

A bachelor degree in Orthoptics to meet increasing demand for public health to eye care in an African Island - Saint Vincent in Cape Verde

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Introduction

- **Purpose:** Lisbon School of Health Technology (ESTeSL) has been establishing partnerships with developing countries for the implementation of the Orthoptic degree.
- The first-degree program (BSc) was implemented in the University of Mindelo (School of Health), Saint Vicente in 2013.



Introduction

- This paper describes the role of an education degree in Orthoptics delivering public health for eye care to the community.



Methods

- Throughout the four years, using WHO guidelines we planned that the **orthoptic program** should assume four basic functions of education, research, service delivery and policy design.
- Five main partners have been identified: policy-makers, health managers, health professionals, academic institutions and **communities**.
- Assistance has been provided to improve the skills and qualifications of the **local educators** and professional groups.

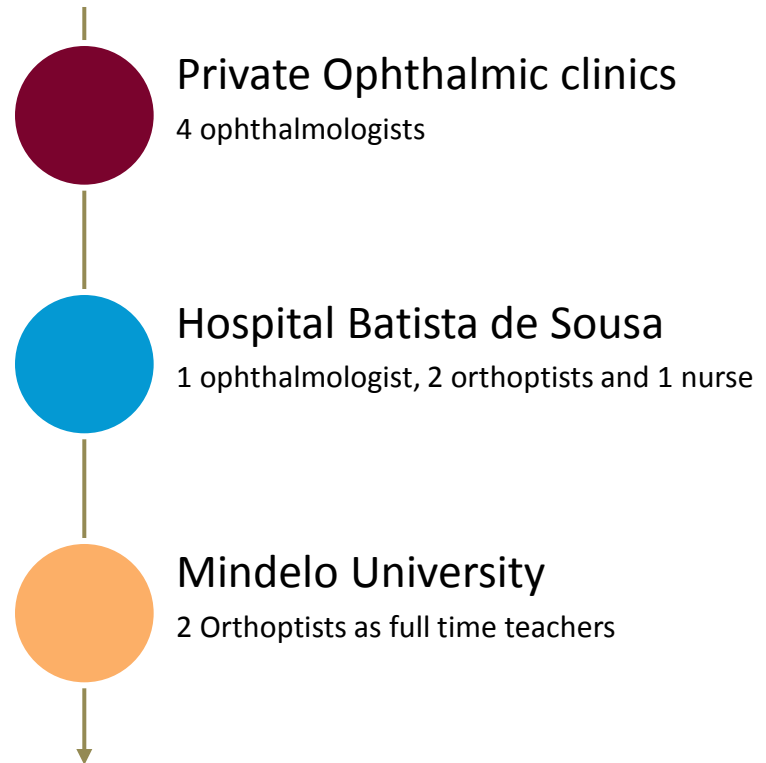
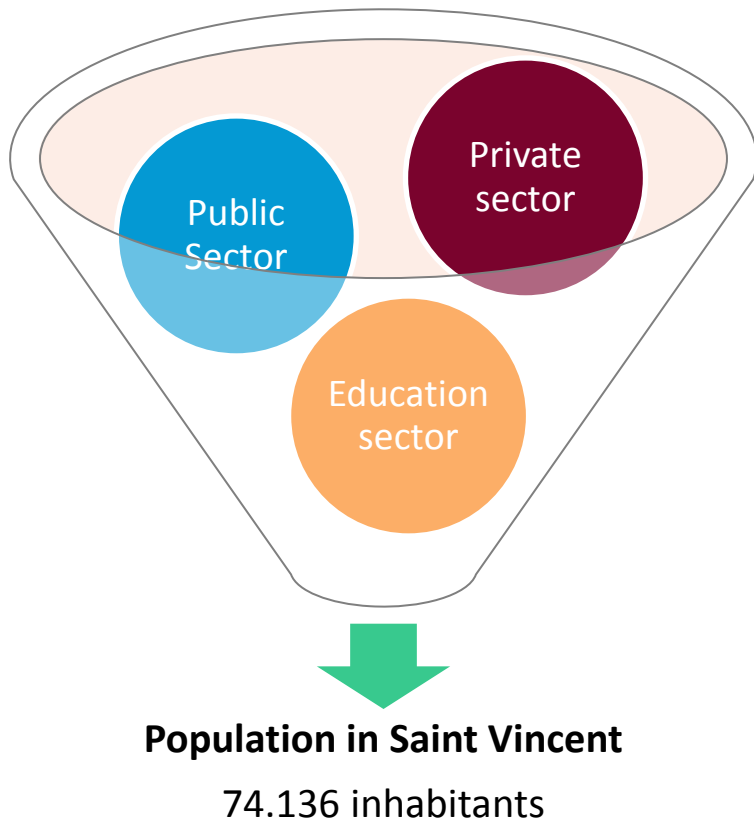
Results

- 9 teachers from ESTeSL are involved in the **education program** with the aim to develop a public health oriented approach to eye care services and the control of blindness, keeping with the objectives of Vision 2020.
- 104 students are enrolled in Orthoptic program.
- Blended learning and teaching approaches that include a mix of sessions (**skype meetings** and face-to-face lectures) with e-learning are being used.



Results

Eye work force



Results

- Eye screenings and visual health promotion
- Identification of visual health priorities
- Annual international symposium on Orthoptics and vision



**SIMPÓSIO INTERNACIONAL DE
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II Jornadas de Ortopia e Ciências da Visão da UM

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Results

- Between 2014 and 2016 **2633** persons were evaluated (29.27 ± 24.03 years).
- A visual acuity $<20/25$ at distance was present in 995 (37.8%) and 394 persons (15%) had a visual acuity $\leq 20/60$.

Age (years)	Sex		Total
	Male	Female	
≤ 5	26	47	73
6-11	481	513	994
12-19	87	145	232
20-39	103	366	469
40-59	127	353	480
60-79	80	219	299
≥ 80	24	62	86
Total	928	1705	2633

Visual acuity	Frequency	%
$\geq 20/25$	1561	59.3
• Interocular difference of 2 lines	77	2.9
$\leq 20/30$ to $\geq 20/50$	601	22.8
$\leq 20/60$	394	15.0
Total	2633	100

Results

- Visual acuity improved in 41.3% of the persons with the pinhole.
- This improvement was significant for right and left eyes ($p < 0.001$).

Visual acuity	Pinhole		Total n(%)
	No improvement n (%)	Improvement n (%)	
≥20/25	216 (26.3)	112 (19.4)	328 (23.4)
• Interocular difference of 2 lines	41 (5.0)	36 (6.2)	77 (5.5)
≤20/30 to ≥20/50	305 (37.1)	296 (51.2)	601 (42.9)
≤ 20/60	260 (31.6)	134 (23.2)	394 (28.1)
Total	822 (100)	578 (100)	1400 (100)

- Manifest strabismus was found in 3.5% of the persons.

Discussion/Conclusion

- Decreased visual acuity and uncorrected refractive errors affected more than a 1/3 of the population screened.
- Strabismus prevalence is in accordance with other studies, who have reported a prevalence of 2.1%–4.6%.
- Development of human resources for **eye health** is the major focus of the Global Action Plan 2014 to 2019 (WHO) to reduce the prevalence of avoidable visual impairment by 25% by the year 2019.
- Education in **Orthoptics** is a valuable asset when delivering community eye care to developing countries.

Discussion/Conclusion

- This strategy pretends to:
 - broadening ophthalmic knowledge,
 - reducing the clinical workload on ophthalmologists,
 - who can perform vital treatments and surgery to improve efficiency and patient care.

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