



J. Kevin McKinney, MD, MPH  
Ophthalmologist  
Glaucoma Specialist

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OAO 2023  
Ophthalmic Medical Technology Conference

# Ophthalmic Medical Missions

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# Why What How

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How many people have vision loss?

1.1 Billion

World population  
7.8 Billion

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What do you mean by "vision loss"?

Moderate <20/70 to 20/200

Severe <20/200 to 20/400

Blindness <20/400

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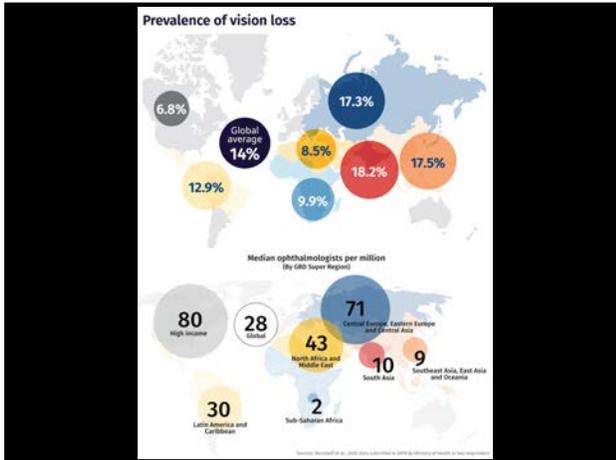
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## Volunteer Motivations

- Feels good to give back
- Learn new surgical procedures
- See advanced cases
- Time-limited commitment
- Donate supplies & equipment
- Adventure / Tourism

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## When Helping Hurts

- lack of cultural awareness and humility
  - leads to offensive behavior and attitudes of superiority
- disparity between local needs & visitor offerings
  - needs assessment
- carrying out medical procedures without adequate training and/or expertise
- lack of partnership and mutual learning
  - displacing & devaluing local providers

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## When Helping Hurts

- o creation of dependency on external resources
  - meds, surgical supplies, equipment / technology
    - cutting edge vs obsolete/expired
    - limit these to what is locally available &/or sustainable
- o lack of continuity of services
- o failure to arrange adequate follow-up of medical and surgical treatment
- o no evaluation of impact / effectiveness

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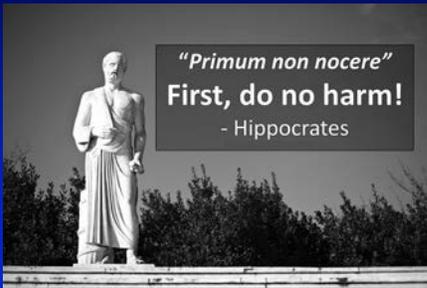
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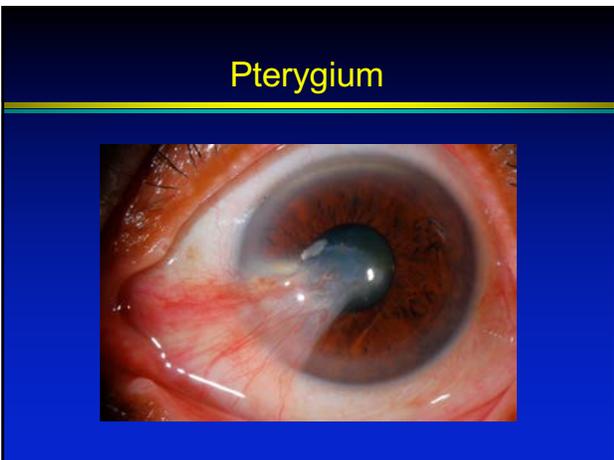
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### Trachoma



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### Trachoma



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### Trachoma



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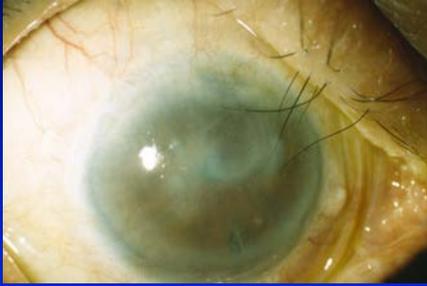
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# Trachoma



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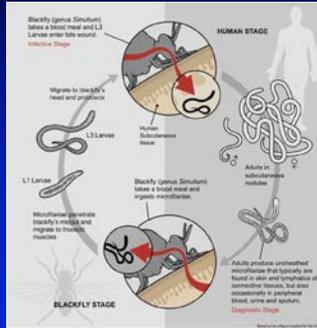
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# Onchocerciasis

"River Blindness"



