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Artemisia vulgaris: A new frontier in reversing diabetic cardiomyopathy**Liza Malik**

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Statement of the problem: Diabetic cardiomyopathy represents a critical complication of diabetes, leading to impaired heart function and an increased risk of heart failure. There is an urgent need for effective treatments that address this condition without adverse side effects. Current anti-hyperglycemic therapies are often costly, may cause side effects, and do not completely prevent cardiac remodeling. This highlights the importance of exploring natural products with the potential to reverse these harmful cardiac changes.

Methodology & theoretical orientation: In this study, we investigated the potential of methanolic extract of *Artemisia vulgaris* to mitigate left ventricular remodeling in a diabetic cardiomyopathy rat model. Diabetic cardiomyopathy was induced in Wistar albino rats following established protocols. Over a 45-day treatment period, *Artemisia vulgaris* extract was administered, and its effects were assessed through serum and histopathological analyses.

Findings / Results: *Artemisia vulgaris* treatment significantly reduced fasting blood, glycated hemoglobin, serum glucose, insulin, total oxidant status, malondialdehyde, total cholesterol, triglycerides, low-density lipids, sodium, calcium, creatine kinase MB, lactate dehydrogenase, C-reactive protein, tumor necrosis factor- α , atrial natriuretic peptide, B-type natriuretic peptide, aspartate aminotransferase, Alanine Transaminase, urea and creatinine but significantly increased total antioxidant capacity, high-density lipids and potassium levels. Electrocardiogram (ECG) results and histopathological examinations confirmed significant improvements in cardiac remodeling and structural changes in both the heart and pancreas.

Conclusion: *Artemisia vulgaris* demonstrates substantial potential for reversing left ventricular remodeling associated with diabetes-induced cardiomyopathy, offering a promising avenue for therapeutic intervention.

Biography

Liza is a dedicated PhD scholar and gold medalist who has exceptional research contributions in her field. As an active researcher and a member of the organizing committee for international conferences, she passionately promotes knowledge exchange and collaboration within the academic community.