

**A CRITICAL ANALYSIS OF THE BASIC PRINCIPLES OF
STRESS RELATED DIABETES MELLITUS
& THE ROLE OF COUNSELING AND MEDHYA RASAYANA
IN ITS MANAGEMENT**



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RESEARCH SCHOLAR

Dr. M. W. SAUMYA JANAKANTHI KUMARI

B.A.M.S. (1st Class Hons.) UoC (Sri Lanka), M.D. (Ayu), GAU (India),
P.G.D.Ed., D.D.A.M.S., D.H.P., UoC (Sri Lanka).

SUPERVISOR

Dr. BALDEV KUMAR

Associate Professor,

B.A.M.S. (Gold-Medalist), M.D. (Ayu) GAU, Ph.D. (Ayu.), M.R.A.V. (National Academy of Ayurveda),
M.A. (Sanskrit), M.A. (Jyotish), M.A. (Philosophy), M.A. (Darshan).

**POST GRADUATE DEPARTMENT OF MAULIKA SIDDHANTA & SAMHITA
NATIONAL INSTITUTE OF AYURVEDA, JAIPUR-302002
RAJASTHAN, INDIA.**

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EXECUTIVE SUMMARY

Diabetes is a universal disorder. *Prameha*, stated in *Āyurveda* greatly resemble the characteristics of Diabetes Mellitus. Diabetes can be identified as a disease that is initiated and provoked by the stress. This research was entitled as “A Critical Analysis of the Basic Principles of Stress Related Diabetes Mellitus & the Role of Counseling and *Medhya Rasāyana* in its Management”. The aims and objectives of this study were to analyze critically the principle behind the stress related Diabetes Mellitus; to establish the psychosomatic relation in the manifestation of stress related Diabetes Mellitus; to identify the particular type of *Prameha* responsible for Diabetes Mellitus through physico-chemical analysis of urine to correlate with the prognosis; and to assess the role of Counseling and *Medhya Rasāyana* in the management of Stress Related Diabetes Mellitus. The proposed study has been carried-out in two phases including Literary and Clinical Study. Literary material pertaining to the subject has been compiled and reassessed to establish the Basic Principles underneath. For the clinical study 60 patients with Fasting Blood Glucose (FBS) in-between 110 mg/dl to 250 mg/dl and suffering from Stress Related Non-Insulin Dependent Diabetes Mellitus (NIDDM) (Type II Diabetes) have been selected. They were treated in three (03) groups randomly, each containing 20 patients within the age group of 20-70 years registered to the Hospital of the National Institute of Ayurveda, Jaipur. Formulas named as *Bilvādi Cūrṇa* and *Kirātādi Cūrṇa* have been selected for the clinical trial. *Bilvādi Cūrṇa* (*Medhya Rasāyana* Drug) contained *Bilva* (*Aegle marmelosa*), *Bilwī* (*Bacopa monnieri*), *Amṛtā* (*Tinospora cordifolia*), *Aśvagandhā* (*Withania somnifera*) and *Pippalī* (*Piper longum*) in equal quantity in fine powder form. *Kirātādi Cūrṇa* (*Madhumehahara* Drug) contained *Kirāta* (*Swertia chirata*), *Katukā* (*Picrorhiza kurroa*), *Methi* (*Trigonella foenugreek*), *Gokshura* (*Tribulus terrestris*) and *Nimba* (*Azadirachta indica*) in equal quantity in fine powder form. Group I has been treated with *Bilvādi Cūrṇa* 5 g, and Group II have given *Kirātādi Cūrṇa* 5 g, three times a day; with proper counseling in each visit. Group III has given roasted *Bilvādi Cūrṇa* Powder Capsules as Placebo 250 mg, three times a day, along with counseling for 1/2 an hour in each visit. Duration of intervention was 2 months. In this study males were found as the majority suffering from Stress Related Diabetes Mellitus. Uneducated housewives and educated housewives were more prone to the stress. Low socio-economic status and financial crisis were influenced on precipitating stress.

Heavy pressure and unable to handle stress were found as root cause of Diabetes. Middle and old age groups have faced to constant chronic stressors as stimulants which have precipitated the Diabetes. When overall result was considered 100% Type II Diabetic patients were identified as suffering from chronic stress before the onset of Diabetes. None was found without the acute stress in accordance with the Perceived Stress Scale. The effect of the therapies on the cardinal signs and symptoms has shown statistically significant reduction in all the parameters with various percentages of relief. Reduction of *Prabhūta Mūtratā* (polyuria), *Kṣudhādhikya* (polyphagia), *Pipāsādhikya* (polydipsia) were extremely significant in all three groups. *Medhya Rasāyana* drug (*Bilvādi Cūrṇa* & Counseling) (Group I) has shown extremely significant reduction in Serum Cortisol levels, statistically very significant reduction in Plasma Adrenaline and Noradrenaline levels. Group II and III also have shown statistically significant lowering of Cortisol levels but insignificant lowering of Adrenaline and Noradrenaline. *Bilvādi Cūrṇa* & Counseling was very effective on lowering Glycated Hemoglobin (GHb%) and Fasting Blood Sugar (FBS) ($P < 0.001$). Therapy was competent to significantly increased High Density Cholesterol. The effect of *Kirātādi Cūrṇa* & Counseling on Group II patients was also encouraging. The G Hb% and FBS reduction reported were significant. These values indicated that the therapy was effective to reduce the hyperglycemia. High density Cholesterol was significantly increased. Counseling & Placebo therapy was also able to significantly reduce G Hb % level and FBS. The effect of lowering G Hb% in all three therapies was appreciable. Unpaired *t*-test for intergroup comparison was statistically insignificant. *Kirātādi Cūrṇa*, *Bilvādi Cūrṇa* and Counseling was capable to reduce Urine Sugar significantly. *Bilvādi Cūrṇa* has shown better result of reducing Plasma Cortisol, Adrenaline and Noradrenaline levels when compared with Group II and III. *Bilvādi Cūrṇa* was predominant by *Tikta* and *Kaṣāya Rasa*, *Laghu* and *Snigdha Guṇa*, *Śīta Vīrya*, *Madhura Vipāka* and *Medhya Rasāyana* properties therefore effective in Stress Related Diabetes Mellitus. *Kirātādi Cūrṇa* was predominated by *Tikta Rasa*, *Laghu* and *Rūkṣa Guṇa*, *Śīta Vīrya* and *Kaṭu Vipāka* and it can break the *Samprāpti* of *Premeḥa*. The effect of Counseling has obviously inclined better result in all the groups. In this present study overall effects of all the therapies have ensured the specific mode of action of the each therapy to break the *Samprāpti* of Stress Related Diabetes Mellitus. This study will definitely form the foundation and guidelines to any future related interventions on the subject for the betterment of mankind.