

Diabetic Retinopathy

1. Magnitude

Today about 170 million people around the world have diabetes. According to WHO the number will grow to more than 370 million by 2025 of which 70% will be appearing in the developing nation. Recent studies show that patients from India have the lowest age of onset of Diabetics (at the age of 43). Diabetic Retinopathy accounts for 80- 90% of diabetes related blindness. Initially symptomless DR is identified only on examination by a retina specialist. DR is a degenerative disease leading to irreversible visual loss and eventually blindness if left untreated.

2. Issues

Financial Issues

The financial costs associated with visual impairment or blindness, both to the patient and to the healthcare system, are very high. In contrast, the cost of screening and preventing diabetic retinopathy is a fraction of that cost, around 1.2% of total healthcare costs for a person with diabetes.

Clinical and Other Issues

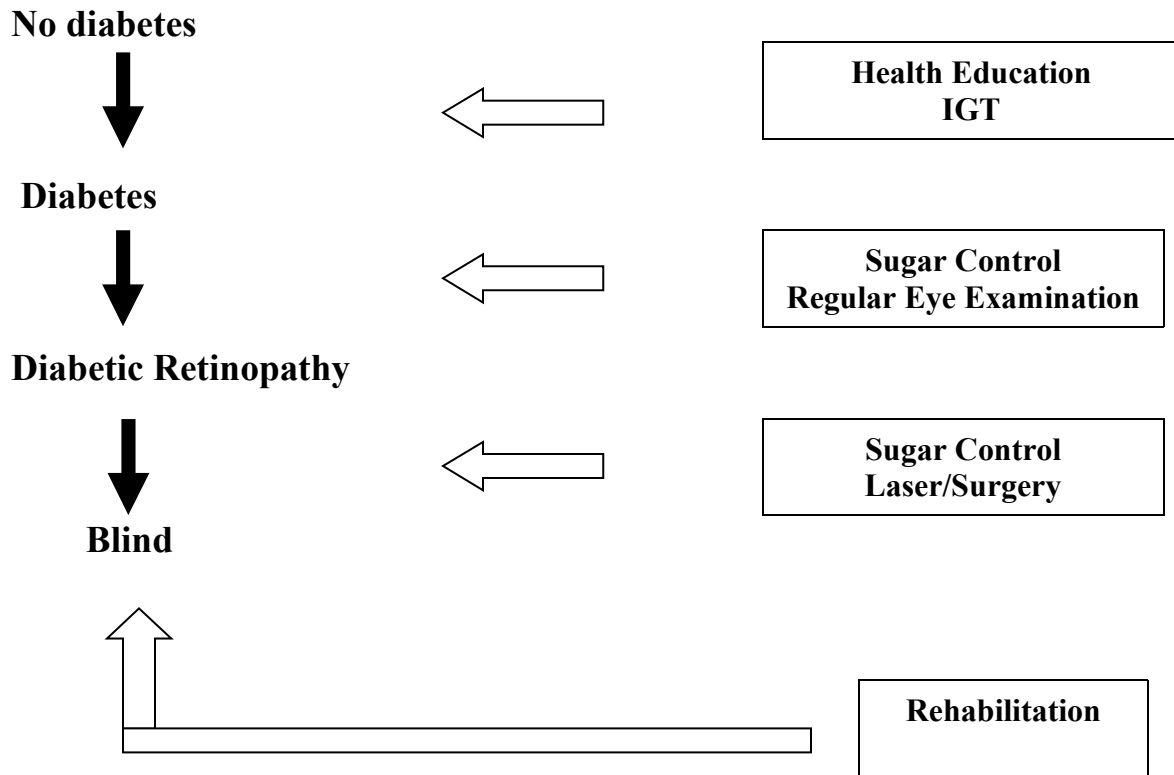
- Symptomless in the early stages.
- Low awareness among public.
- Often treated not as an important complication of Diabetes by Physician.
- 55% of eyes eligible for laser do not receive it
- Information not reached
- Not availed TRT
- Currently the disease is detected too late for effective laser surgery
- Lack of cooperation between diabetic centers, diabetic departments of general hospitals on one side and ophthalmology centers, ophthalmology department on the other side.
- Lack of satisfactory services in rural areas.

Challenges	Innovations
Low level of Awareness	Health Education
Large unidentified Diabetic Population	Strategies to zero in on target population
Undiagnosed Diabetic Retinopathy	Networking for Referrals
Dispersed population	Remote Diagnostic



Poor Logistics	Outreach Activities
Lack of trained Manpower	Task oriented training
Large & Growing Problem	Scalable & Replicable Model

Levels of Prevention in Diabetes related Blindness



3. Best practices for reaching out

Strategies to address barriers:

- *Planning:* The magnitude of the problem should be well defined to overcome the challenges using the available resources.
- *At the provider end the service delivery system should be properly defined*
- *Outreach Activities:* To reach out to the large population, outreach activities should be strong enough.
- *Training:* As the intervention of DR demands specialized skills, proper training is of utmost importance. Studies confirm that education significantly improve the ability of non-ophthalmologists to detect and to appropriately refer patients who are at risk for vision loss (An example was quoted from a research study in Australia where the Australians GP ability to clinically recognize DR increased from 24% to 94% following a brief training intervention.)
- *Awareness creation among public:* As the awareness level regarding DR is very minimal, it should be given prime importance.
 - Diabetic physicians; need strong networks
 - Known diabetic patients- Creating awareness among this group is equivalent to picking the low hanging fruit
 - Also target lab technicians, pharmacists, and even school children.

Case Finding & offer of treatment

- Diabetic patients (low hanging fruit)
- Community screening
- Screening in businesses, corporations, even medical societies
- Through vision centers- telemedicine

Opportunities in marketing using patients: Use of existing patient network for reaching into the large unreached and uninformed population

Follow-up

- With Physicians
- For providing Low vision care

Networking: Networking through better referral system (General Physician, Laboratories)

Financing: Treatment is costly but not as costly as the young person becoming blind from DR. Provider needs to have strong financial strategy to address the issue.

