Roles of Eye Care Providers and Importance of Eye Examination

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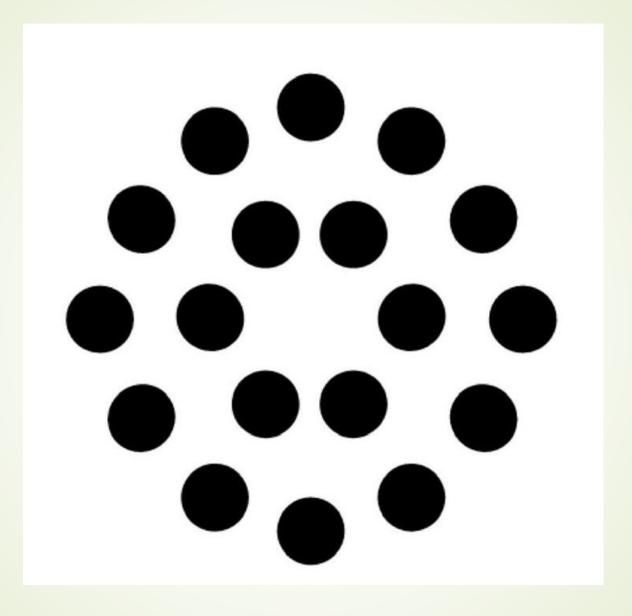
Pre-lecture Reflection

- 1. Have you ever had an eye examination? When was it?
- 2. Who performed the eye examination for you?
- 3. What tests did the eye care provider do for you?
- 4. What are the roles of optometrists?
- 5. What are the roles of ophthalmologists?
- 6. Can eye examination be done in babies?

What is an optometrist (眼科視光師)?

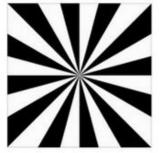
	1	20/200
FP	2	20/100
TOZ	3	20/70
LPED	4	20/50
PECFD	5	20/40
EDFCZP	6	20/30
FELOPZD	7	20/25
DEFPOTEC	8	20/20
LEFODPCT	9	
F D P L T C E O	10	
PEZOLCFTD	11	





