

# How to Reduce Vision Loss From Diabetic Blindness

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Systematic eye screening and preventive treatment dramatically reduce diabetic blindness. This has been shown to be true in Iceland, where over the past thirty years, there has been a dramatic drop in vision loss due to diabetes to the point that diabetic blindness has been all but eradicated.

A systematic nationwide screening program made this possible in Iceland. However, particularly in the developing world, non-attendance at eye clinics for screening has been recognized as a significant risk factor for poor visual outcomes from diabetic retinopathy (DR).

A very insightful and well-sourced recent article from the UK's 'Community Eye Health', provided by the International Centre for Eye Health<sup>[1](#)</sup>, speaks to this global challenge. Their world-wide survey showed that hospitals were seen as places for the sick, so for patients who seemed well, hospital attendance for regular retinal screening was not seen as 'normal behavior.' While most employers seemed to be willing to give time off for occasional appointments, time off for regular appointments was not tolerated.

Patients with diabetes had multiple hospital appointments, most of which are for routine surveillance, and some patients chose to attend only the appointments they saw as essential. Often, this meant they didn't attend for retinal screening.

Those patients with poor family support, or whose relatives had a limited understanding of the disease, were less likely to attend for eye examinations, as this was not a priority for the family.

In rural areas, transport to and from the clinic was a major barrier, largely due to poor public transport. Patients with their own vehicles were sometimes not permitted to drive due to the dilating eye drops. In urban area, this was less of an issue as patients were able to use public transport.

Clinic waiting times were identified as a barrier by both patients and providers. Patients said that the delays made them reluctant to ask questions of the doctor to help them better understand their DR. It also made it difficult for friends or relatives to accompany patients or provide transport.

## **Global Perspectives**

The most common barrier to dealing well with DR is lack of awareness about diabetic eye disease and its treatment. As retinal screening programs have become more available in low- and middle-income countries, research shows that not knowing enough about preventive treatment before symptoms develop is the main reason patients do not access eye care services.

The study in Zambia, where diabetic eye care was just being established, showed that most patients knew nothing about eye complications as a result of diabetes. They were struggling with much more basic issues such as how to monitor blood sugar.

The study in China found that a quarter of patients presented for the first time with advanced DR, and the only variable independently associated with late presentation was lower education level.

In Paraguay and Pakistan, where programs have existed for longer, lack of awareness remained the primary barrier but was closely followed by difficulty in accessing services, particularly in rural areas.

Research carried out in Qatar highlighted how social attitudes can erect different barriers to accessing eye care services. For men, the barriers were 'too busy' and 'no appointments'; for women, they were 'too great a distance to travel alone' or 'lack of transport.'