

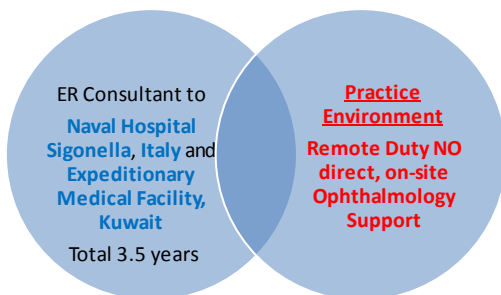
Financial Disclosure Statement

- None

ER OPTOMETRY

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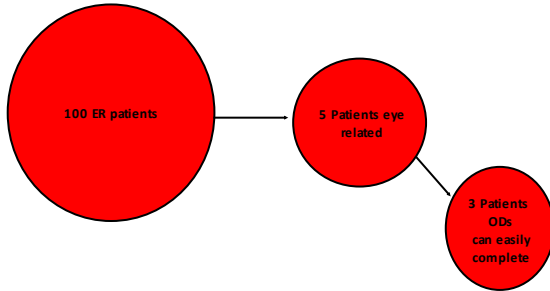
ER Background



Quick Audience Poll

- ER consultants?
- More common conjunctivitis OR RD?
- Optometrists could safely work in ER?
- Much different than a medically oriented Optometric practice?

ER Stats



Cohn and Kurtz, Journal of the AOA, 1992

ER Stats

~75% include:

- Lid/Conj inflammation
- Corneal abrasions
- Superficial foreign bodies
- 5-10% of Eye Visits are CL related
 - 40% of these are:
 - Mild Abrasions, CL Solution or Handling Issues
- Cost savings to use ODs in hospitals
- Nurse at the slit lamp
- Tele-Eyecare

Breakdown by Diagnosis in Ophthalmological Emergency Service

Table 1
Breakdown by diagnosis of new patients attended at ophthalmological emergency service, Santa Casa of Sobral (may-october 2008)

Diagnosis	n	%
Trauma	419	40.9
Infections	297	29.0
No ophthalmologic diagnostic	55	5.4
Pterygium inflamed/ pingueculitis	41	4.0
Glaucoma (raised intraocular pressure)	30	2.9
Episcleritis	28	2.7
Allergic lid edema (with/without chemosis)	25	2.5
Uveitis	21	2.0
Retinal detachment	17	1.7
Miscellaneous	91	8.9
Total	1,024	100



STUDY: Tele-Eyecare

- Internet-based tele-ophthalmology system for consultation in an Ophthalmic ER
- Slit Lamp video camera obtained images
- Transmitted to a physician by email
- 100% agreement between the diagnosis made during consultation and the on-site examination later on
- 98% of the patients stated that they would prefer being examined under the telemedicine system on their next emergency room visit

Bar-Sela, SM, J Telemed Telecare. 2007;13(3):119-24.

Paulo de Tasso Ponte Pierre Filho; Rev. brasa de Otol. vol.69 no.1 Rio de Janeiro Jan, Feb. 2010

Videoconferencing

- Patients and physicians report virtual doctor visits done through videoconferencing were similar to face-to-face visits on most measures
 - According to a study published in the May 2009 issue of the *Journal of Telemedicine and Telecare*
- **Patients found virtual visits similar to face-to-face visits**
 - Including time spent with the physician, ease of interaction, and personal aspects of the interaction.
- **Physicians** scored virtual visits similar to face-to-face visits on measures including **history taking** and medication dispensing.
- My Own Postulation: Use in ER setting?

STUDY: ODs' Ability to Manage Ocular Dz in ER of an Eye Hospital

- UK
- 150 patients assessed
- Agreement between ODs and Ophthalmologists
 - 89% in primary diagnosis
 - 79% in management plan
- No sight-threatening conditions misdiagnosed by ODs
- Conclusion: "This study has shown that Optometrists can potentially work safely in an Emergency Dept of a busy Eye Hospital"

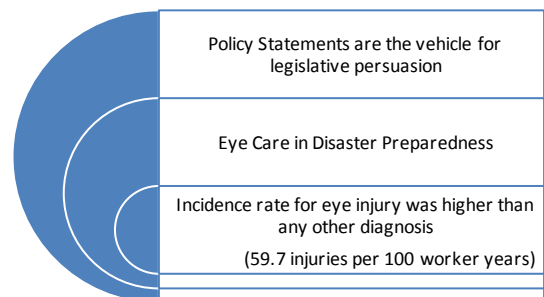
Br J Ophthalmol. 2007 Apr;91(4):437-40.

ER Physician Training

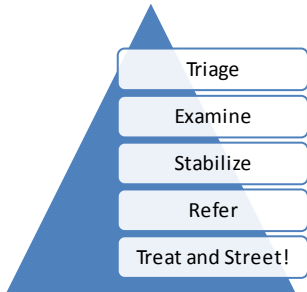
"Although many patients present to the ER with ocular conditions, some physicians are NOT formally trained in the physical examination of the eye and use of the slit lamp."

Long and Smith, The Journal of Emergency Medicine 2007

American Public Health Association Resolution

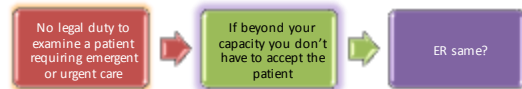


Mindset of an ER Physician: Objectives



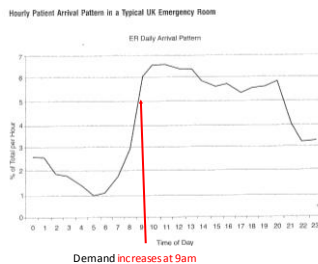
Triage Form

TRAUMA EMERGENCY	
Name:	_____
Telephone Number:	_____
Address:	_____
City:	_____
State:	_____
Zip:	_____
Insurance:	_____
Physician:	_____
Referral:	_____
History:	_____
Physical:	_____
Diagnosis:	_____
Treatment:	_____
Disposition:	_____
Signature:	_____
Date:	_____
Time:	_____
Place:	_____
Mode:	_____



Book: Classe, Chapter: Legal Aspects of Management of Ocular Trauma

Seasonality in ER Visits



Walley et al., *Journal of Healthcare Management*, 2006

ER Examination

- History
- Visual Acuity
 - Near Card and/or Mobile Distance Chart
- Inspection
- Motility
- Pupils (BIO, DO)
- Gross Visual Field Exam
- Intraocular Pressures (Tonopen, iCARE)
- Slit lamp Exam (Burton Lamp, Bluminator)
- Direct Ophthalmoscopy (at a minimum)
- Wireless BIO
- Foreign Body Kit (lid speculum)
- Mydriatics, NaFL, Anesthetic



icare Instructional Video: <http://video.google.com/video/play?docid=918329738709966466&hl=en>

Cases