Vision without Astigmatism

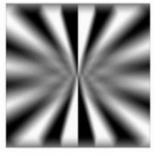






With the rule astigmatism

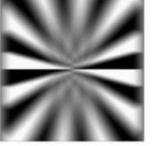






Against the rule astigmatism

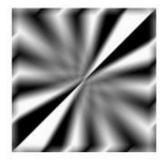




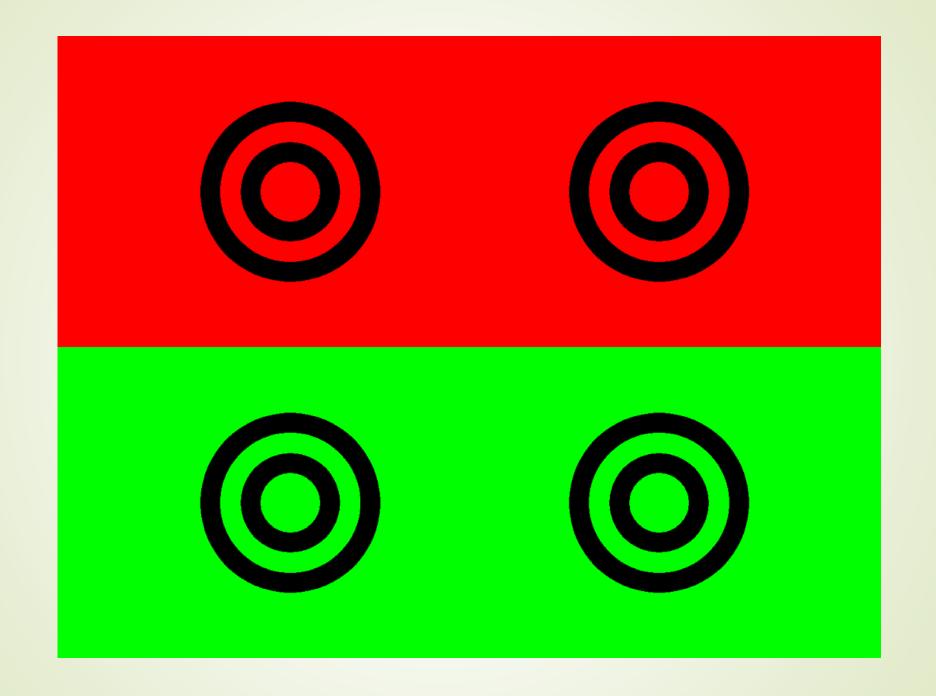


Oblique astigmatism





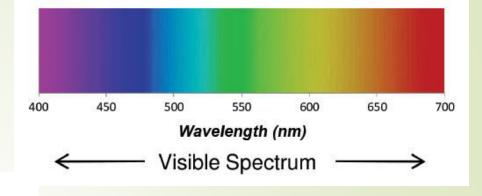


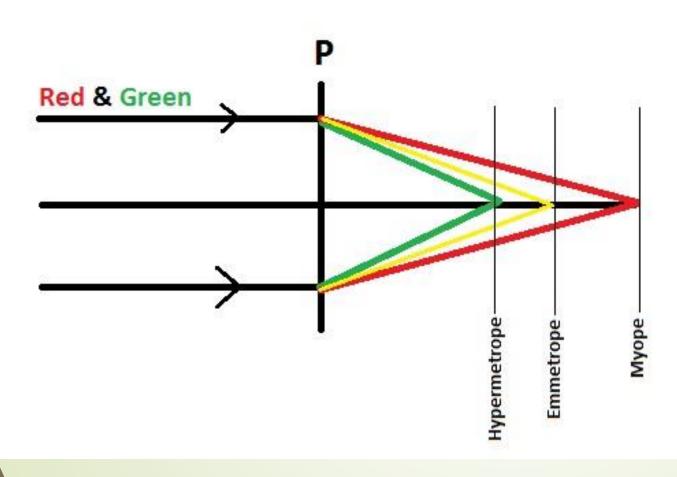


Duochrome test

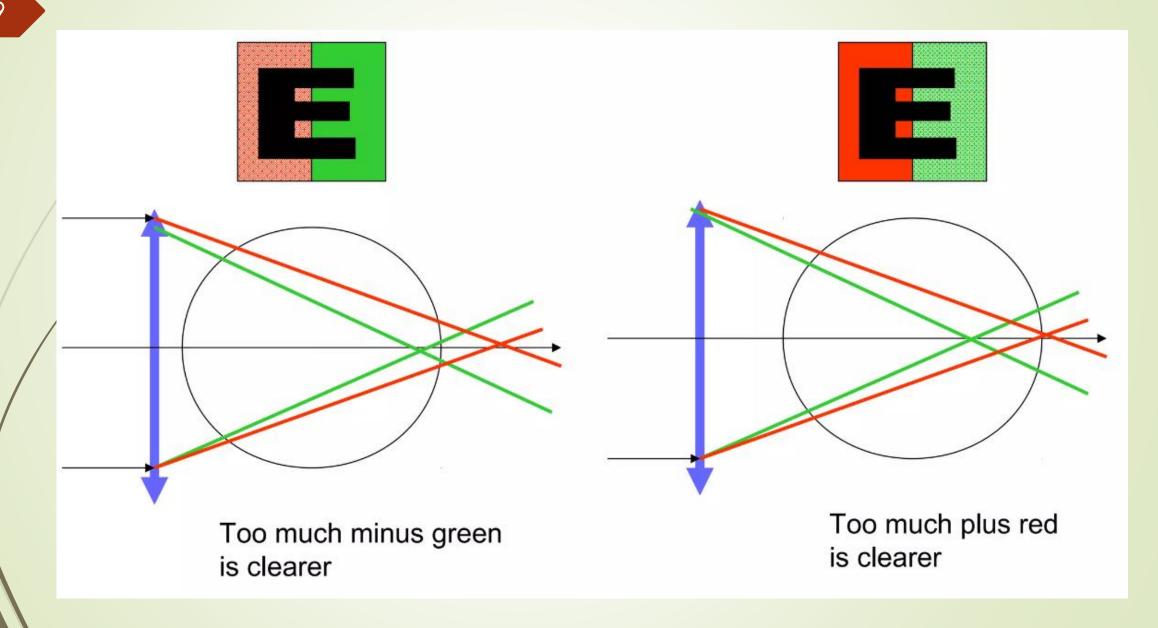
How do you feel this line? How do you feel this line? Chromatic aberration

Chromatic aberration





Chromatic aberration



Do Optometrists Only Perform Refraction?

