

Assessment of Impact of Physiological and Biochemical Risk Factors on Type 2 Diabetes

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Abstract : Introduction: Non-communicable diseases are emerging diseases in India. Government of India launched National Programme for Prevention and Control of Cardiovascular Diseases, Cancer and Stroke (NPCDCS) during the year 2008. The aim of the programme was to reduce the burden of non communicable diseases by health promotion and prompt treatment. Objective: The present study was intended to assess the impact of National Program for prevention and control of Cardiovascular Diseases, Diabetes, Cancer and Stroke Programme on biochemical and physiological factors influencing Type 2 diabetes in Kalaburagi District. Material and Method: NCD Clinic was established at District Hospital during April 2016. All the patients attending District Hospital Kalaburagi above the age of 30 years are screened for Non Communicable Diseases under NPCDCS Programme. A total sample of 7447 patients attending NCD Clinic situated at Kalaburagi district was assessed in this study. Pre structured and pretested schedule seeking information was obtained from all the patients by the counselor working under NPCDCS programme. All the Patients attending District Hospital were screened for Diabetes using Glucometer at NCD clinic. The suspected cases were further confirmed through Biochemical investigations like Fasting Blood glucose, HBA1c, Urine Glucose, Kidney Function test. SPSS 20 version was used for analysis of data. Chi square test, P values and odds ratio was used to study the association of factors. Results: A Total of 7447 patients attended NCD clinic during the year 2017-18 were analyzed, Diabetes was seen among 3028 individuals were as comorbidities along with Hypertension was seen among 757 individuals. The mean age of the population was 50 ± 2.84 . 3440(46.2%) were males whereas Female constituted 4007(53.8%) of population. The incidence and prevalence of Diabetes being 8.6 and 12.8 respectively. Diabetes was more commonly seen during the age group of 40 to 69 years. Diabetes was significantly associated with Age group 40 to 69 years, obesity and female gender ($p < 0.05$). The risk of developing Hypertension and comorbidity conditions of hypertension and Diabetes was 1.224 and 1.305 times higher among males, whereas the risk of diabetes was 1.127 higher among females as compared to males. Conclusion: The screening for NCD has significantly increased after launching of NPCDCS programme. NCD was significantly associated with obesity, female gender, increased age as well as comorbid conditions like hypertension and tuberculosis.

Keywords : non-communicable diseases, NPCDCS programme, type 2 Diabetes, physiological factors

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