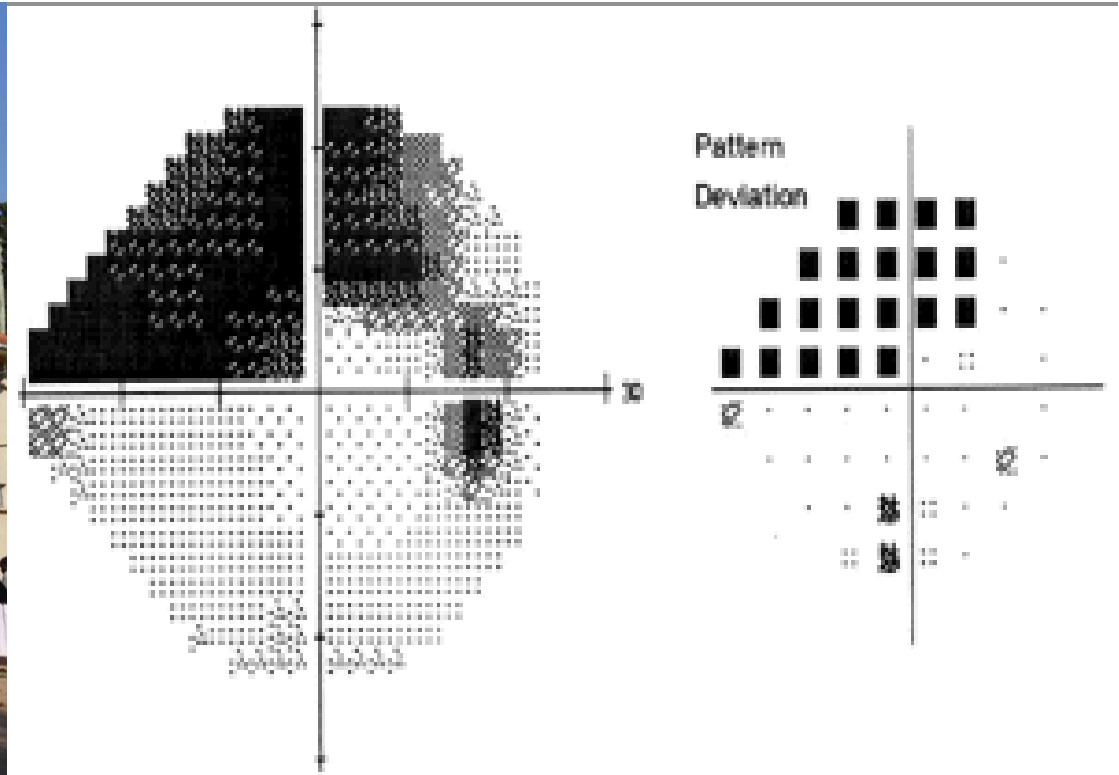


PEALRS OF GLAUCOMA MANAGEMENT: THE UGANDAN PERSPECTIVE

Dr Simon Arunga, MBChB, MMed(Oph), PhD





- How many people are blind?
- How many are blind due to glaucoma?
- What is your glaucoma backlog?

The burden and the need?

What makes glaucoma different in Africa?

- High prevalence
- Poor detection
- Low treatment armamentarium
- Cost
- Access
- Negative social marketing

