Diabetes Impacts Your Vision

Unmanaged diabetes can lead to issues with eyesight. Retinopathy, macular edema, cataracts, and glaucoma are among several eye diseases due to complications from diabetes. Diabetic Retinopathy, the leading cause of blindness in adults, occurs when an individual's high blood sugar damages blood vessels in the retina. This can lead to blurred vision or a halt in blood flow impacting both eyes. People who are at risk of this disease include those who are diagnosed with type 1, type 2, or gestational diabetes.

In the early (non-proliferative) stage of diabetic retinopathy, tiny pouches form in the retina that can leak blood and other fluid, leading to macular edema. More than half of the individuals who have diabetic retinopathy will develop macular edema. In the advanced (proliferative) stage, new blood vessels form in the retina and cause minor bleeding due to its fragility. Symptoms in this stage include blurred vision, spots or floaters in your vision, difficulty seeing colors, dark or empty areas of vision, and ultimate vision loss.

Risk factors for diabetic retinopathy (eye-related illness due to diabetes):

- poor glycemic control,
- smoking
- poorly managed hypertension, dyslipidemia,
- nephropathy,
- being a male, and
- obesity.





Fig. 2 Diabetic Retinopathy by Gender MS vs USA, 2021



Fig. 3 Diabetic Retinopathy by Race, MS vs USA, 2021



Mississippi had a 10% higher percentage of diabetics with retinopathy (28.9%) when compared to the US national average (26.4%) (Fig. 1). In MS, about 30.8% of the males with diabetes had retinopathy and 27.2% of the females with diabetes had retinopathy in 2021, Fig 2. Blacks had a higher prevalence of Diabetic retinopathy in MS (34.7%) and at the (33.8%) compared national level white to individuals, Fig. 3 (MS and USA: 24.9%). When age groups are compared, the state of MS and the USA followed a similar trend for individuals with diabetic retinopathy with slightly higher values for the state of MS in each group, Fig. 4.

One should be checked for diabetic retinopathy immediately if diagnosed with type 2 diabetes. For type 1 diabetes, individuals should be checked within 5 years of their diagnosis and then regularly thereafter, typically every year. The sooner the treatment for diabetic retinopathy, the better that treatment will work. (*Data Source: CDC, https://www.cdc.gov/visionhealth/vehss/project/index.html*)





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