

Diabetes in the developing world

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The prevalence of diabetes and its impact

- Diabetes is the leading cause of blindness amongst middle aged working adults in the West
- It results in blindness for 10,000 people with diabetes every year
- Although not as common as in the West, diabetes is still highly prevalent in developing countries.
- The effect on ocular morbidities is further compounded by the lack of education – a large proportion of patients with diabetes in the developing world are not aware of its ocular complications

Nigeria (Nwosu, 2000)

- 100 new diabetic patients examined
- 17 had IDDM and 83 had NIDDM
- 68 were male and 32 were female (M:F = 2:1)
- Prevalence of bilateral blindness = 18%
- Prevalence of bilateral visual impairment = 20%
- Bilateral blindness was mainly due to glaucoma (33.3%), cataract (27.8%), and diabetic retinopathy (22.2%)
- Likewise, bilateral visual impairment was mainly due to diabetic retinopathy (35%), refractive errors (30%), and cataract (20%)

Yemen (Bamashmus, 2009)

- Looked at 350 IDDM patients
- Prevalence of blindness was 16%
- Diabetic retinopathy was present in 55% of patients.
- However, cataract and glaucoma were also present in a substantial proportion of diabetics (34.3% and 8.6% respectively).

Azerbaijan

- “There is no patients who will NOT be blind by the age of 25 if they had diabetes for at least 15 years by then”

Botswana

- RC and Cambridge helped to set up a screening service in Botswana
- We have trained the people and DHC donated the software!
- The problem: the ONE ophthalmologist and two nurses already see in excess of 100 patients a day, so it will be an added burden
- No laser/vitreotomy in Botswana: all must go to South Africa

Nigeria, Kenya, Ghana

- Three cohorts of patients of nearly 10000 each are currently being graded by the MEH RC for diabetes and AMD
- Without full analysis, we can still see that there are many more cases of these diseases than expected
- Training in Africa traditionally concentrated on cataract, anterior segment and trauma
- This might need to be re-considered

LEOPARD programme

- Professor Dodson's team is involved in screening in Ethiopia
- Under difficult conditions