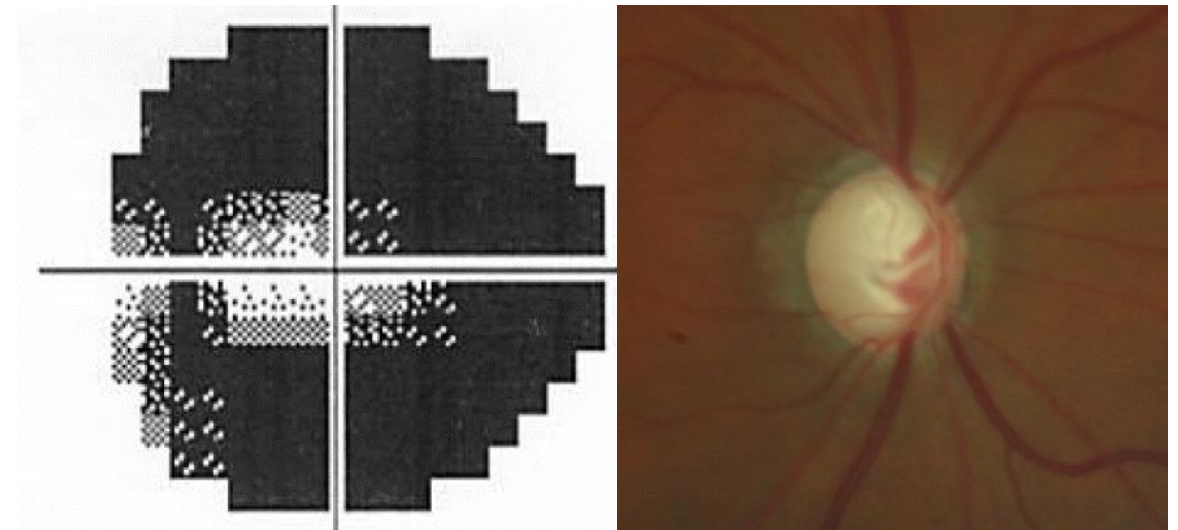


Glaucoma in Africa

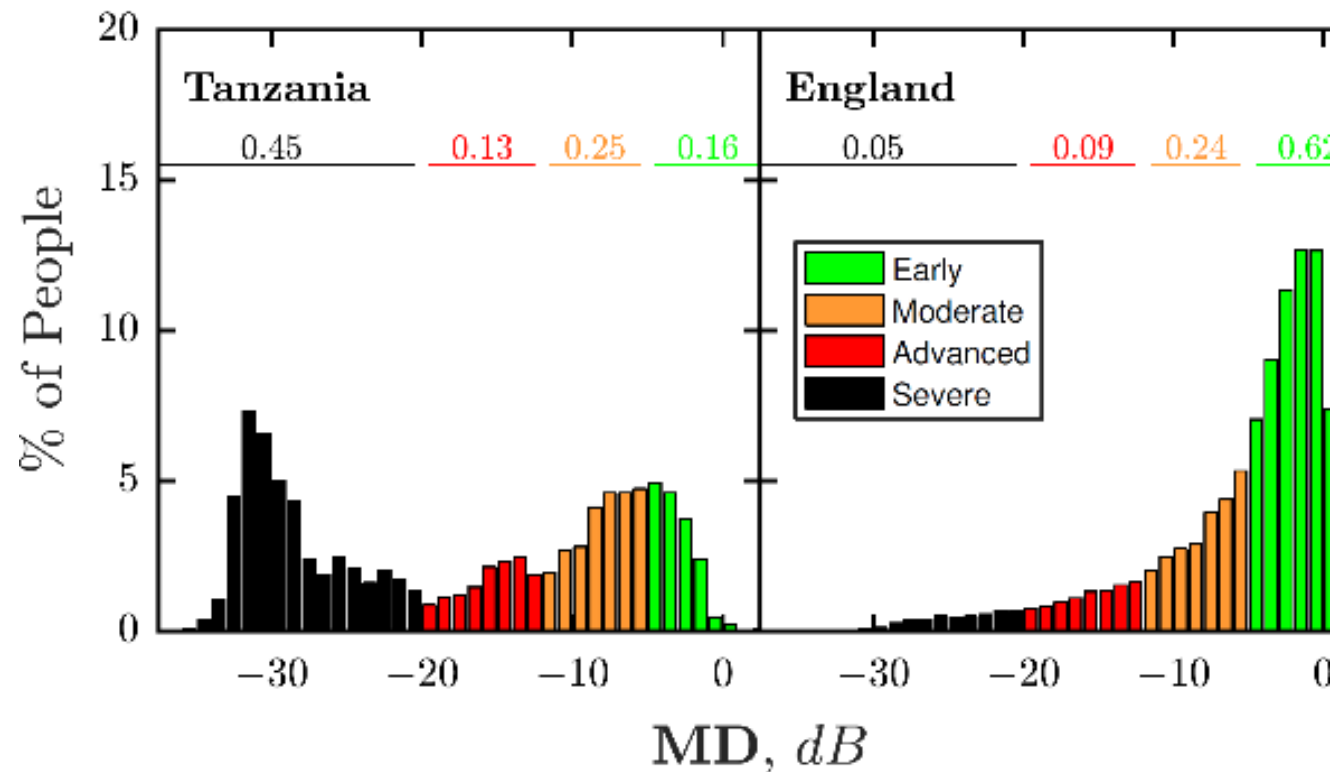
High Prevalence

	Prevalence	Number (millions)
Asia	3.40	39.00
Africa	4.79	8.29
Europe	2.93	6.77
North America	3.55	3.36
Latin America	4.51	6.59
Oceania	2.97	0.25
Worldwide	3.54	64.26

