**ABSTRACT**

Social media offer superior platform for its clients to share their comments and opinions about their knowledge toward specific product. This attracts the medical investigators to acquire knowledge about drug products owing to user perspective. Moreover, gaining and analyzing knowledge about drug tweet status is extremely a complex talk. This is carried out in our previous investigation by introducing Dynamic Drug Data examination by Hybrid Transductive Support Vector Machine with Fuzzy C Means (DDDA-HTSVM-FCM) procedure whose primary objective is to carry out drug tweet classification to acquire users’ opinion. But the research lacks in terms of accuracy of opinion identification. Accuracy of classification might get diminished in prior work with the occurrence of more extraneous tweets aggregated in online. The classification recital might be lesser in the prevailing work with the arrival of huge volume of data with either labeled or unlabeled data. These crises are resolved in the anticipated research technique by introducing Relevancy and Similarity Aware Drug Comment Classification Framework (RSDCCF). In this research work, similarity-based filtering technique is provided to eliminate irrelevant reviews from a number of tweets accumulated online. It is performed by evaluating semantic similarity among verbal of sentences and score is allocated based on similarity level. Verbal with fewer score will be eradicated to raise learning performance and to diminish computation overhead which caused by processing irrelevant data. Then, Classification performance is enhanced with presence of mixed data by initiating ensemble classifier. Classifiers used in this work are Adaboost, SVM, Random Forest, and TSVM. The complete implementation of research technique is carried out in MATLAB simulation, and it is proven that anticipated technique offers optimal outcome associated with accurate prediction of user opinion in drug comments than prevailing work.