

## ABSTRACT

According to our survey of the existing prescription systems, we were not able to find any existing fuzzy system to modify the prescriptions of oriental traditional medicine. This research proposes a modeling and inference mechanism for modifying standard prescriptions of oriental traditional medicine using the fuzzy set theory and fuzzy logic. Input data are symptoms and patient's status, which are represented as linguistic variables, and results of the model are adjustment of herbal plants of standard prescriptions and adding new herbal plants to the existing standard prescriptions when "syndrome" diagnosis is known and the standard prescription was given. These output are considered as linguistic variable, too.

Based on the above, we developed a prototype of the fuzzy system for modifying standard prescription of oriental traditional medicine on Java programming language. Now, the fuzzy system can modify fifteen therapies that include many sub therapies, and each sub therapy has prescriptions. Currently, I includes seventy prescriptions. This system is platform independent and more therapies or prescriptions can be added to it.