Advanced & Aggressive Disease



Presentation patterns



- 90% of glaucoma is undetected
- 66% of POAG in Mbarara had blindness in one eye (Mbumba et al 2012).
- Uganda is second to Nigeria in POAG blindness.
- 50% have severe visual field loss compared to <5% in the UK

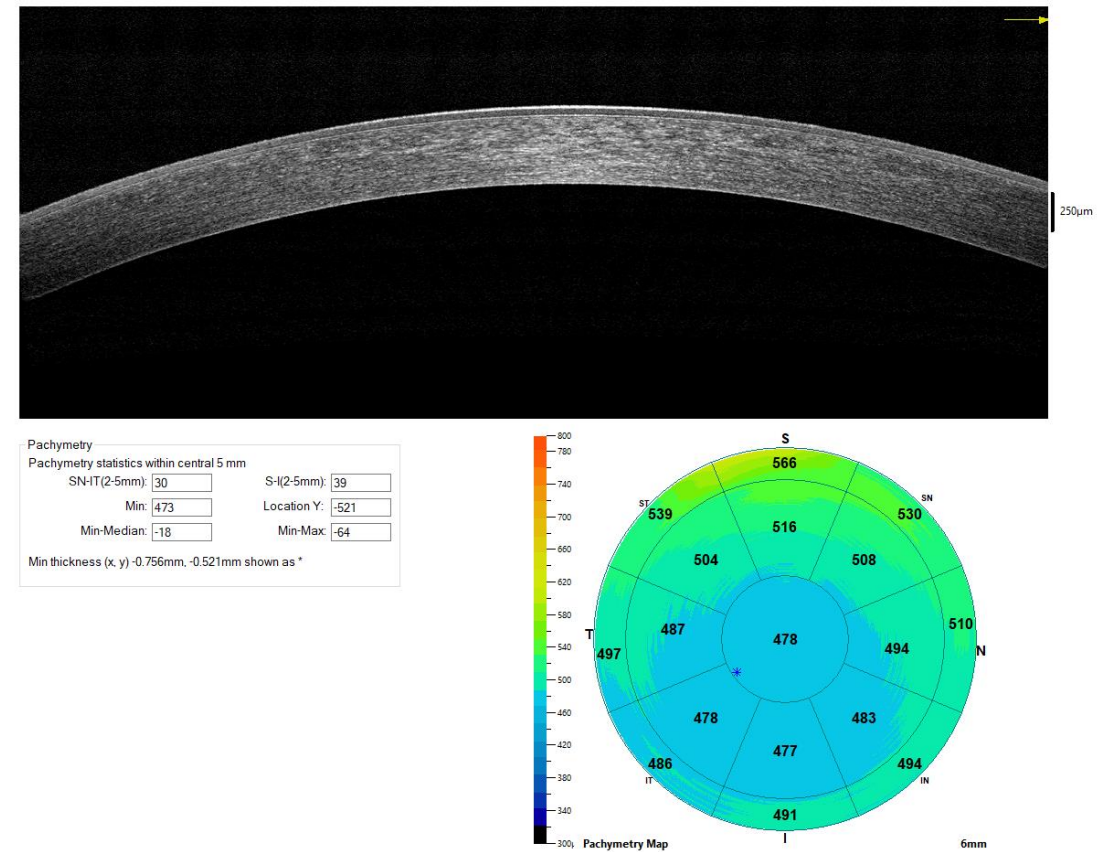
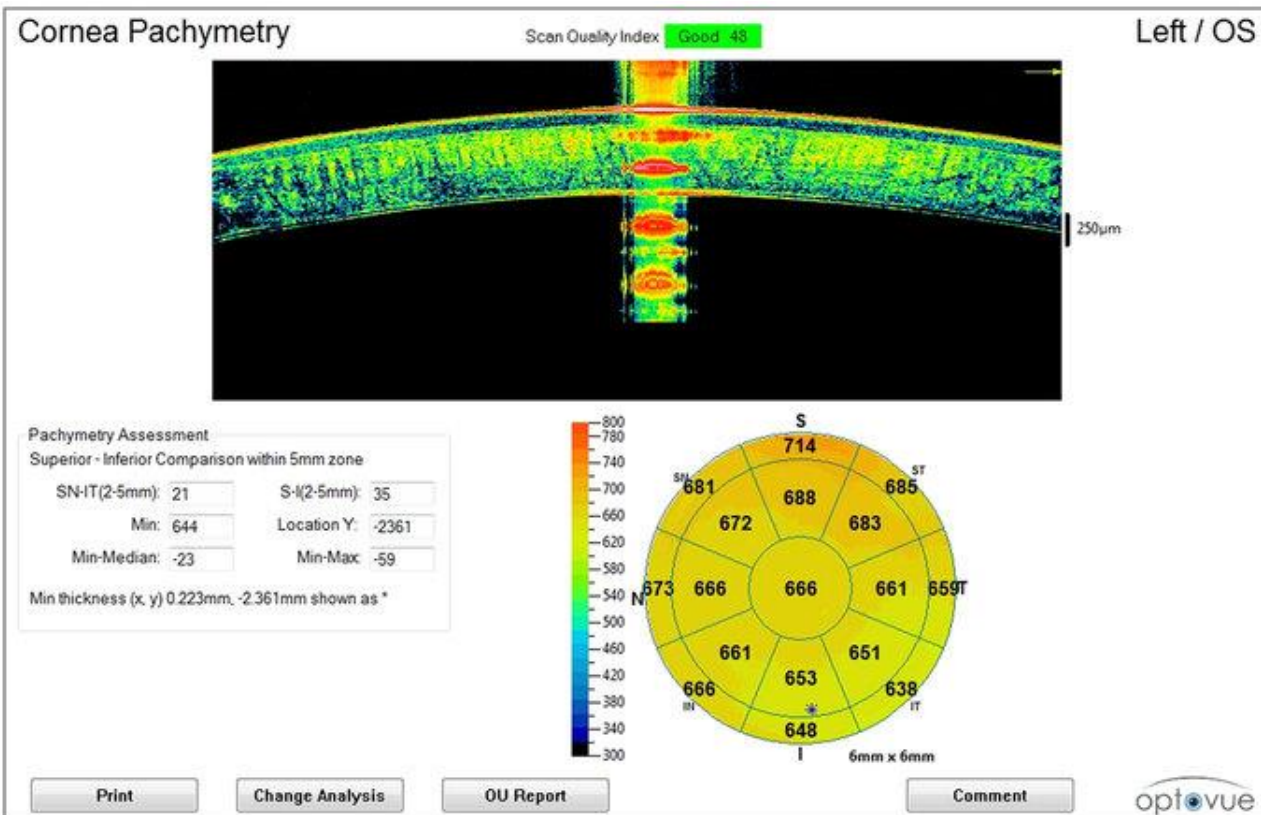
A Toolkit for Glaucoma Management in Sub-Saharan Africa

