

INTRODUCTION

- In Haiti, few reliable epidemiological data on blindness and visual impairment are available;
- The National Blindness Prevention Committee (*Comité National de Prévention de la Cécité, CNPC*) has estimated blindness to affect 1% Haitians¹;
- An estimated 7% of children are thought to have undiagnosed refractive errors
- Cataracts and glaucoma are thought to be prevalent causes of visual impairment in this population.
- Miragoâne, located in the département des Nippes, has a population of roughly 56 800. A hospital ensures basic access to health care, but there are no ophthalmology services; the closest eye care available is in Port-au-Prince, 3 hours away.
- IRIS Mundial (IM)* is a multidisciplinary, non-governmental organisation (NGO) that collaborates with the CNPC to develop local eye care infrastructures to reduce preventable blindness and visual impairment in Haiti.
- In 2016, the CNPC partnered with the Société Haïtienne d'Ophtalmologie (SHO) to organize a visit from IM to Miragoâne.

PURPOSE

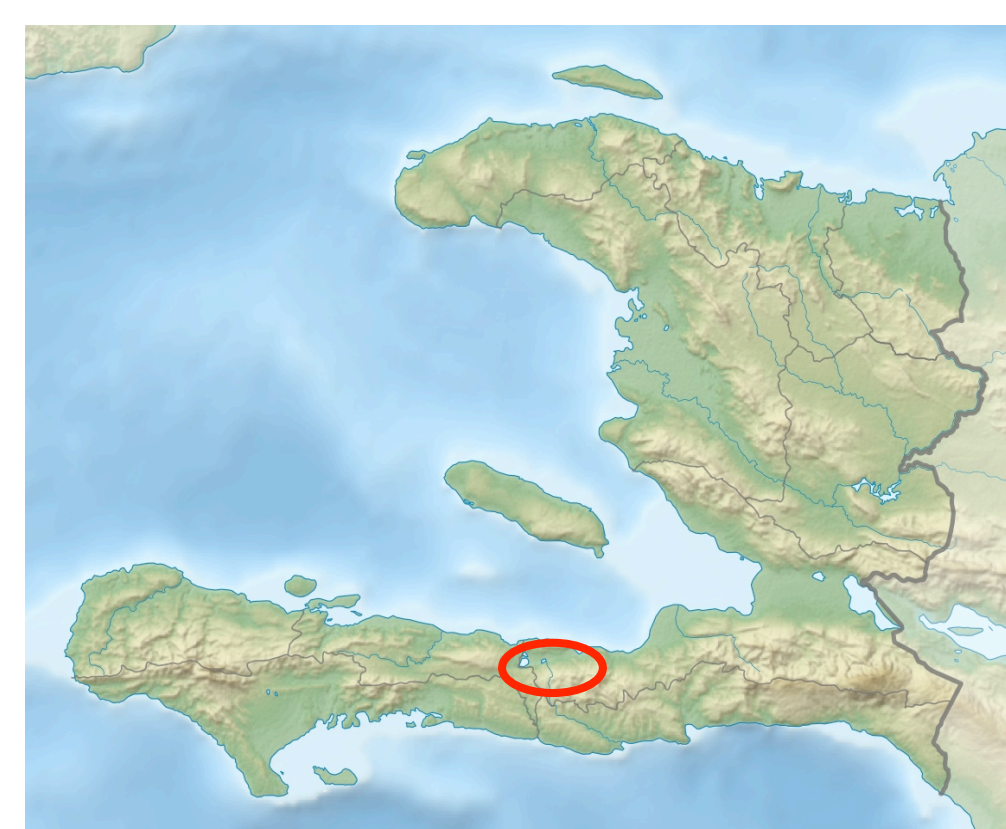
To estimate the prevalence and causes of visual impairment and blindness in the region of Miragoâne, for use in programme planning.

METHODS

From April 27th to the May 1st 2016, a visiting team from *IM* joined a team of Haitian ophthalmologists and nurses, and performed ophthalmic examinations in the general population of Miragoâne, Haiti.

