

ABSTRACT:

Diabetes mellitus is complex heterogenous disorder with 693 million estimated global prevalence. The objective of this study was to determine the histological and biochemicals changes in alloxan induced mice after treating with ethanolic extract of seeds of *L. usitatissimum*. Ethanolic extract was prepared in Soxhlet apparatus. The induction was confirmed by fasting glucose level greater than 200 mg/dL in mice. This study was directed in 6 groups of mice, each group contains 5 mice; Negative Control (NC-Normal), Positive Control (PC- diabetic untreated), Standard Control (SC-Metformin treated), Low dose (50mg/kg b.w.), Medium dose (100mg/kg b.w.) and High dose (150mg/kg b.w.), these groups of mice were administrated orally with respective doses for consecutive 28 days and then mice were euthanized for blood serum and collection of pancreases, liver and kidney. Biochemical assay of Renal Function Test (RFT), Liver Function Test and histological studies of pancreases, liver and kidney were performed in order to check the protective role of different treatment (mentioned above) of ethanolic extract of seeds of *L. usitatissimum*. LFT indicates significant reduction in Bilirubin and ALP level after treatment with high dose of ethanolic extract of *L. usitatissimum* when compare with PC. Results of RFT showed the manageable range of urea along with creatinine. So, current experimental study is showing the antidiabetic effect extract of seeds of *L. usitatissimum* against alloxan induced mice