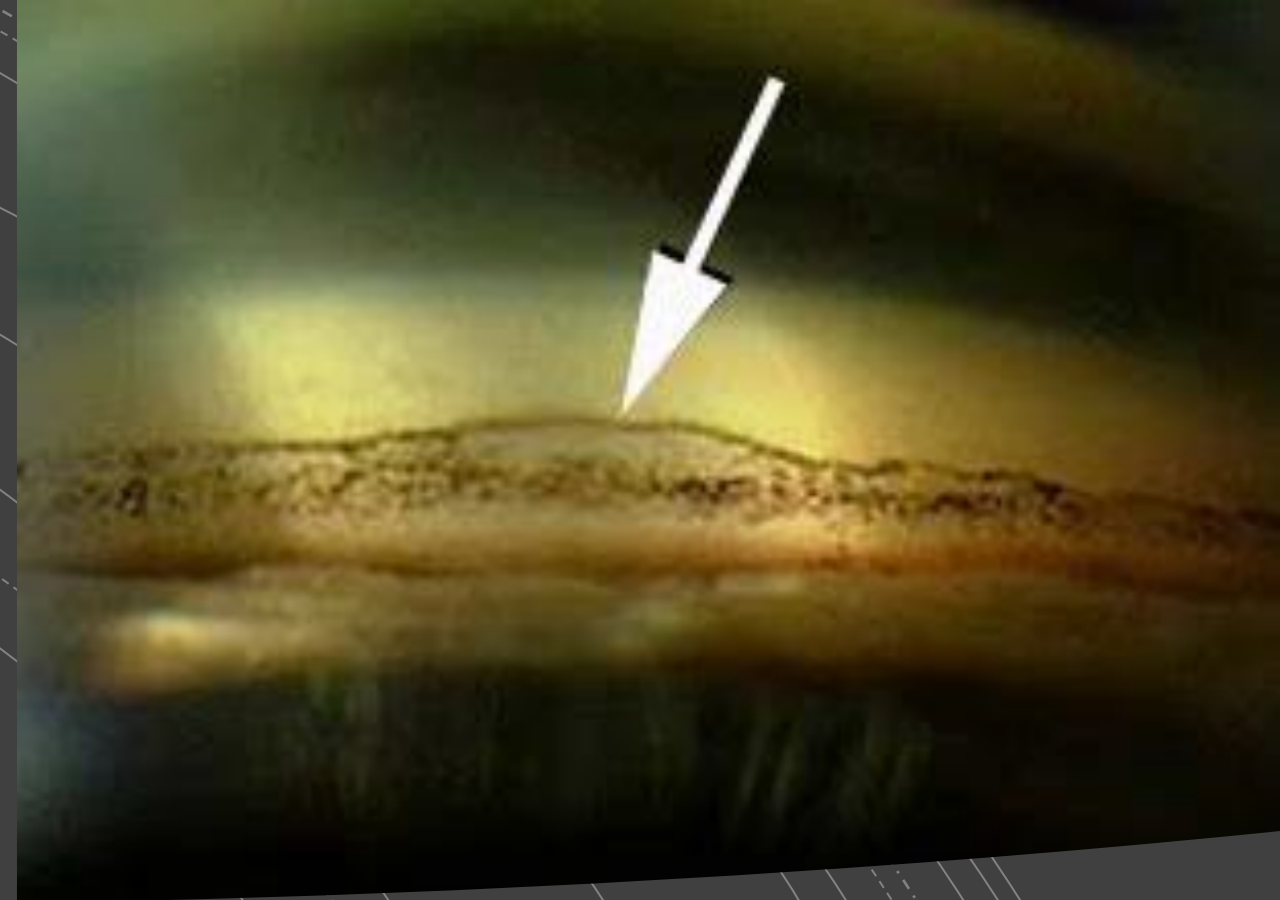