Miragoâne, Haiti

- 28 volunteers
- 5 optometrists
- 4 ophthalmologists
- 1 general practitioner
- 4 opticians
- 5 nurses
- 9 others

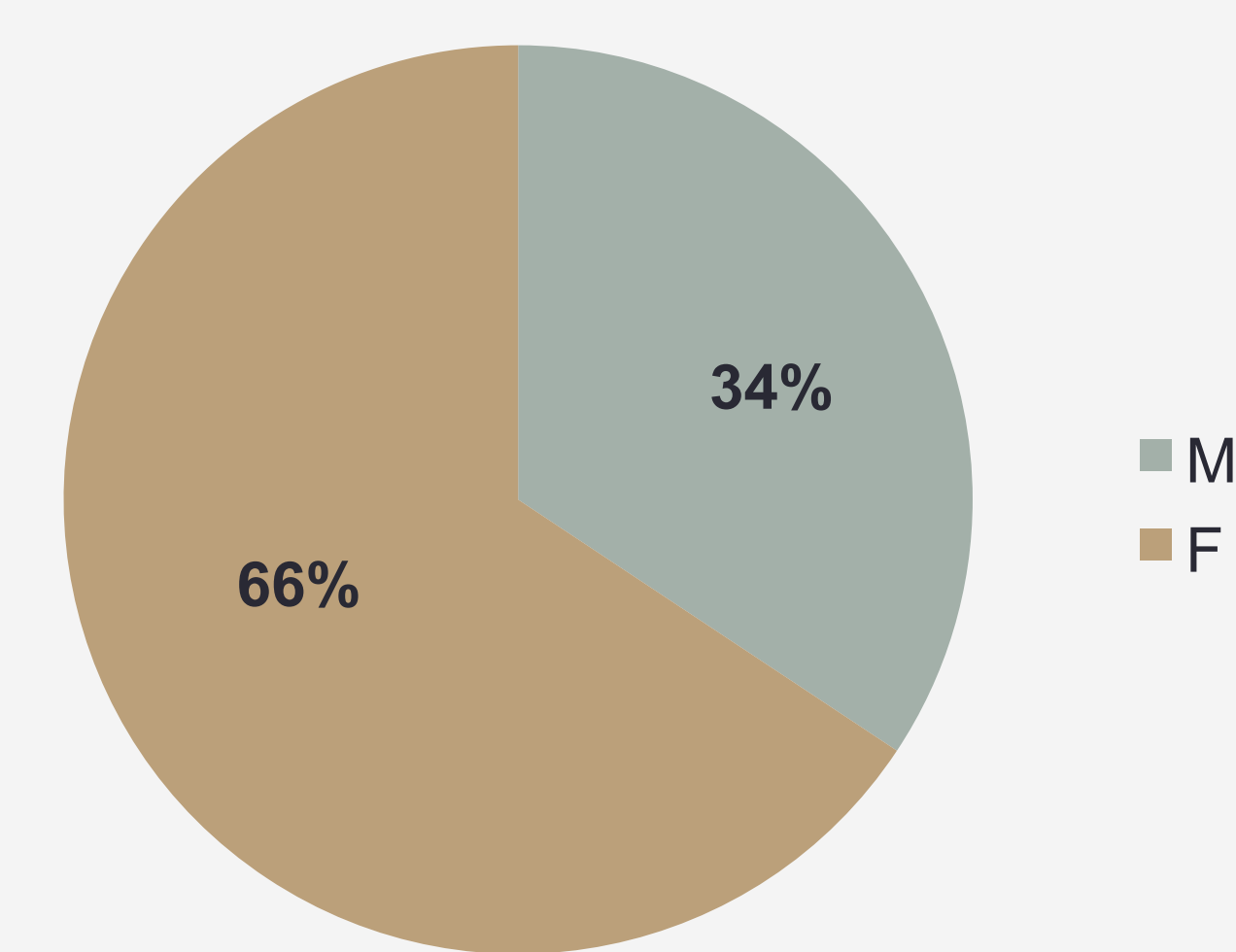


Data collected included presenting visual acuities, objective and subjective refraction, slit lamp examination, Goldmann tonometry and fundus evaluation.