What is an optometrist (眼科視光師)?

- Primary eye care practitioners
- Specialized in the examination, diagnosis, management, and prevention of visual system disorders and ocular diseases
- A point of entry into the vision/health care system



Primary Eye Care Examination

Lasts about 60 mins!

- History
- Visual acuity
- Refraction
- Binocular vision assessment
- Color vision
- Intraocular pressure
- Ocular health assessment
- Diagnosis and prescription
- Referral if needed



眼科視光學診所服務 Services provided by The Optometry Clinic

成人、兒童及嬰孩驗眼

檢驗:

- 視覺
- 屈光度數
- 眼睛健康
- 雙眼協調能力





Primary Eye Care Consultations for Adults, Children and Infants

Assessment of:

- vision
- refractive status
- · ocular health
- binocularity





如有需要,我們會為應診者提供以下的轉介服務



If necessary, we refer our clients to following services

隱形眼鏡驗配服務 Contact Lens Service

 軟鏡及透氣硬鏡 Soft contact lenses and rigid gas permeable lenses



 異常角膜弧度特製 鏡片 Custom-made contact lenses for special prescription and

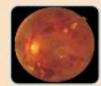
irregular comea



角膜矯視鏡片

眼病服務 Ocular Disorder Service

● 進一步的眼病診斷 Further workup and consultation of ocular diseases



眼鏡驗配服務 **Optical Dispensary** Service

- 眼鏡 Spectacles
- 運動及安全眼鏡 Sports and safety evewear
- 特製眼鏡 Custom-made spectacles for special needs

雙眼視覺服務 **Binocular Vision** Service

- 雙眼視覺的深入 檢查
- Further workup for binocular vision problems
- 視變矯正 Vision therapy





視障復康服務 Vision Rehabilitaion Service

視障人士低視能的診 斷及治療

Low vision evaluation and management for patients with vision loss





深度近視服務 High Myopia Service

• 深度近視的特 別診斷及治療 Special evaluation and management for high myopia



視網膜退化護理 **Retinal Degeneration** Care

視網膜退化病變 患者登記冊 RP Registry





專科測試 Advanced Investigations

電生理診斷 Electro-diagnosis



- 眼底影像攝影 Ocular imaging
- 色覺檢驗 Colour vision assessment
- 視覺功能檢驗 Visual function assessment



PolyU Optometry Clinic Virtual Tour

14



https://www.youtube.com/watch?v=Kk5YqQ2oxm4&t=238s





Checking eyes for...

- Children? Babies?
- Yes! Of course
- Important to detect:
 - ■Significant refractive error
 - Squinting eye



https://www.youtube.co m/watch?v=pDn2f5PSZ4E

Cardiff Cards – measuring vision in infants









Status of Optometrist in Hong Kong

- Independent professional providing "primary" eye care service
- Good reputation around the world
- Recognized by the HKSAR
- Regulated by the Optometrists Board (視光師管理委員會), all optometrists in HK MUST be registered and follow the Code of Practice (註冊視光師專業守則)

The respective numbers of optometrist registrants in various parts of the register and the corresponding restrictions on practice:

Part	Number	Restrictions on practice
	1210	
11	132	Not allowed to use any diagnostic agent other than staining agents
	16	Not allowed to perform any function or engage in any activity other than work relating to refraction.
IV	876	Not allowed to perform any function or engage in any activity other than work relating to refraction and contact lenses. Or Not allowed to perform any function or engage in any activity other than work relating to refraction.
Total:	2234	her sta

Updated: 30 Apr 2024



Looking for Part I Optometrists?

