In this article, the investigators present a new method using a deep learning approach to diagnose schizophrenia. In the experiment presented, the investigators have used a secondary dataset provided by The National Institute of Health. The aforementioned experimentation involves analyzing this dataset for the existence of schizophrenia using traditional machine learning approaches such as logistic regression, support vector machine, and random forest. This is followed by the application of deep learning techniques using three hidden layers in the model. The results obtained indicate that the new deep learning technique formulated by the investigators provides a higher accuracy in diagnosing schizophrenia. These results suggest that deep learning may provide a paradigm shift in diagnosing schizophrenia.