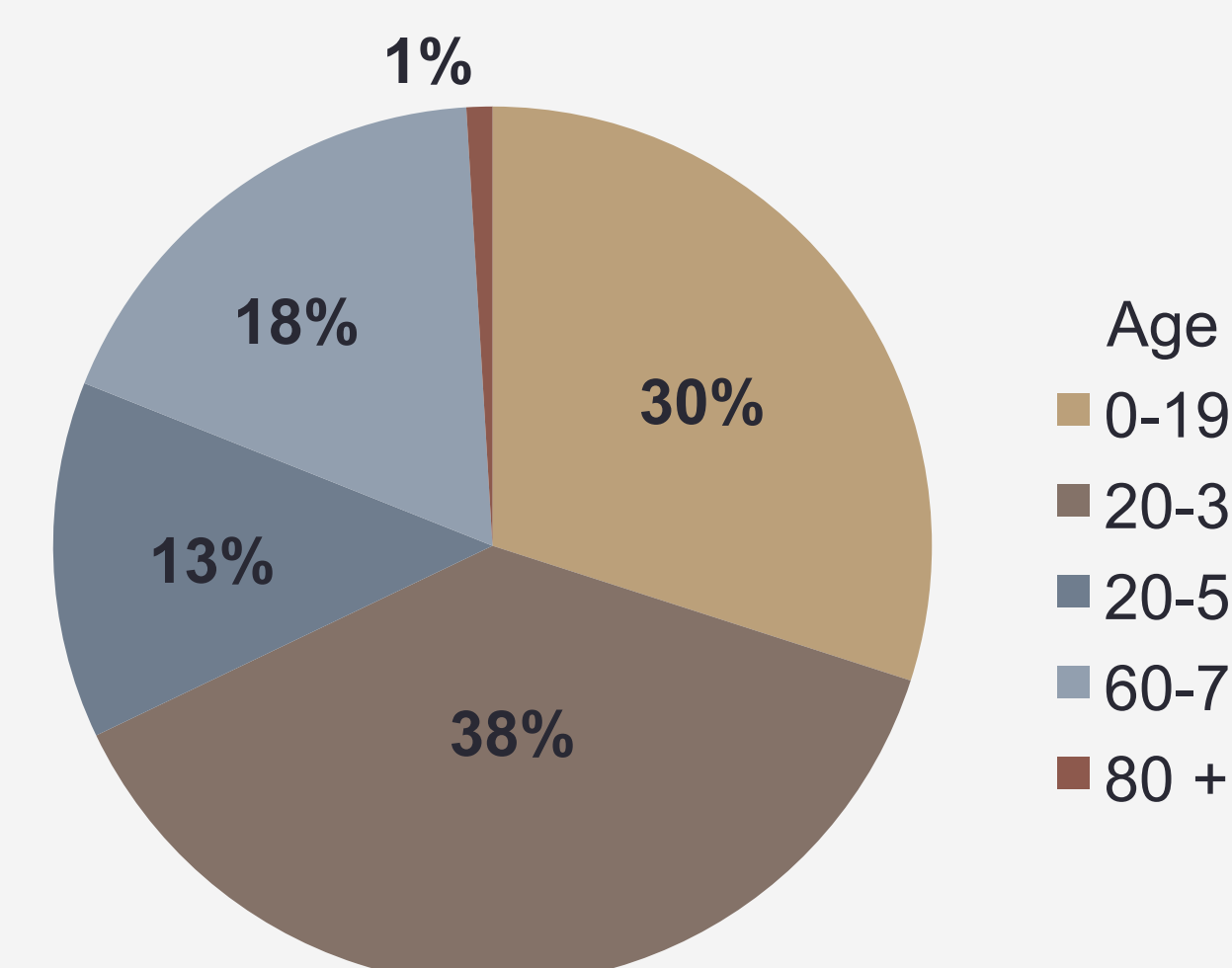
RESULTS

SAMPLE DESCRIPTION

Gender distribution of patients examined in Miragoâne, Haiti (% , n = 1709)