R尋常不過 · 但本報接獲投訴指 · 有並 p 眼鏡店職員為顧客驗配院形眼鏡 - 獎 \$眼疾。觀光師業界指:市民對觀光師 +全港無牌觀光師佔行內近兩成:記者 多區 50 間有驗配服務的眼鏡店,發現 D格證件憑掛在店內當眼處 - 渝半觀光 E驗光室內。

明報記者 張艷紅

視光師約佔行內近兩成,有連鎖眼鏡 店或因未能轉請足夠人手,只能安排 視光師巡迴在不同分店工作, 行內俗 稱「飛虎隊」,不排除有部分營業時 間由非註册的視光師爲顧客驗光。

人手不足 視光師巡過各分店

事主電先生版嘆指、若顧客在驗服 時並無特別留意視光師證件及問清全 名,即使之後有問題亦難追查。他後 來向眼鏡店多番查問及透過消費者委 員會查詢,才發現當日爲他驗配隨形 **服籤的女職員並非註册視光師,而在** 場的視光師則爲第IV部分臨時註册的 視光師(見表),亦不可敬配隨形眼

不足一成視光師店舖當眼掛證件

紀者早前觀察 港九新界多區 50 間有 驗配服務的眼鏡店、發現只有不足一 成的視光師將證件懸掛在店內當賬 盛,有逾半視光師將證件掛在驗光室 內,其餘眼鏡店的視光師證件則難以 以保障市民。

從店內觀察中發現。

《輔助醫療業條例》規定·任何人 士如未經註册而從事視光師專業,或 健用非註册人士從事有關專業,均屬 達法,一經定罪,可判處監禁6個月及 劉款 5000 元。而任何註册視光師若不 在從事專業的處所顯服處展示其註册 證書・亦屬犯罪・

視光師無牌執業 可囚6月

霍先生事後報繁求助,警方證實在 去年8月19日收到相關部門轉介,指 一眼鏡店內有職員懷疑觸犯《輔助醫 療業條例》,案件交由电門警區刑事 調査隊第五隊限進・調査工作仍在進 行, 智未有人被捕。記者早前致電波 **服錢店欲向姓張女職員查詢‧獲告知** 該職員己在數月前離職。

據視光師管理委員會資料,過去5年 轉介共5宗懷疑無牌從事視光師的舉報 予
答
方
健
進
。
香
港
執
業
眼
科
視
光
師
協 會會長鄭偉澤指出·市場對視光師需 求大,所有服錢店按規定最少要有一 名註册服科視光師駐場。

「過去有無障視光師被檢控、都係 罰款 2000 蚊,變相縱容無障經營」 他又指,過去因政府欠缺巡查及罰則 過輕,今行內有人冒險無障經營,或 担害市民服 睛健康,政府鲜有宣傳視 光師專業,市民亦認知不足。鄭偉澤 促請政府定期巡查關鐵店、檢查視光 師牌照、加强罰則及增加宣傳教育。



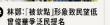
早前觀察 50 閉眼鏡店發現,僅有一成店舗如團般 楊柏賢福













A3 4000 盒「過期 | 薯條棄街 市民速掃清

△5 家舍姨姨 22 年湊大 70 量

金 美入境禁令遭法院叫停

話你知

视光師分4類

• 视光師註冊制度實施 逾20年;分為4個許

有不同執業限制。即

使是註冊提出師亦未 必代表可以驗配體形

全港有約2180名註 用視光師·由視光師

智理委員會根據學

展、節輪方林姓:湖

視光師分為4個註冊

须持有视光學學位或專

葉文憑, 註冊後可使用

技造岭新性商物作业大

瞳孔管纤细检查及於断

其餘註冊者可根據年資

及通過考試、註冊為第

|| 至親||| 部分初半的。

菜界指,這兩個部分視

燕! : 約者限制不可用

适合则以外的的股份

物。但可作屈光檢查及

可读行展光检查。即一

務的視力檢驗,而不可

验配理形成的。

牌視光師 行内佔兩成



明報記者 襲聽紅 视光師無牌執業 可囚6月

《輔助醫療業條例》規定,任何人

士如未經註所而從事視光師專業、或

港扶,一牌定罪,可判成對您6個月及

行、對去有人被補。如此早期的問題

「過去有無障視光節被檢控・都保

到款 2000 軟·變相縱容無陣經營」

他又指、過去因政府欠缺巡查及罰則

市民到限領店配限領葬業不過,但太親接等投訴指,有益 從店內觀察中發现 非註冊觀光節的連續膜鏡店職員爲顧客驗配隨形膜鏡,疑 因論配不常導致顯常眼疼。觀光解業界指,市民對觀光師 專業與據不深,估計至淺無粹觀光師佔行內近隔成:記者 早前觀察港九新界多區 50 間有驗配服務的膜線店·發現 只有不足一成親光節終握件憑得在屆內當課處,證学親光 在從事專業的應所顧限應展示其註册

