

# Health-related quality of life in glaucoma and ocular hypertension: utility values and disease severity

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## PURPOSE

- Glaucoma is the commonest cause of irreversible blindness globally, affecting patients' quality of life.
- There have been several attempts to evaluate health-related quality of life using different instruments.
- Here, we assess utility values (UVs) in a cross-section of patients with ocular hypertension and glaucoma at all stages of severity.

## METHODS

- Patients (n=341) requiring treatment for ocular hypertension and open-angle glaucoma (primary open-angle glaucoma, pseudo exfoliative, and normotension glaucoma) were recruited from two clinical sites in London, United Kingdom.
- UVs were evaluated for patients' health states using the standard gamble for death and standard gamble for blindness.
- The Mean Deviation from Humphrey visual field analyser of each patient's worse eye was used to classify degree of severity.
- Severity was classified based on Hodapp-Parrish-Anderson Criteria.

Standard Gamble Blind:  
 What is the highest risk to go blind would you be willing to take in return for normal vision?

Standard Gamble Death:  
 What is the highest risk to die would you be willing to take in return for normal vision?

## RESULTS

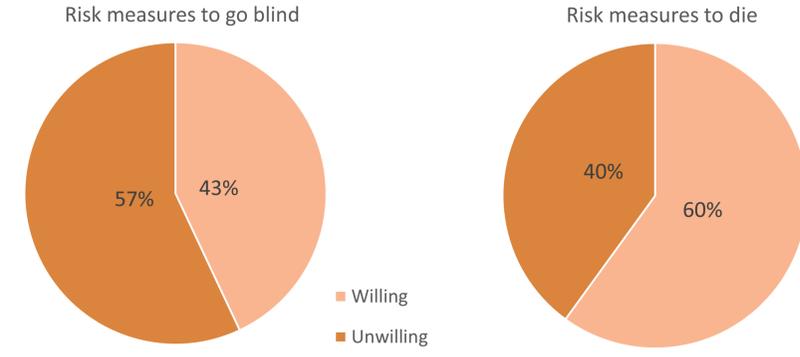


Figure 1. Proportion of patients by their responses to the questions about willingness to take risk (die or blind)

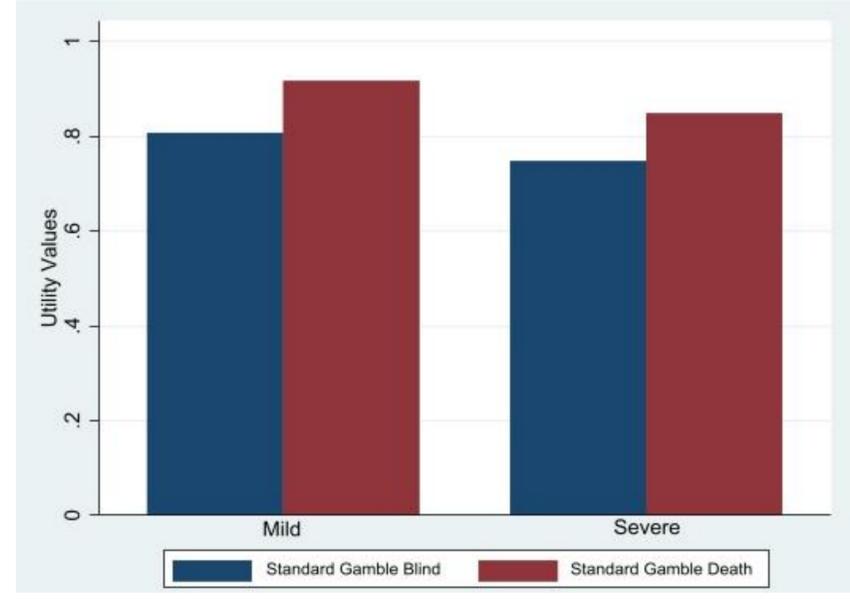


Figure 2. Mean utility values (standard gamble for blind and death) by worst eye mean deviation (MD)

## RESULTS

- Only 43% of patients were willing to risk blindness in return for perfect vision; whereas 60% were willing to risk dying in return for perfect vision.
- Mean UV for the whole patient cohort was 0.77 (standard deviation (SD) 0.27; 95% confidence interval (CI) 0.74 to 0.80) with the standard gamble for blindness; and 0.87 (SD 0.22; 95% CI 0.85 to 0.90) for a gamble of death.
- Mean UV in patients with severe visual field loss was 0.73 (SD 0.27) with standard gamble for blindness and 0.83 (SD 0.25) with standard gamble for death.
- With each method, mean UV was lower in those with severe visual field loss compared to those with mild visual field loss (0.80 (SD 0.26), and 0.92 (SD 0.18), respectively).
- The mean difference in UV between mild and severe groups was 0.076 (95% CI 0.010 to 0.142; P = 0.0071) with standard gamble for blindness.
- In standard gamble for death, the mean difference between mild and severe groups was 0.085 (95% CI 0.031 to 0.140 P = 0.0001).

## CONCLUSION

- Most patients requiring treatment for glaucoma and ocular hypertension are willing to risk their lives in return for the hypothetical offer of normal vision.
- Severity of visual field loss is inversely correlated with quality of life assessed using utility values.
- This information is useful for cost-utility analysis in clinical trials.

**Disclosure:**  
 AS: LPDP, EK: NIHR HTA, MEC, GG: Belkin, Genentech, Ivantis, Reichert, Santen, Sight Science, Alcon, Allergan, B&L, Ellex, Equinox, Genentech, Glaukos, Haag-Streit, Heidelberg, Lumenis, McKinsey, Merck/MSD, Pfizer, Thea, HTA, MEC, Glaucoma-UK, Fight for Sight, KH: None

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