Age distribution of patients examined in Miragoâne, Haiti (n = 1682)

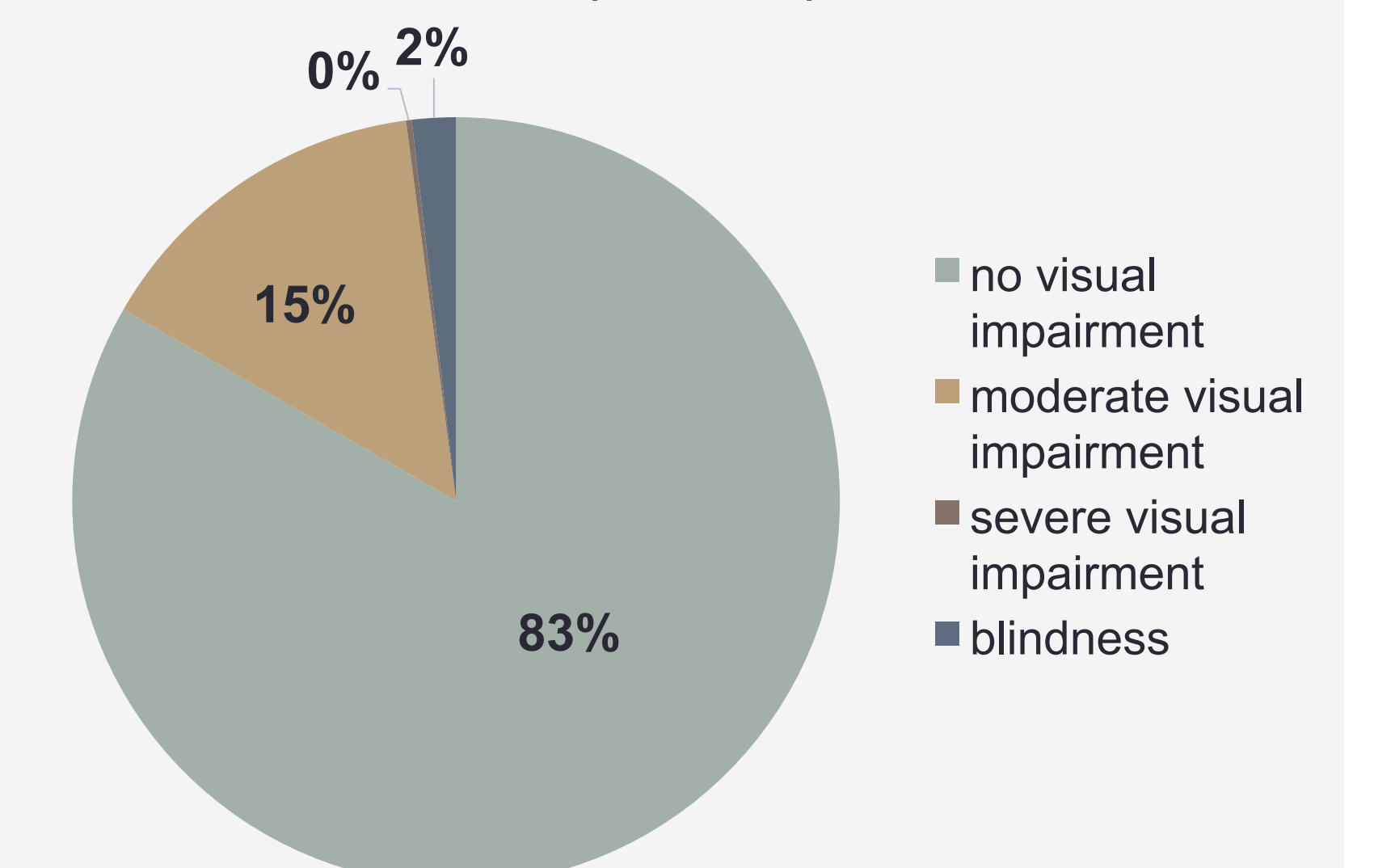


PRESENTING VISUAL ACUITY

According to WHO classification:

- 83.3% of patients had normal vision
 - 20/30 or better in the better eye
- 14.6% of patients had moderate visual impairment
 - < 20/60 ≥ 20/200 in the better eye
- 0.2% had severe visual impairment
 - < 20/200 in the better eye ≥ 20/400 in the better eye
- 1.8% were blind
 - < 20/400 in the better eye

Presenting visual acuity in the better eye, Miragoâne, Haiti (n = 1678)

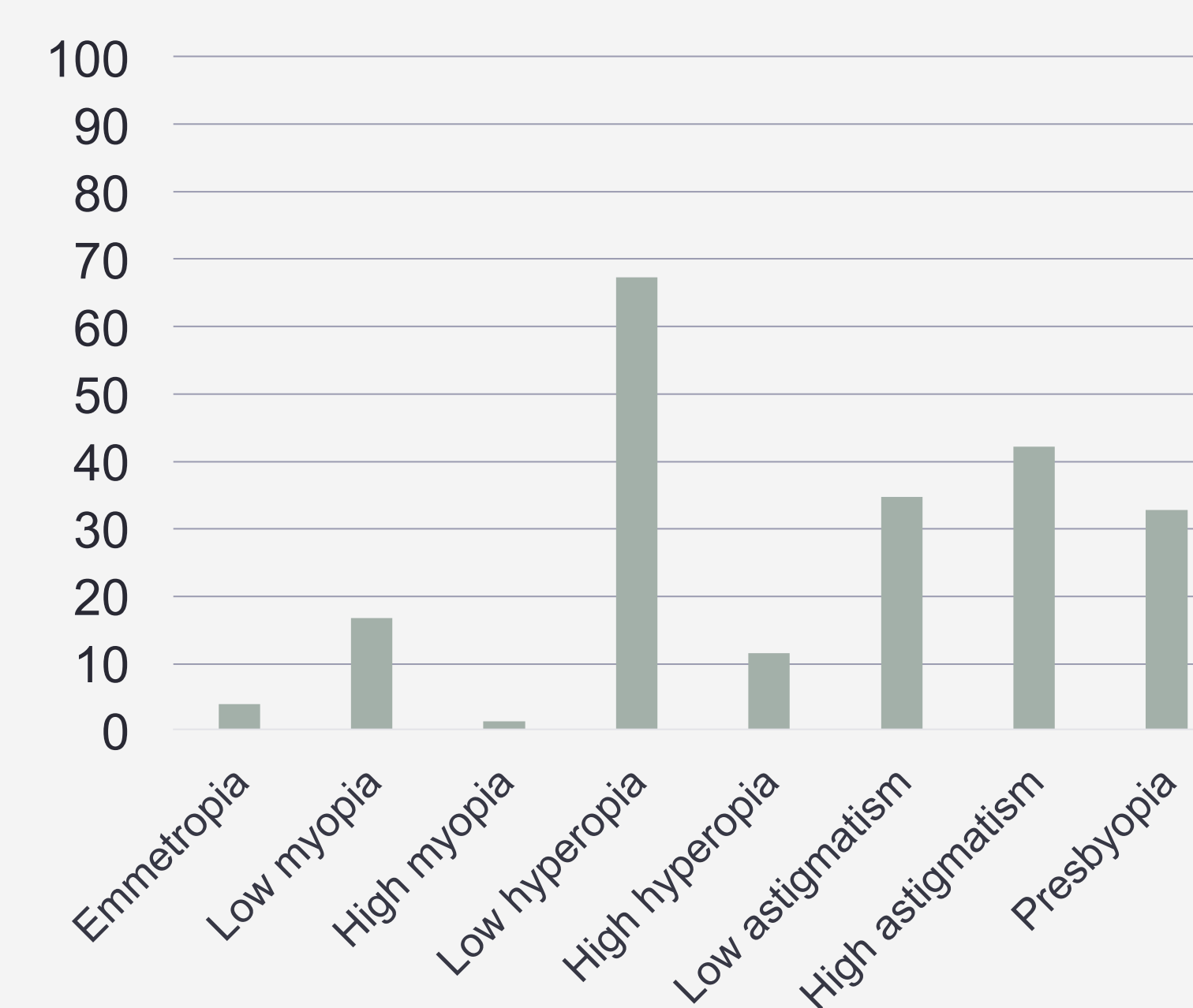


REFRACTIVE ERROR

According to WHO classification:

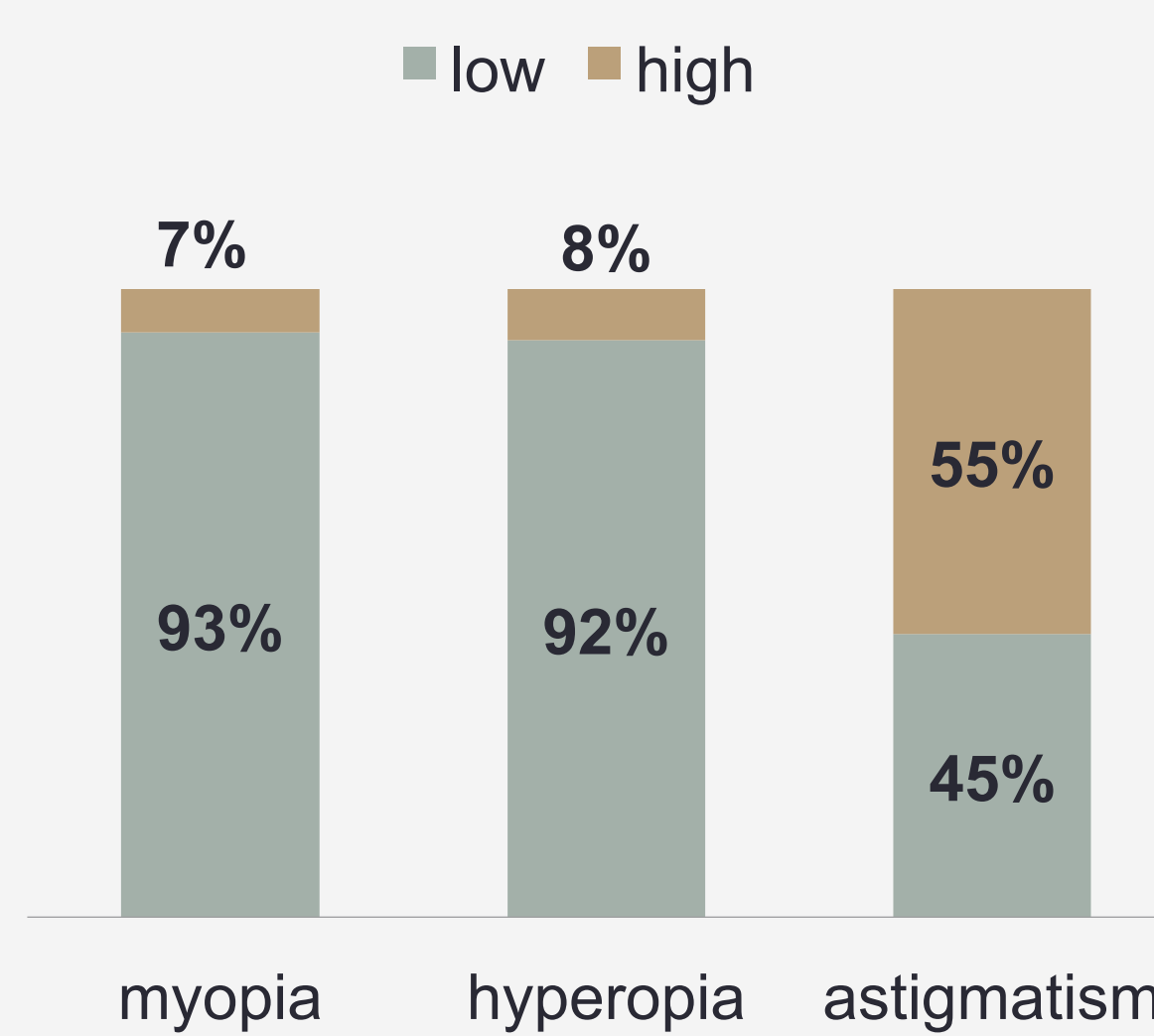
- Low myopia OU: 17% of patients
 - ≤ -3.00 D > 0.00 D
- High myopia OU: 1% of patients
 - > -3.00 D
- Low hyperopia OU: 53% of patients
 - ≤ 2.00 D
- High hyperopia OU: 5% of patients
 - > 2.00 D OU
- Low astigmatism OU: 35% of patients
 - < 2.00 D
- High astigmatism OU: 42% of patients
 - ≥ 2.00 D

