**ABSTRACT**

Brain tumors are important medical issues and must be detected quickly and accurately to give the right treatment. Checking the MRI scans manually can be slow and can have many human errors, so to make it easy and error-free, we use automated solutions, which are very important in the medical field. In our research, we found that there are many models that help us to find the brain tumors and the type of brain tumor. We reviewed the mostly used model known as Convolutional Neural Networks (CNN), which uses the BRATS dataset to create a better system for classifying and segmenting brain tumors. The aim is to improve both segmentation precision and classification accuracy, solving the problems while detecting the types and levels of brain tumor detection. The research used several deep learning methods. Techniques like ResNet and VGGNet, along with hybrid models such as CapsNet and VGGNet were applied. While these have helped find tumors better, gaps still exist in the research. A major issue is that there are not enough types of brain tumors classified thoroughly. Many models struggle to tell apart different tumors, and older methods often made mistakes in outlining the tumor areas on MRI scans. The approach of using deep learning boosts pixel-wise segmentation and enables accurate classification into different tumor types. It helps in clearly defining the tumor borders. This results in both tumor classification and segmentation, which can achieve high accuracy across various tumor types and levels.