花,令我不敢再亂配 Con (隨形眼 稱「飛虎隊」,不排除有部分營業時 療業條例》,案件交由电門營區刑事 敷後,交代價錢後,在購入2盒兩星期

数月面拉出及粉色铜粉:

亦約8小時・但至去年1月底・他感願

並非少數,有傷深視光師預針,無障 內,其餘縣歲店的視光師證件則難以 以保障市民。

视光節約佔行內近兩成,有連續限較 亚先生事後報營求助,營方證實在 店或因未能轉請足夠人手·只能安排 去年8月19日收到相關部門轉介·指 「现在雙眼仍不舒服·經常覺得很 视光師巡遊在不同分店工作·行內任 一眼般店內有職員懷疑觸犯 (輔助警

後)。」 至先生 2015年9月於屯門一 関由非註册的規光師爲解客粉光。 関連鎮膜截居敷配體形限機。他指 (エアロ 細胞体医型及り) 人手不足 视光師巡迴各分店 事主電先生散獎指,若顧客在驗賬 紡骸員己在數月前職骸。 時並無特別留意視光師或件及間清全 據視光師管理委員會資料,過去5年

被名文敬員更告知至先生如何護道 名,即使之後有問題亦難追查。他後 轉介其5茶懷疑無障從事授光師的學報 「打研堂」以始前沒水分類。東京發展 具备去物,才容理實具具的驗配關形,會會具都便運搬出,有提到提供額需 體形級機期間,因無法順利截上,女 級機的女職員並非註將視光師,而在 求大,所有級機店按規定最少要有一 場的視光師則爲第 JV 部分臨時註册的 名註册級科視光師駐場· 至先生稱,購買隨形眼鏡後一直依 视光師(見表),亦不可敬配隨形眼 照職員的指示清潔及使用 · 佩藏時間 · 檢。

來約18小時,但至去年1月底,他經驗 在配置,非常不適,後經醫生壞診, 老上從確定及目乳瘦性故既《 (giant 卷上從確定及目乳瘦性故既《 (giant 驗配服務的眼鏡店·發現只有不足— 光師專業·市民亦越知不足·鄭傳澤 成的视光師將證件懸掛在店內當縣 促請政府定期巡查縣鐵店、檢查视光 無時視數學形成時間 無時視光師爲顧客發配膜鏡的個案 庭·有逾半視光師將藏件掛在驗光室 師碑照、加强罰則及增加宣傳教育

→ 於計模光節負責、根據法例、一般 查、淡水、角膜質度及眼睛健康檢查 間、護理職形眼鏡的方法等。如每日 店舗如格仔舗只可出售簡形服務而不 等,勢分患服疾者並不適合裸裁隨形 不可操破多於小小時,使用不含防腐對能提供驗配服務。有限科醫生及視光 眼镜。看通執業眼科視光師協會會長 的情况液清度隨形眼镜,以及不同品 師偕出,驗配隨形眼鏡學問多,需先 鄭偉澤補充,部分有「乾眼症」症狀 牌有不同的清洗鏡片方法等。他又提 检查额额规定,专业所有人均离合强 如乾醒、得米、刺痛等「触致髓功能 醇,用定得日摄故器形筋检剂,集留

整配陽形眼鏡有特定高程·香港眼 適合無鐵陽形眼鏡。 科醫學院院長周伯展表示,包括了解 用伯展指、驗配體形限競後、視光 紅筋或視力感到模構,則不宜無敵。

验的简形器结节的由现私数化方线 田安森中、华庭所断给老的意义给 额及器和数化也会经期田安保龄额



按(輔助醫療養條例)規定在當與處傷檢駐店視光條

香港教兼取料視光節協會會長擎偉擇 (右)表示,視 光節除驗光外,亦可為市民做取科檢查,或可診斷出



基临時註冊·在1994

E12月1日或之前從 事有關專業者才可申 績,至今已再無新增的 臨時註冊申請。第IV部 分視光師分為兩類:-預可作屋升輪者及鹽形 銀鐵驗配工作:另一類

Health Care Voucher 醫療券

- Optometrist (Part 1) is eligible as one of the health care providers to participate in the Elderly Health Care Voucher Scheme with effect from 2012.
- Vouchers can be used by a recipient to settle the professional service / Exam Fee and the optical prescription (glasses, if needed) of an enrolled optometrist (Part I)

可以利用醫療券接受哪些服務?

