

Ophthalmology

1. GOAL

The broad goal of the teaching of students in ophthalmology is to provide such knowledge and skills to the students that shall enable him to practice as a clinical and as a primary eye care physician and also to function effectively as a community health leader to assist in the implementation of National Programme for the pre-vention of blindness and rehabilitation of the visually impaired.

2. OBJECTIVES

2.1. Knowledge At the end of the course, the student should have knowledge of:

- 1.Common problems affecting the eye:
- 2.Principles of management of major ophthalmic emergencies
- 3.Main systemic diseases affecting the eye
- 4.Effects of local and systemic diseases on patient's vision and the necessary action required to minimize the sequelae of such diseases;
- 5.Adverse drug reactions with special reference to ophthalmic manifestations;
- 6.Magnitude of blindness in India and its main causes;
- 7.National programme of control of blindness and its implementation at various levels
- 8.Eye care education for prevention of eye problems
- 9.Role of primary health centre in organization of eye camps
10. Organization of primary health care and the functioning of the ophthalmic assistant.
- 11.Integration of the national programme for control of blindness with the other national health programmes;
12. Eye bank organization

2.2. Skills At the end of the course, the student should be able to:

1. Elicit a history pertinent to general health and ocular status;
2. Assist in diagnostic procedures such as visual acuity testing, examination of eye, Schiottz tonometry, staining for corneal pathology, confrontation perimetry, Subjective refraction including correction of presbyopia and aphakia, direct ophthalmoscopy and conjunctival smear examination and Cover test.
3. Diagnose and treat common problems affecting the eye;

4. Interpret ophthalmic signs in relation to common systemic disorders;
5. Assist/observe therapeutic procedures such as sub conjunctival injection, Corneal/ Conjunctival foreign body removal, Carbolic cautery for corneal ulcers, Nasolacrimal duct syringing and tarsorrhaphy;
6. Provide first aid in major ophthalmic emergencies;
7. Assist to organise community surveys for visual checkup;
8. Assist to organise primary eye care service through primary health centres;
9. Use effective means of communication with the public and individual to motivate for surgery in cataract and for eye donation;
10. Establish rapport with his seniors, colleagues and paramedical workers, so as to effectively function as a member of the eye care team.

2.3. Integration

The undergraduate training in Ophthalmology will provide an integrated approach towards other disciplines especially neuro-sciences, Otorhino-laryngology, General Surgery and Medicine.

3. SYLLABUS

3.1. Theory

At the end of training in the subject of ophthalmology, an MBBS student should be able to: Identify the abnormal conditions of the eye - Diagnose various eye diseases which are most prevalent in the country – Manage various eye conditions like conjunctivitis, sty, chalazion and foreign body - Recognize and give medical treatment of anterior segment diseases - Identify the national objectives and be an active participant in the National Programme for Prevention and Control of Blindness - Recognize the ophthalmic manifestations of systemic diseases - Aetiology, clinical features and treatment of conjunctival infections, allergies, pterygium, xerosis and trachoma - Aetiology, clinical features, complications and treatment of corneal ulcers, keratomalacia and other scleral and corneal inflammations -Basic principles of keratoplasty, eye donation and corneal blindness - Aetiopathogenesis and complications of ectropion, entropion, ptosis, lagophthalmos, symblepharon and lid inflammations -Aetiology, clinical features and treatment of lacrimal sac infections and causes of epiphora - Classification, clinical features, diagnosis and treatment of various forms of cataract - Classification, aetiology, clinical features, complications and management of various forms of uveitis - Classification, aetiology, clinical features and management of various glaucomas - Differential diagnosis of 'Red eye'- Classification, clinical features and treatment of various refractive errors and presbyopia - Types of ocular trauma, clinical features, complications and management including sympathetic ophthalmia - Aetiology, clinical features and management of optic nerve disorders including differentiation of papilloedema and optic neuritis - Aetiology, clinical features, and management of orbital diseases; common causes of proptosis - Ocular manifestation of systemic diseases including diabetes,

hypertension, tuberculosis, lep-rosy, anemia, and pregnancy-induced hypertension - Types of blind-ness and their causes - Ocular side effects of systemic drugs -Objectives of National Programmes of Prevention and Control of Blindness and Trachoma Control Programme - Aetiology, clinical features and treatment of common retinal disorders including vas-cular occlusions, inflammation and detachment - Aetiology, clinical features and principles of treatment of vitreous diseases e.g. haemorrhage, degeneration, liquefaction, endophthalmitis - Differ-entiate senile cataract and Open Angle Glaucoma - Ocular mani-festations of common neurological disorders - Aetiology, symptoms, diagnosis and principles of treatment of strabismus - Recent advances in ophthalmology - types and scope of lasers, intraocu-lar lens implantation.

3.2. Practical

Determine visual acuity, field of vision - Test colour vision -Take conjunctival swab - Use of ophthalmoscope - Examine ante-rior segment of eye - Remove extra ocular foreign body - Perform epilation of cilia - Incise and drain lid abscess - Distant direct oph-thalmoscopy for diagnosis of cataract.