Proportion of bilateral ametropias in Miragoâne, Haiti (% , n = 1709)



Presbyopia (requiring prescribed addition): 33%

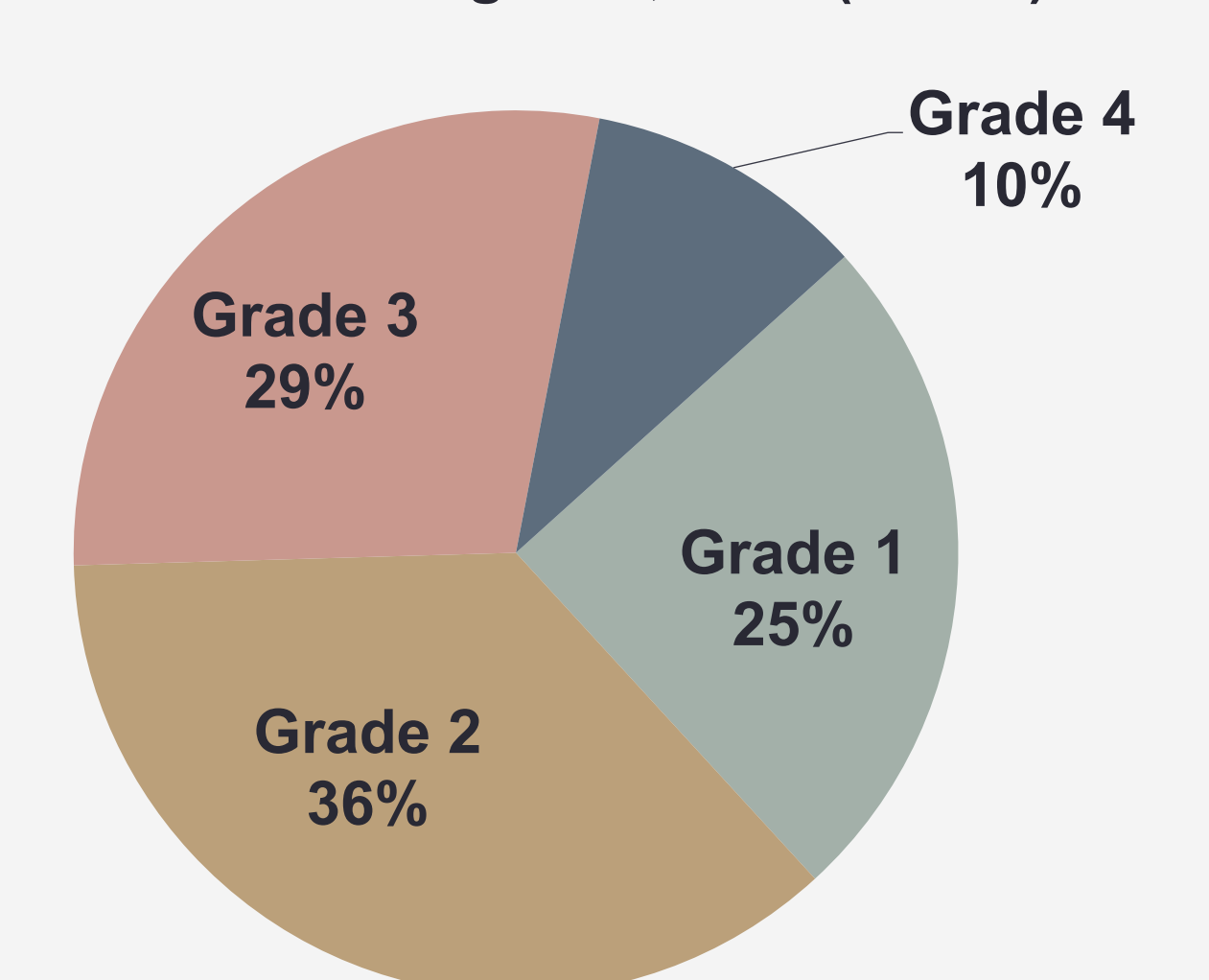
Severity of refractive error by type of ametropia in Miragoâne, Haiti (n=1709)



