

Overview of Medical Optometry 2023 and Beyond

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Course Description:

Optometry as a profession has changed dramatically over the years. For some of us on the panel we have witnessed much of that change. From refractionists who correct vision with glasses to contact lens evaluations and prescriptions followed by dilation and the evaluation of the internal structures of the eye and diagnosis of eye disease. Next, we witnessed the evolution of treatment of eye disease with medications and even surgery. In this course we will discuss where medical optometry is today and where we see the future.

Objectives:

- 1. Attendees will learn where medical optometry is today.**
- 2. Attendees will learn more about refractive medical optometry today.**
- 3. Attendees will learn more about ocular medical optometry today.**
- 4. Attendees will learn more about systemic and surgical medical optometry today.**
- 5. Attendees will learn more about where medical optometry is going in the future in each area and how to keep up with the ever-evolving information and changes.**

- I. What is medical optometry? – Introduction- **April**
 - A. What do patients see as medical optometry?
 - B. Do patients see any difference?
 - C. What does a medical practitioner/practice look like?

- II. Overview of Refractive Medical Optometry Today- **Eef**
 - A. Myopia
 - B. Presbyopia
 - C. Hyperopia
 - D. Other
 - It was a Dutch ophthalmologist, Prof. Donders around 1864 to first describe the different ‘anomalies of the eye’ as we know them today (*On the anomalies of accommodation and refraction of the eye*, Franciscus Cornelis Donders: London, The New Sydenham society). There is a big statue of the professor in the middle of the city of Utrecht in the Netherlands, in which city now the (only one in the Netherlands) optometry school is located. Interestingly, as an ophthalmologist he laid out the groundwork of what we would today describe as the basis of the profession of ‘optometry’.
 - However, optometry today has evolved further into a medical profession. But at the same time, can we – and should we – be careful not to divert too much from our roots: the optical and refractive side of things?
 - Questions that will be brought to the table are:
 - Are ODs still able to provide and advise ‘the best optical solution’ to patients?
 - Multifocal or bifocal glasses – which is better for the patient?
 - Glasses, contact lenses – or refractive surgery – which is better for the patient?
 - Anisometropia – when to prescribe contact lenses?
 - Do ODs understand optics of contact lenses (including scleral lenses)?
 - Do we fully understand as ODs the optics of presbyopia and presbyopic correction?

- Are ODs fresh out of school able to fit corneal GP lenses – and do they understand their optics and their design well?
- Do ODs understand ocular surface shape (corneal topography and beyond) well (enough)?

III. Overview of Ocular Medical Optometry Today- **Shira**

- A. Diabetes
- B. Glaucoma
- C. Retina
- D. Dry Eye Disease
- E. Other

1. The role of the optometrist

- Gatekeeper
 - i. Primary care
 - ii. Necessitates broad knowledge of the entire eye
 - iii. Strong referral base and relationships with all subspecialties of ophthalmology as well as internal medicine specialties including rheumatology, dermatology, allergy, endocrinology, etc.
- Medical Practitioner
 - i. Independence to practice medical optometry
 - ii. Liability for proper assessment, treatment, management and appropriate referral for escalation of care.
- Location specific?
 - i. Private practice – OD only
 - 1. Focus on establishing referral network
 - 2. Decide on what you do and what you don't do – be clear about this in marketing and to your patients.
 - ii. Ophthalmology department
 - 1. Despite advanced medical knowledge, expertise in complex refraction and contact lens fittings is essential
 - 2. Effectivity of a niche
 - iii. Academia
 - 1. Skillset when it comes to teaching interns, externs, residents, etc.
 - iv. MD/OD setting
 - 1. Establish a niche and a respectful/firm relationship with colleagues.
 - v. What if I “just” work in an optical setting?

1. Am I “off the hook”?
- Are we specialists?
 - i. What does it mean to have a niche?
 - ii. What if I don’t want to treat _____ (fill in the blank...glaucoma, DED, AMD, etc.)...is that okay?

IV. Overview of Systemic and Surgical Medical Optometry Today-**Nate**

- A. Lasers
YAG cap, LPI, SLT, laser floater removal – indications, treatment protocols for each
- B. Excision of lumps and bumps
RF removal of lesions, chalazion management
- C. Injections
Intramuscular, intradermal, intralesional (Kenalog injections), sub-conj, intracameral (Bimatoprost)
- D. Pre and Post Op Medical Care
- E. Dry Eye Treatments
- F. Systemic disease
- G. Other

V. What is the Future of Refractive Medical Optometry? - **Eef**

- A. Myopia
 - B. Presbyopia
 - C. Hyperopia
 - D. Other
- Considering ‘all of the above’ – optometrists have a role, a duty, and an obligation towards our patients, to provide or at least inform them objectively about the best vision correction method possible – independent from the financial involvement.
 - Furthermore – where do we stand with our education? Differences from around the world are apparent – but even within the USA significant differences remain when you graduate from one school or the other. Some schools excel in (specialty) contact lenses for instance – but not all. What do we want, as a profession?

- Where do we stand, and where do we go? In this session we discuss and cover this very important topic – for our future and the future of new students coming out of optometry school Who are we, and who do we want to be?
- The topic of myopia (management) gets a lot of attention, also (and rightfully so) also at this meeting. But this touches on the core of our profession: do we fully understand myopia, and if we apply optical intervention methods (glasses and contact lenses) do we fully understand the optical pathways behind that?
- The same, to a very large degree, can be said about presbyopia management.
- Points of discussion are:
 - Optometry school – more medical or more optical?
 - What level of (specialty) soft lens education do we need?
 - Myopia management – a medical enterprise, or mostly an optical phenomenon?
 - Presbyopia management – can we do better if we better understand the optical pathways?
 - Shall we call our patients clients?
 - The role of technology in analysing the eye, diagnosis & artificial intelligence

VI. What is the future of Ocular Medical Optometry? - Shira

A. Diabetes

- Where have we been?
 - Detection and counseling
- Where are we going?
 - What is on the horizon?

B. Glaucoma

- Where have we been?
 - Drops, oral meds, laser
- Where are we going?
 - Sustained release?
 - Others?

- C. Retina
- D. Dry Eye Disease
- E. Other

AMD

- Where have we been?
 - Refer out
- Where are we going?
 - Drugs? Genetics?

Anterior Segment Disease

- Where have we been?
 - Drops, procedures, sclerals
- Where are we going?
 - What's on the horizon?

VII. What is the future of Systemic and Surgical Optometry Today? -**Nate**

- A. Lasers
 - Low energy annual SLT?
 - Direct transscleral SLT?
 - Retinal lasers?
- B. Excision of lumps and bumps
 - Excision biopsy? Different technology, newer technology?
- C. Injections
 - Intravitreal injections?
- D. Pre and Post Op Medical Care
- E. Dry Eye Treatments
 - LLLT – low level light therapy
- F. Systemic disease
- G. Other

VIII. Why does it matter that we think Medical Optometry wherever we are at? - question to 2 panelists

IX. What should optometry be doing now to prepare for that next big thing in optometry? - question to 2 panelists