

INTRODUCTION TO OPTOMETRY

Assist.Lect.Duaa H.Ali

Introduction

Optometry is a healthcare profession concerned with the eyes and related structures, as well as vision, visual systems, and vision information processing in humans. Optometrists are trained to prescribe and fit lenses to improve vision, and in some countries are trained to diagnose and treat various eye diseases.

DUTIES OF OPTOMETRISTS

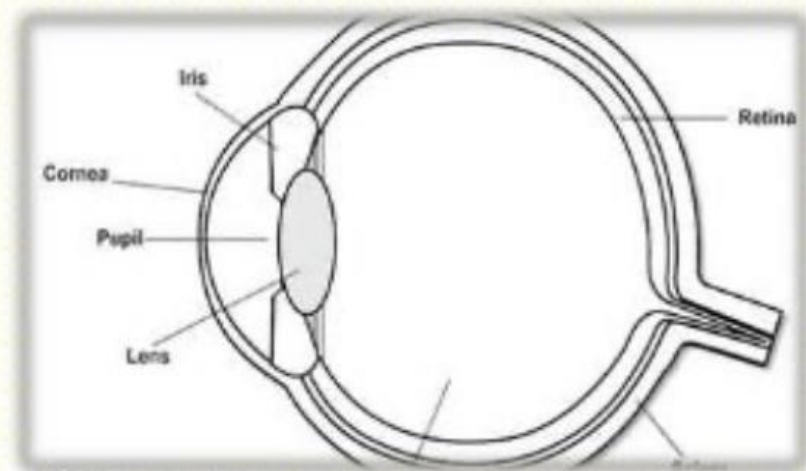
- Perform vision tests and analyze results.
- Diagnose sight problems, such as MYOPIA(nearsightedness),HYPEROPIA(farsightedness) and eye diseases like GLAUCOMA
- Advise patients about proper eye hygiene and care.
- Provides treatments such as vision therapy or low-vision rehabilitation



Brief History of Optometry

- Origins of Optometry goes back a long way
- Developed into the highly technical field today
- Optometry as a discipline traces its roots back roughly 2000 years, to the Greeks.
- Greeks worked out the laws of reflection in mirrors but did not fully understand the principles of refraction.

- Also knew of the crystalline lens but had no knowledge of the retina
- Rays of light came from the eyes, a myth that existed until Leonardo da Vinci's investigation
- The physics of light rays led to establishing the role of the retina



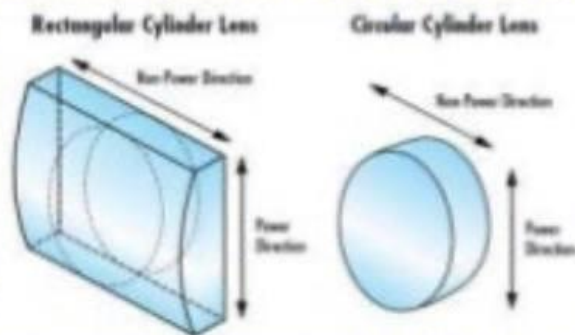
- By 1300, Europeans were making spectacles. From this time and up to the beginning of the 16th century spectacles were primitive being made of horn, bone, leather or metal in two pieces and held together by a rivet
- These were eventually replaced by one-piece mounts but the problem remained as to how to keep the spectacles on the nose



- Around the turn of the 18th century, Benjamin Franklin invented the bifocal lens, John Dalton described colour blindness, and Thomas Young successfully mapped the normal visual field of humans.
- The mid-19th century saw the development of sets of trial lenses to determine lens prescriptions, followed closely by the invention of the ophthalmoscope, which allowed optometrists to view the interior of the eye.



- 19th century saw significant discoveries led to the rapid development of ophthalmic optics which in turn leads to establishment of optometry as a profession in the late 19th century and onwards.



- Throughout the 20th century the scope of practice of optometry has developed with an increasing emphasis on health care.

- In 2016, almost 5000 optometrists in general practice were licensed with their regulatory body, the Optometry Board of Australia. Of these, approximately 2300 were registered to prescribe some medicines for the treatment of conditions of the eye.

IN THE UNITED STATES, THE FIRST COLLEGE OF OPTOMETRY IN THE WORLD WAS ESTABLISHED IN ILLINOIS IN 1872 FOLLOWED BY THE NEW ENGLAND COLLEGE OF OPTOMETRY IN 1894.



*Thank
you*