下列私營醫護專業人員若已經參與長者醫療券計劃,你便可 以用醫療券支付費用,得到他們的服務:

- ✓ 註冊西醫
- ✔ 註冊中醫
- ✔ 註冊牙醫
- ✓ 註冊脊醫
- ✓ 註冊護士、登記護士
- ✔ 註冊物理治療師
- ✓ 註冊職業治療師
- ✔ 註冊放射技師
- ✓ 註冊醫務化驗師
- ✓ 註冊名冊第Ⅰ部分註冊的視光師



衞生署 Department of Health





Note!

You cannot use HCV to claim just for refraction fee and glasses

Need to include ocular health assessment

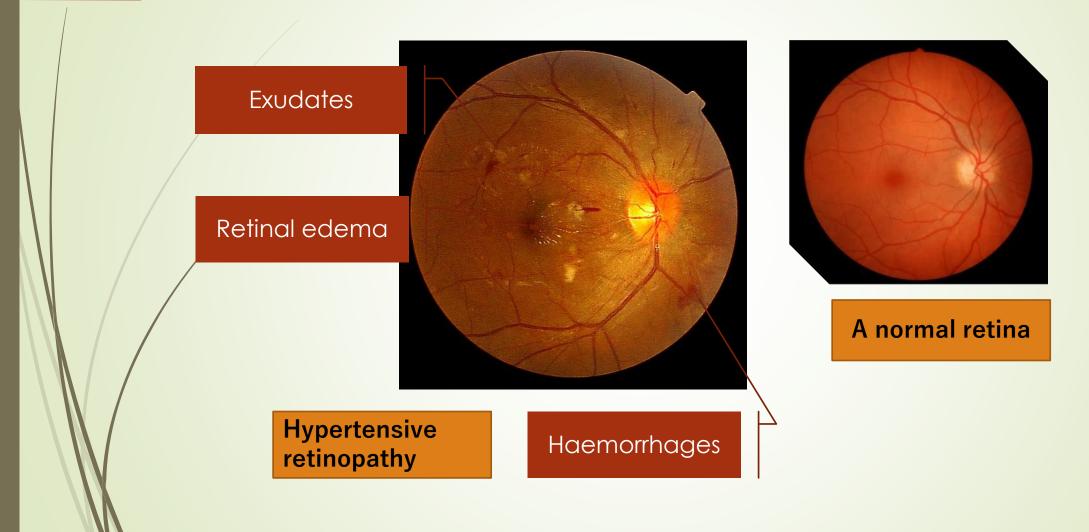
Common Misconceptions About Eye Examination

My vision has become blurry recently, I think I will just need to renew my glasses.

Case Study: History and Symptoms

- Patient: 35-year-old gentleman
- Reason of visit: Blurry vision for distance and near since 1 month ago
- Chief complaints:
 - Blurry vision persisted for a few days, has become worse with time
 - General health was ok, not taking any medication
 - Visual acuity: 6/18
 - External eye examination : normal

Dilated Fundus Examination



I noticed some changes in the appearance of my eyes/surrounding my eyes, it's just ageing and normal degeneration.