CATARACTS

Binocular cataracts: 4% of patients
○ 39% of patients with binocular cataracts were grade 3 or 4

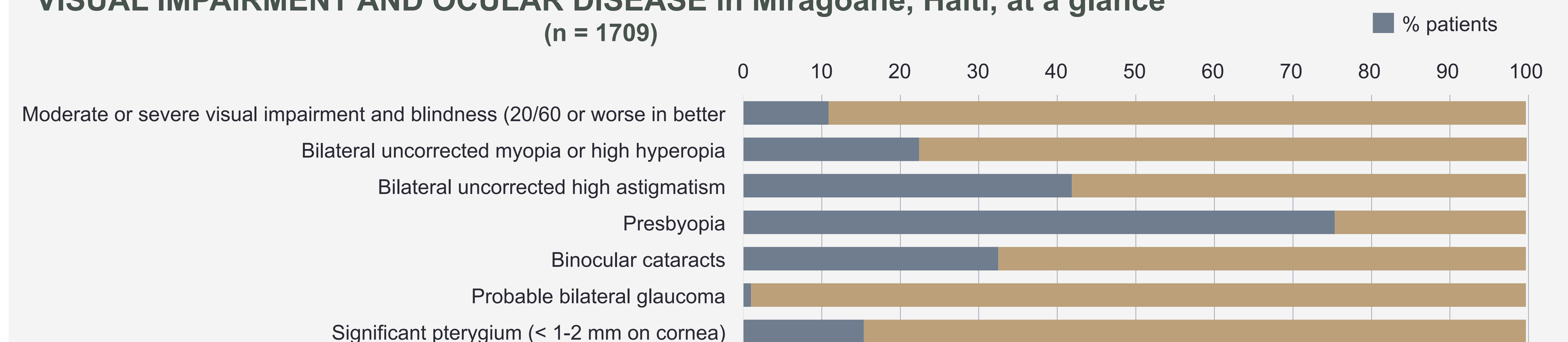
Severity of cases of binocular cataracts in Miragoâne, Haiti (n=165)



PTERYGIUM

- 15% of patients had a monocular pterygium (1-2 mm on cornea)
- 5% of patients had binocular pterygium (1-2 mm on cornea)
- Only 2 patients (0.3%) had a monocular pterygium covering the visual axis, and none had this binocularly

VISUAL IMPAIRMENT AND OCULAR DISEASE in Miragoâne, Haiti, at a glance (n = 1709)



DISCUSSION AND CONCLUSION

- Our data give a glimpse of the prevalence of visual impairment and ocular disease in Miragoâne, Haïti.
- Prevalence estimates for bilateral uncorrected high astigmatism are relatively high.
- Prevalence estimates for uncorrected presbyopia are high.
- Cataracts, significant pterygium and glaucoma are confirmed as prevalent conditions in this population.
- Appropriate interventions need to be planned to tackle the burden of these sight-threatening diseases.
- Further work is needed to estimate prevalence and causes of visual impairment at subnational and national levels.

Take home message

- Prevalence of bilateral uncorrected high astigmatism and presbyopia are high;
- Prevalence of cataracts, significant pterygium and glaucoma is confirmed in this population.

References

- CNPC. Programme Vision 20/20: Plan stratégique national de prévention de la cécité en Haïti 2010-2015.

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