for LGS patients at 2 years of age.
- **3 years (69%):** Most clinicians (69%) initiate therapy at 3 years.

• 4 years (5%) & 5 years (2%): A small fraction (5% and 2%, respectively) recommend starting treatment at 4 or 5 years.

### **Monitoring Parameters:**

- Liver function tests (60%): The majority (60%) of clinicians emphasize monitoring liver function in patients on long-term Clobazam therapy.
- Renal function tests (33%): A significant portion (33%) prioritize monitoring renal function for patient safety.
- Electrolyte levels (5%): A small number (5%) of clinicians monitor electrolyte levels during Clobazam treatment.

### **Drug Interactions:**

- Oral contraceptives (60%): Clinicians often monitor interactions between Clobazam and oral contraceptives, due to potential effects on efficacy.
- Antihypertensives (21%) and Anticoagulants (19%): Some clinicians emphasize interactions with antihypertensives (21%) and anticoagulants (19%).

## **Efficacy and Effectiveness:**

- Seizure frequency reduction: Most clinicians (88%) report that less than 25% of their patients experience a noticeable reduction in seizure frequency with Clobazam.
- Efficacy comparison: 60% of clinicians rate Clobazam as superior in efficacy compared to other antiepileptic drugs, while 31% find it comparable to other treatments.

#### **Adverse Effects:**

- **Bradycardia (71%):** A majority (71%) of clinicians report bradycardia as a common adverse effect of Clobazam use.
- **Hypertension (24%):** Some clinicians observe hypertension as a possible side effect, though less common.
- Sedation (2%) and Hypoglycemia (2%): Few clinicians report sedation or hypoglycemia as side effects.

#### **Patient Satisfaction:**

• Very satisfied (95%): A significant majority (95%) of clinicians report that patients and caregivers are very satisfied with Clobazam's efficacy in managing LGS.

#### DISCUSSION

The survey reveals that Clobazam is widely regarded as an effective treatment for Lennox-Gastaut Syndrome (LGS), especially for pediatric patients. It is commonly prescribed for absence seizures and simple partial seizures, with a marked preference for twice-daily dosing. Clobazam is seen as superior in efficacy compared to other antiepileptic drugs, though its use is somewhat limited by its adverse effects, particularly bradycardia.

Clinicians emphasize the importance of regular monitoring, especially for liver function, and the need to adjust dosages based on patient response. The initial dosing at 5 mg/day and titration frequency (often weekly) appear to align with clinical best practices. While Clobazam is more effective for some patients than others, particularly those with age-related and seizure type factors, the efficacy is noted as slightly effective for the majority of patients.

## **CLINICAL RECOMMENDATIONS**

- Integration into Treatment Plans: Clobazam should be prioritized for children with Lennox-Gastaut Syndrome and for patients with absence seizures or simple partial seizures who do not respond to first-line therapies.
- **Dosage Guidance**: Clinicians should start with a 5 mg/day dose, gradually adjusting based on age, comorbidities, and seizure type. Most clinicians recommend a twice-daily regimen.
- Monitoring and Management: Regular monitoring of liver function and renal function is crucial, especially for long-term therapy.
- **Patient Education**: Educate caregivers and patients on the importance of adherence to the prescribed regimen, especially regarding potential side effects like bradycardia.

### **CONSULTANT OPINION**

Expert consultants view Clobazam as an effective and safe option for managing Lennox-Gastaut Syndrome (LGS), with particular focus on its efficacy in children and patients with absence seizures. They recommend continued monitoring of long-term efficacy, particularly given the potential for diminished effect over time.

## **MARKET OPPORTUNITIES**

**Unmet Medical Needs:** The survey highlights a significant gap in seizure control for patients with Lennox-Gastaut Syndrome, especially as Clobazam is seen as more effective than other drugs.

**High Prescription Rate:** The widespread use of Clobazam reflects strong adoption and confidence in its efficacy for children with LGS.

**Patient Satisfaction:** The high patient satisfaction reported, particularly in reducing seizure frequency, positions Clobazam as a key treatment option in the seizure management market.

**Efficacy and Safety**: Despite moderate efficacy in reducing seizure frequency, Clobazam remains a valuable therapy, especially due to its manageable side effect profile.

## MARKET POSITIONING

**Targeted Marketing to Clinicians:** Emphasize Clobazam's unique benefits for pediatric patients with LGS and its non-vasoconstrictor properties.

**Educational Initiatives:** Develop clinician education programs to highlight the titration schedule, side effect management, and patient outcomes.

**Patient-Centric Approaches:** Promote Clobazam as a patient-friendly option, especially for children with severe epilepsy.

**Strategic Pricing and Access:** Ensure Clobazam remains accessible to pediatric patients through affordable pricing and insurance partnerships.

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