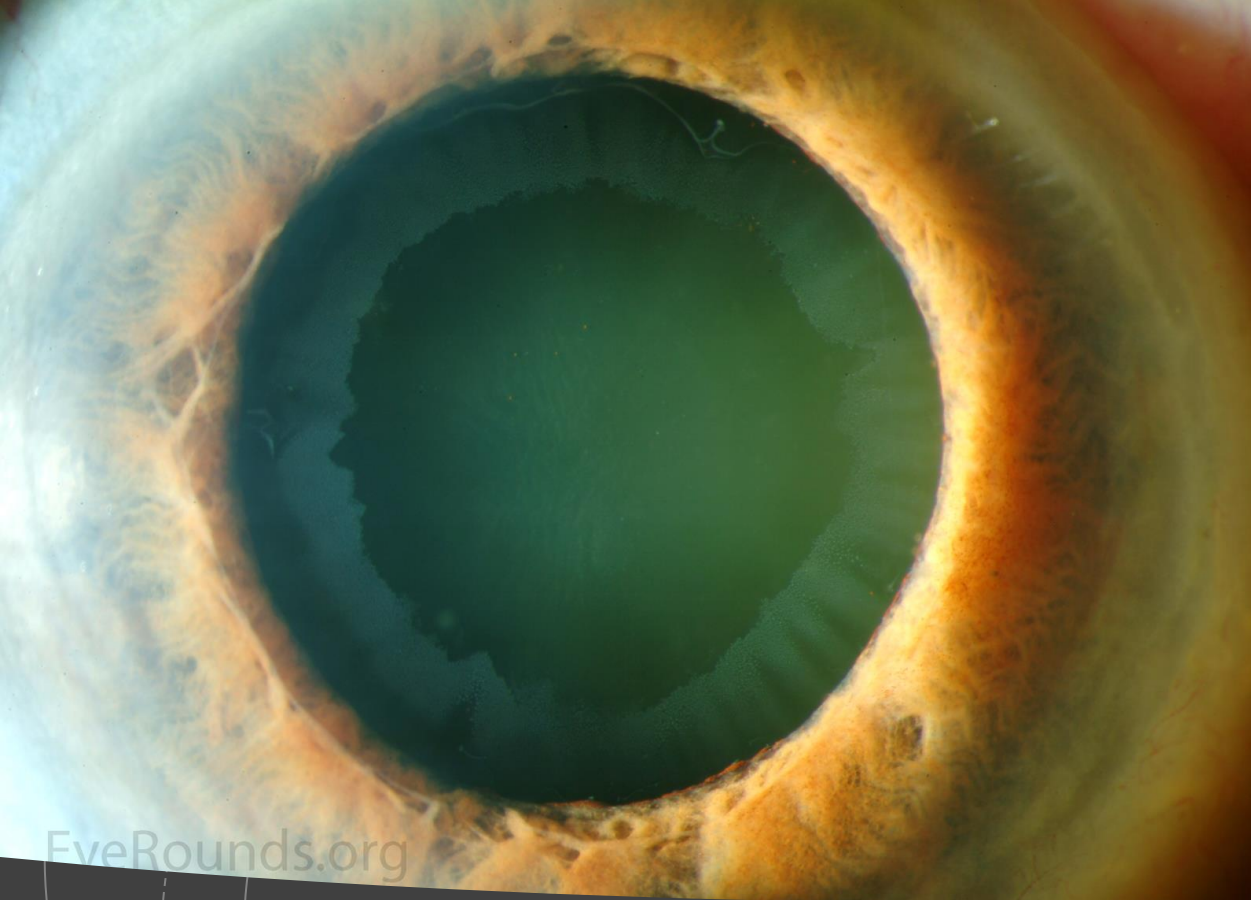