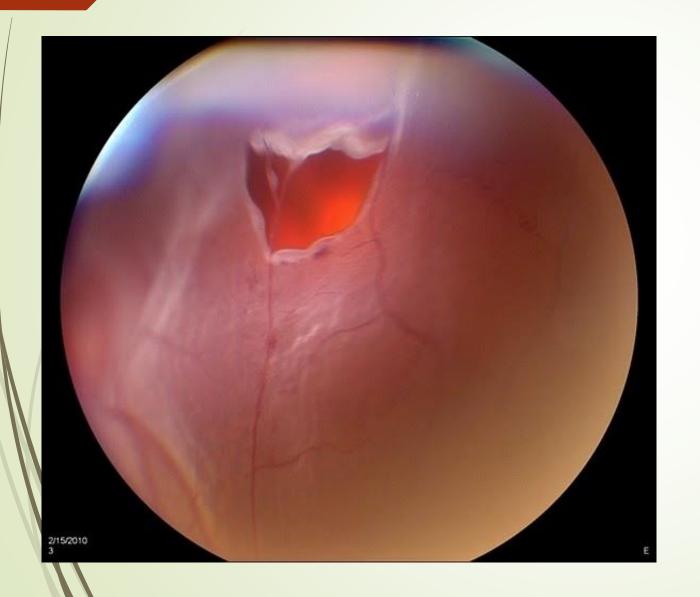


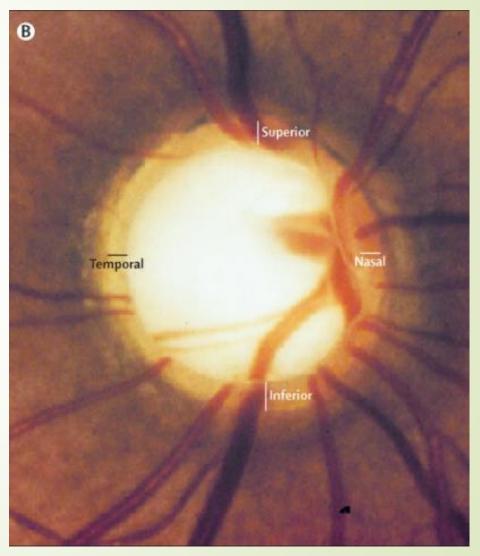
High Cholesterol

- Arcus
- Xanthelasma

- Cholesterol deposit on the cornea or skin at eye lid
- Strongly associated with high cholesterol level in blood
- Recommend blood test for high cholesterol level

Some eye diseases are without symptoms!

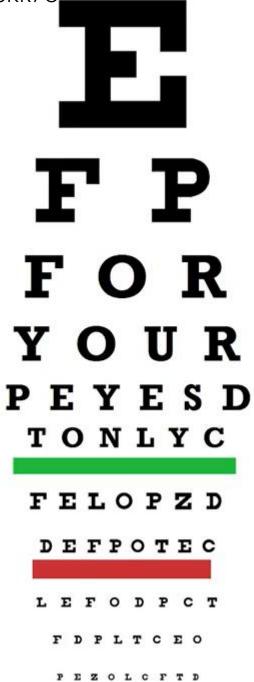




Therefore... Regular eye examination is very important!

What is the difference between optometrists and ophthalmologists?

https://www.youtube.com/watch?v=ftCRFWeKR7c_



Optometrists vs Ophthalmologists

Optometrists

- Primary eye care
- Eye exam as whole (including visual functions, eye health, binocular vision functions)
- Prescribe optical aids
- Educate clients how to protect their eyes and vision

Ophthalmologists

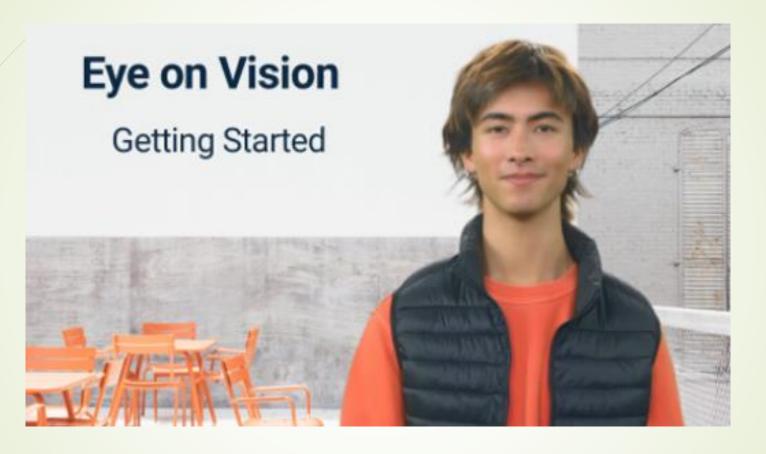
- Medical doctors specialized in eye
- Use medication and surgery to treat eye diseases
- Often specialized in a particular area, e.g. retina, glaucoma, cataract
- Most of the time need referral

Summary

- Roles of Eye Care Providers
 - Optometrists
 - Ophthalmologists
- Importance of Eye Examination

Getting Started Video about Eyes on Vision

Available on Blackboard course "EYES ON VISION" under the "Content" folder



If you need any technical support regarding joining the MOOC on edX and using the SEE eye model app, please contact Dr Lydia Yu at somooc@polyu.edu.hk.