

## Correlation between Diabetic Cataract, HbA1C and Guraku, a Clinical Study in Chhattisgarh State

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**Abstract :** HbA1c is form of the haemoglobin that is used to measure the average plasma glucose concentration over prolonged periods of time. It is formed in a non-enzymatic glycation pathway by hemoglobin's exposure to plasma glucose. In diabetes mellitus, higher amounts of glycated hemoglobin, indicating poorer control of blood glucose levels, have been associated with cardiovascular disease, nephropathy, and retinopathy. Guraku's basic components are nicotine and jaggery, jaggery is made up of sugarcane so can have a diabetogenic potential which is exacerbated in presence of nicotine. This work had done with the aim to find correlation between Diabetic cataract, HbA1c and Guraku. Subjects were enrolled according to the inclusion and exclusion criteria. In this study total 75 subjects were included. In the study it was found that people consuming Guraku had a high level of HbA1c thus are more prone to the development of diabetic cataract. Male subjects are the more than female subjects. Most of the subjects belong to the lower socioeconomical class and not very educated. It could be concluded that this type of study could be useful in indentifying number of subjects suffering from diabetic cataract whose condition get worse by use of nicotine product like Guraku and preventive measure to be taken in prevention of this type of diabetic complication.

**Keywords :** diabetic cataract, HbA1c, Guraku, diabetogenic potential

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