1. Symptomatic versus routine screening?

- Every patient above 40yrs and above should undergo glaucoma screening.
- What proportion of OCOs in Uganda screen patients for glaucoma?
- What proportion of Ophthalmologists screen patients for glaucoma?

2. IOP calibration





#2 IOP calibration...

- Tend to have normal in clinic IOPs
- Wide fluctuations which cause Damage
- Aggressive visual field loss

3. Diurnal fluctuation

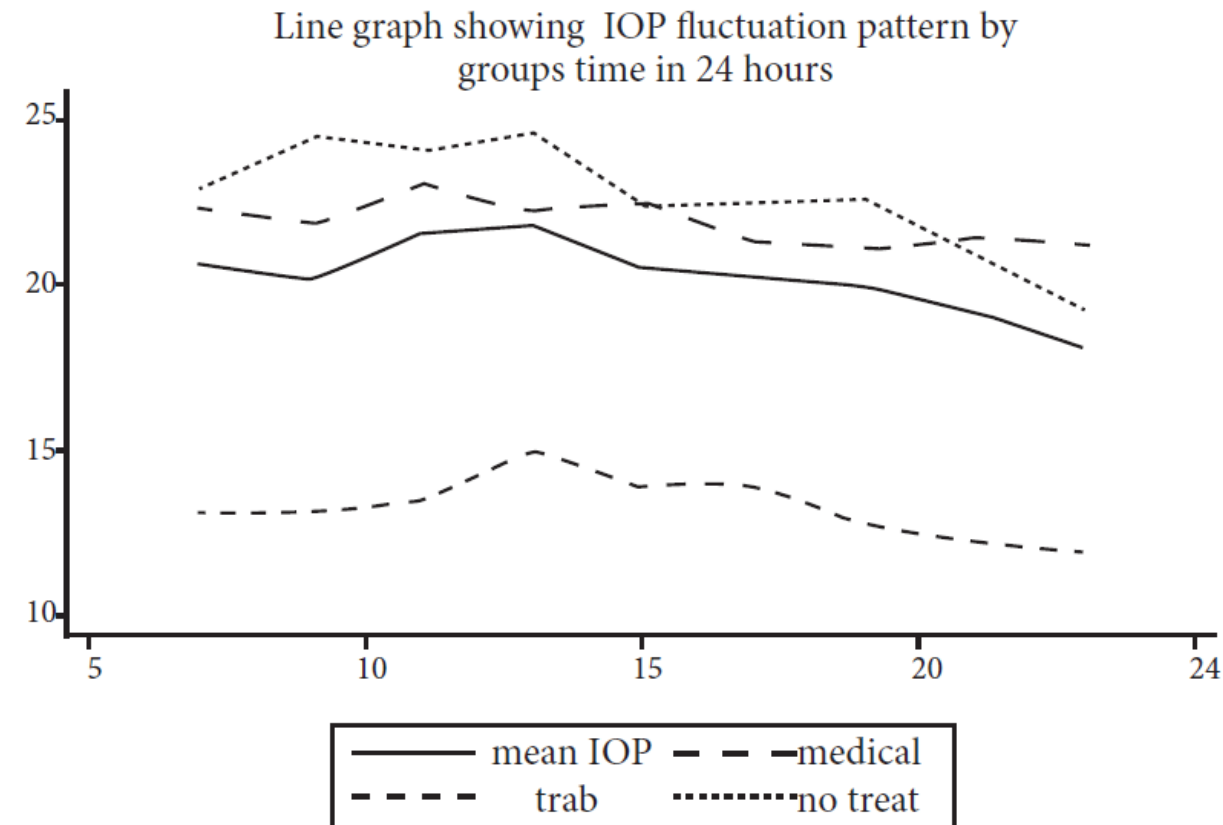
• 40-year-old male. VA 6/12, 6/9. BCVA (-1.00) 6/6, (-0.5) 6/6. CDR. 0.7 OD 0.5 OS

