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# **REFRACTIVE ERRORS, BLOOD GROUP AND DIABETES MELLITUS: -A CORRELATIVE STUDY IN SOUTH INDIAN POPULATION**

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**Abstract:** The primary purpose of this study was to correlate and analyze the relation between the refractory error and the diabetes mellitus among the people of Mangalore. The secondary purpose was to correlate and analyze the relation between the refractory error and blood group. Our study was a hospital-based cohort study consisting of 172 patients out of which 135 were male and 57 were females. All of them were diagnosed with diabetes for more than 5yrs. The study showed that there was a significant correlation between the refractive error and the glycemic index ( $p < 0.0001$ ). Patients with severe uncontrolled diabetes ( $HbA1c > 9\%$ ) showed maximum significant myopic shift ( $< -0.5D$ ). Patients with O and A blood group had maximum incidence of refractive errors. In patients having AB blood group, left eye is more prone for refractive errors. In patients having A blood group, right eye is more prone for refractive errors. Through this study, age was established as a risk factor for increasing the myopic shift of the eyes.

**Keywords:** Diabetes, Refractive errors, Glycemic index, Blood group