

**Thesis Abstract****PHARMACIE GLOBALE****INTERNATIONAL JOURNAL OF COMPREHENSIVE PHARMACY****ANTIDIABETIC ACTIVITY OF COMBINATION OF KARNIM PLUS AND GLIBENCAMIDE IN ALLOXAN-DIABETIC RATS**

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ABSTRACT

Diabetes is a chronic disorder of carbohydrate, fat and protein metabolism characterized by increased fasting and post prandial blood sugar levels. Karnim plus and Glibencamide are already established drugs for diabetes but both of the drugs suffers from various demerits. Different combinations of Karnim Plus and Glibencamide were administered daily for 7 days *p.o.*, 72 h after alloxan injection (150 mg/kg, *i.v.*) and the results were compared with standard group *i.e.* Glibencamide. The biochemical parameters studied were: plasma glucose, serum urea, creatinine, total cholesterol triglyceride, high density lipoprotein (HDL), and low density lipoprotein (LDL) along with body weight. All these combinations significantly reduced the elevated blood glucose level and serum biochemical parameters in alloxanized wistar rats and exhibited marked antidiabetic activity out of which Karnim Plus: Glibencamide (1/4:3/4) showed the most significant activity near similar to the standard drug, Glibenclamide, 4 mg/kg. In conclusion plasma glucose, serum urea, creatinine, total cholesterol triglyceride, and LDL-cholesterol were increased but hdl cholesterol was decreased. . Decreased body weight of alloxanized rats was restored after 7 days of treatment with different combinations. This study indicates that the combination Karnim Plus: Glibencamide (1/4:3/4) could be successfully used in diabetes mellitus type II and also overcomes the various side effects and demerits of both the drugs.