Time	Right Eye (mmHg)	Left Eye (mmHg)
0800hrs	10	11
1000hrs	15	17
1200hrs	19	18
1400hrs	16	15
1600hrs	14	15
1800hrs	12	13

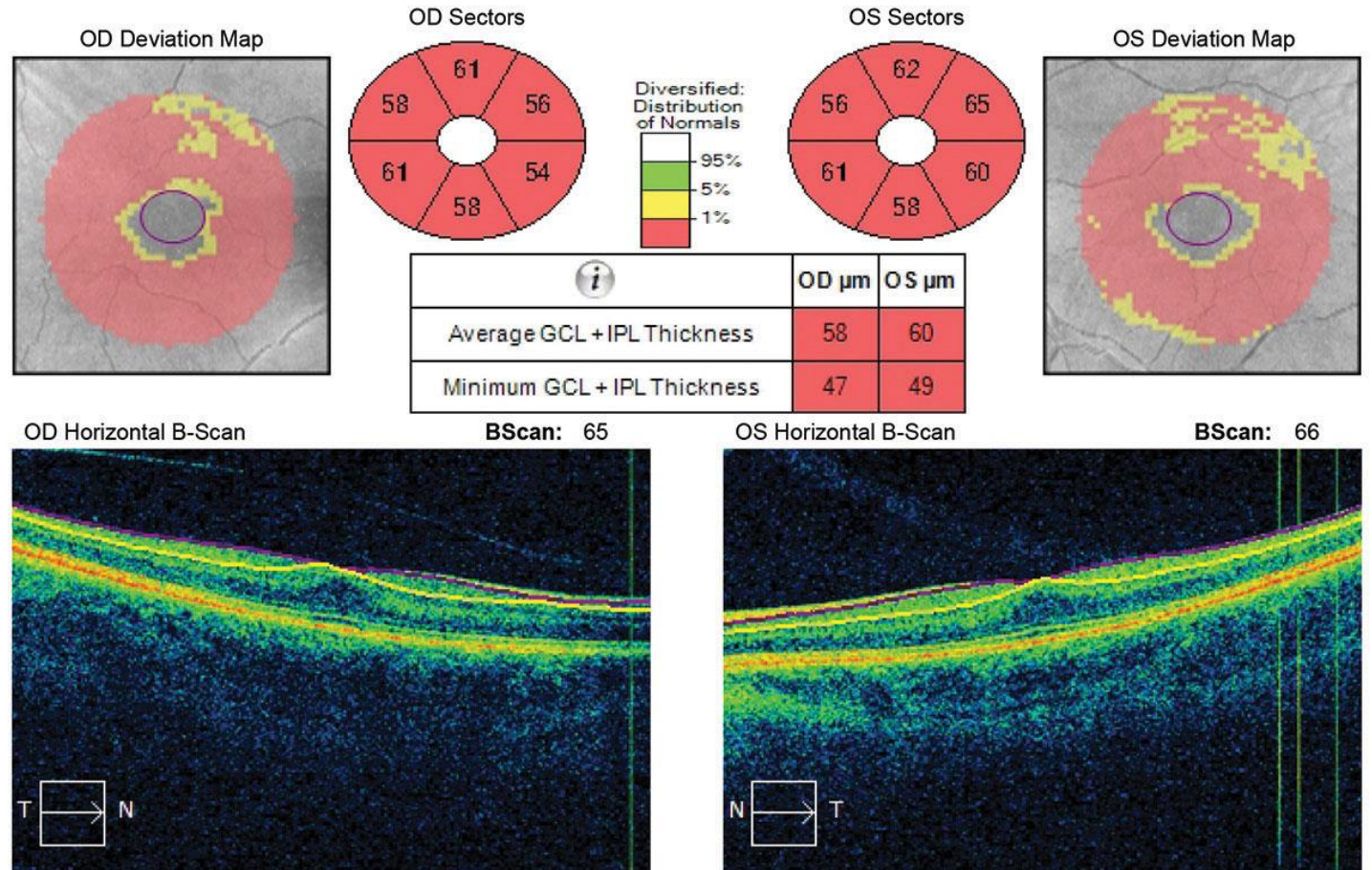
#3. Diurnal fluctuation

Diurnal fluctuation IOP pattern: Generally, the peak IOP was recorded in the morning, between 11am-1pm while the least IOP was recorded in the evening, between 9pm-11pm (Figure 1).

