

#### **UNIVERSITY OF NAIROBI**



# INTRODUCTION TO OPHTHALMOLOGY

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#### OUTLINE

- Definition
- Expectations
- Teaching methods
- Career in Ophthalmology

#### Definition

- Ophthalmology: The branch of medicine concerned with the study and treatment of disorders and diseases of the eye.
- Ophthalmologist: A physician who specializes in *ophthalmology*.

## History of Ophthalmology

- Earliest records: code of Hammurabi on rewards and penalties for physicians, 2000BC
- Egyptian records: 1500BC treatment of eye diseases by incantations and applications of various concoctions, epilation.
- Hippocrates: discarded supernatural beliefs but no advancement in ophthalmology

#### History cont

- Galen: anatomy of the eye
- Arabian renaissance translated Greek texts to Arabic but perpetuated errors
- Western Middle Ages translation of Arabic text to Latin, 11<sup>th</sup> century by Constantinus Africanus
- Benevenutus Grassus book on eye diseases

#### History cont

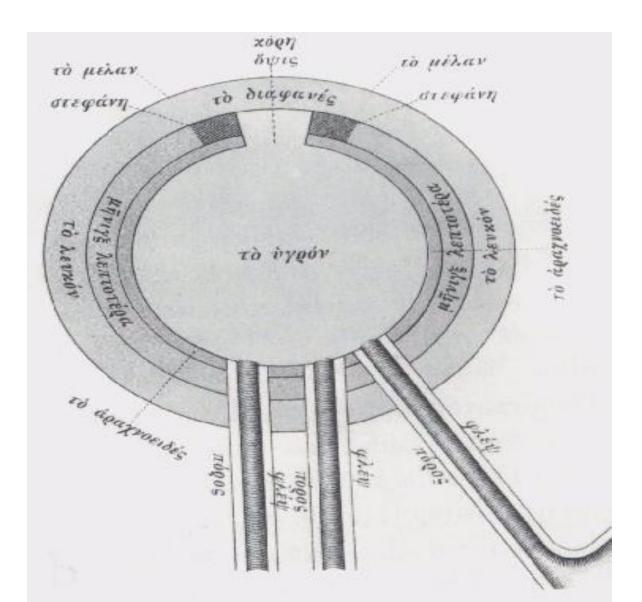
 Roger Bacon: crossing of the optic nerves at the chiasma, first mention of convex lenses for presbyopia.

Leonardo da Vinci close to realizing the principle of the

camera as applied to the eye.

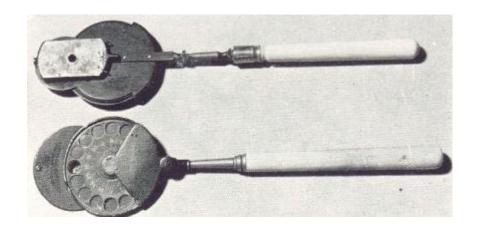


#### How the eye was thought to work

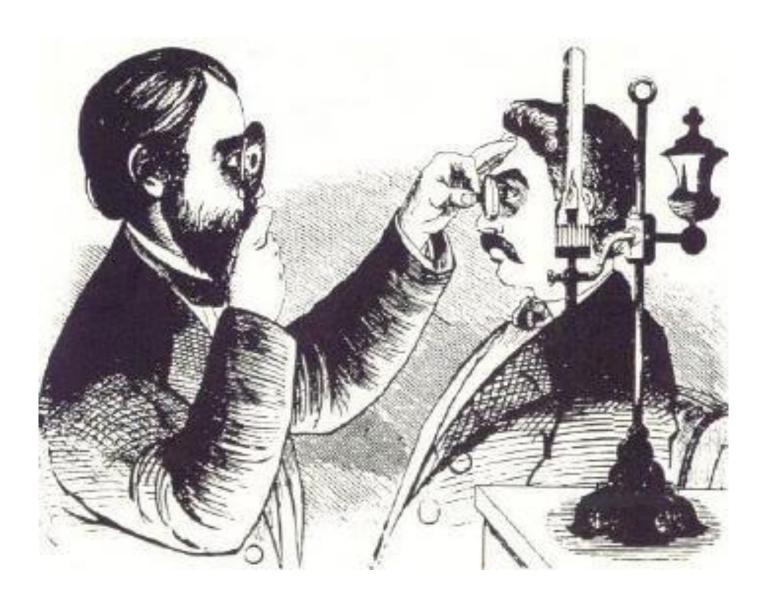


#### History cont

- Modern period: 16<sup>th</sup> and 17<sup>th</sup> Century better understanding of anatomy of eye and mechanism of vision
- 19<sup>th</sup> century marked progress; surgery, invention of ophthalmoscope, elevation of ophthalmology to the most exact of clinical studies.



# Fundoscopy



# Early glasses



#### **OBJECTIVES**

- Understand the basic anatomy and physiology of the eye
- Understand the pathology of common eye disorders
- Be able to take accurate history of a patient with an eye complaint
- Be able to assess visual acuity and examine the eye using a torch and a direct ophthalmoscope

#### Objectives cont.

- Be able to diagnose common eye disorders
- Be able to treat simple eye disorders
- Recognize and refer eye disorders that need referral
- Recognize systemic diseases that can lead to eye disorders and advice the patient appropriately as well as refer.

#### **Academic Staff**

Prof Ilako
Dr Marco

Prof Karimurio Dr Nyenze

Dr Gichuhi
Dr Njambi

Dr Kimani
Dr Gachago

Dr Njuguna
Dr Nyamori

Dr Kariuki

### Ophthalmology as a Career

- Very rewarding
- 3 years post graduate training
- Scholarship opportunities available
- One the best run training programs in UON
- Opportunities to sub-specialize
- Ever changing technology exciting

# Outreach













