with Mentat remarkably reduced oxidative stress and inflammation in the hippocampus, indicating that Mentat may have a protective effect on this brain region. Goyal *et al*.,[37] in their study on the effect of Mentat on cognitive function and hippocampal neurogenesis in rats with seizures, revealed that treatment with Mentat significantly boosted hippocampus neurogenesis and improved cognitive performance in the rats, indicating that Mentat may benefit brain plasticity.

Conclusion

The results of this study imply that Mentat has a protective effect against seizure-induced mice and may be employed in the control and treatment of seizures and other neurological diseases.

Patient informed consent

There is no need for patient informed consent.

Ethics committee approval

The Faculty of Basic Medical Sciences Committee on Animal Use and Care, University of Calabar, approved the use of experimental animals for this research project by the institution's established policies and procedures.

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Conflict of interest

There is no conflict of interest to declare.

Author Contributions subject and rate

- Ekpo Ubong Udeme (60%): Design the research, data collection, and analyses
- Igiri Anozeng Oyono (40%): Supervision and research organization.

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