Figure 1: Fluctuation pattern of IOP over 24 hours

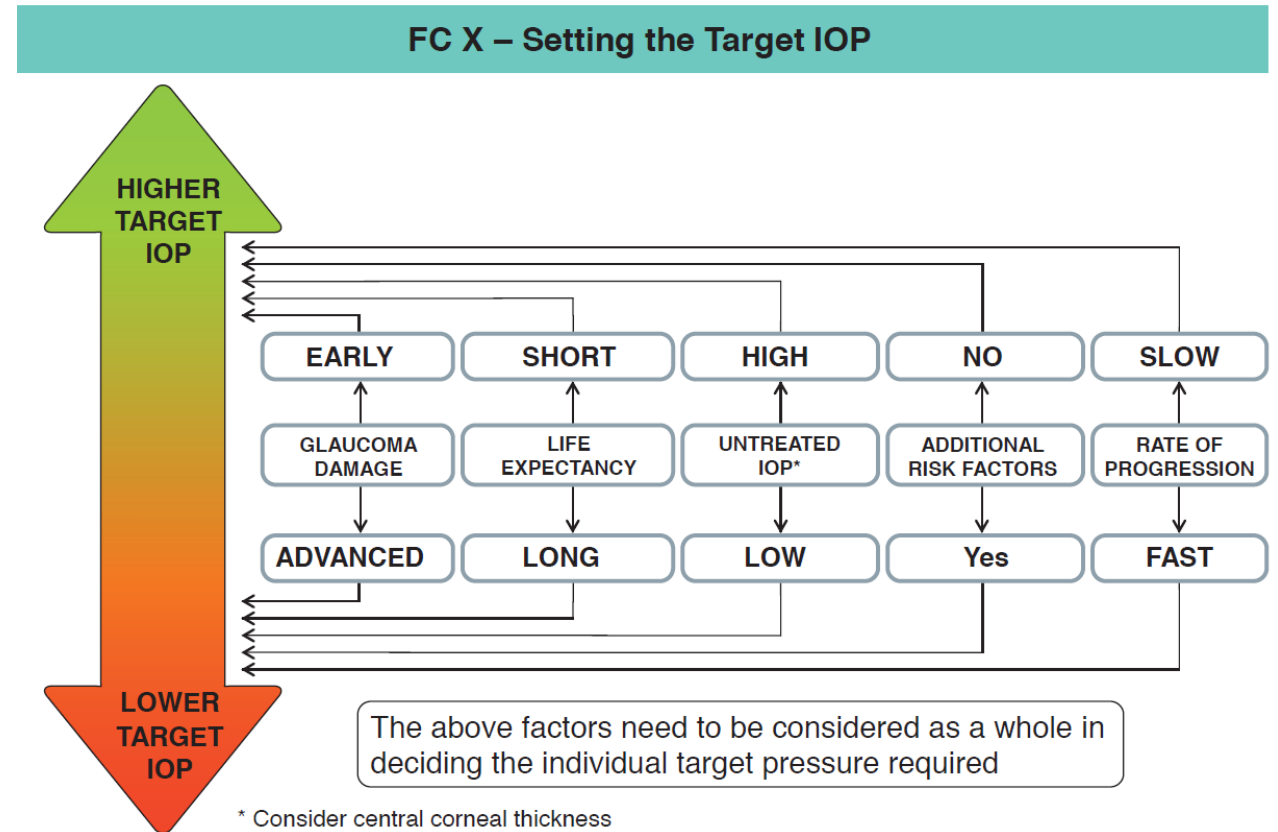


4. Pre-perimetric glaucoma



5. Set target IOP

- How many ophthalmologists set target IOP?
- Percentage reduction versus absolute numbers?
- POAG numbers: 18, 15, 12, 10



GLAucoma Screening and Treatment (GLAST) Project for Southwestern Uganda (2021-24)