Simulium damnosum



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# Onchocerciasis



Onchocerca volvulus



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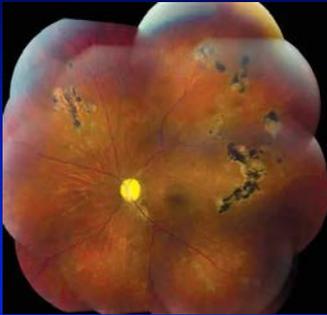
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## Onchocerciasis



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## Onchocerciasis



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## Onchocerciasis

- Ivermectin
  - » Dog heartworm treatment
  - » In 1970's Merck researchers discovered:
    - kills the microfilaria of Onchocerca
    - does not kill the adult worms
    - “cure” requires 1 pill once or twice yearly for 12-15 years (life of adult worms)
    - Merck Mectizan® Donation program
      - Distribution is the challenge

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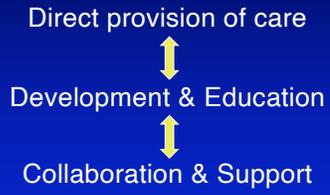
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## Types of Mission Outreach



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Medical Teams International



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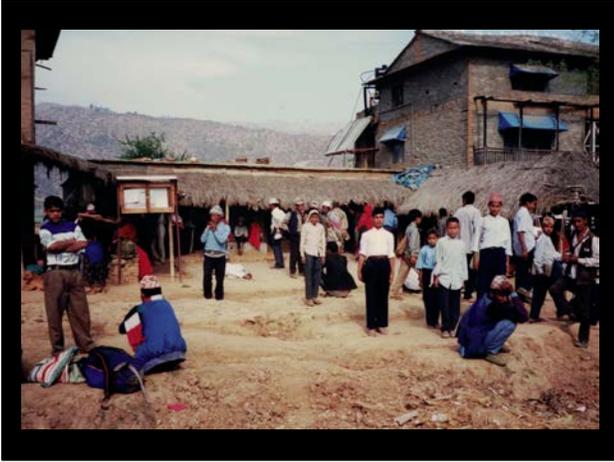
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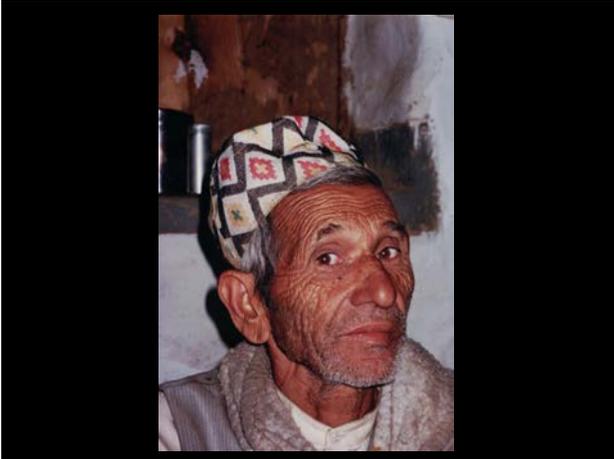
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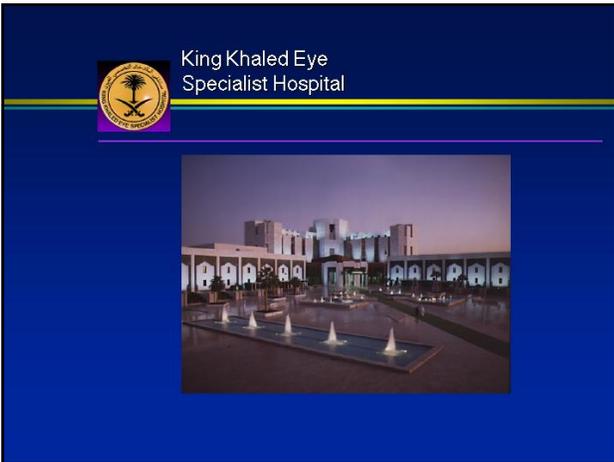
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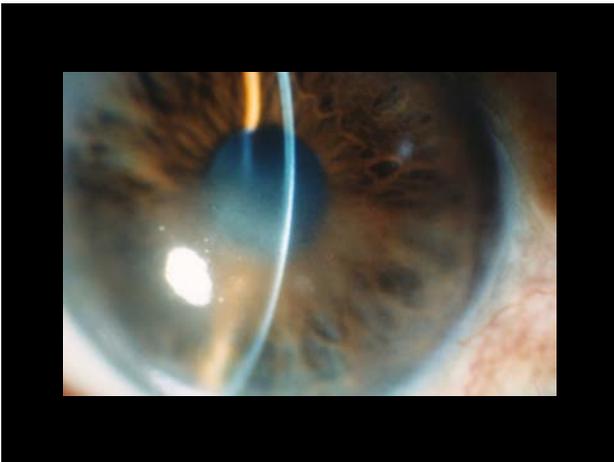
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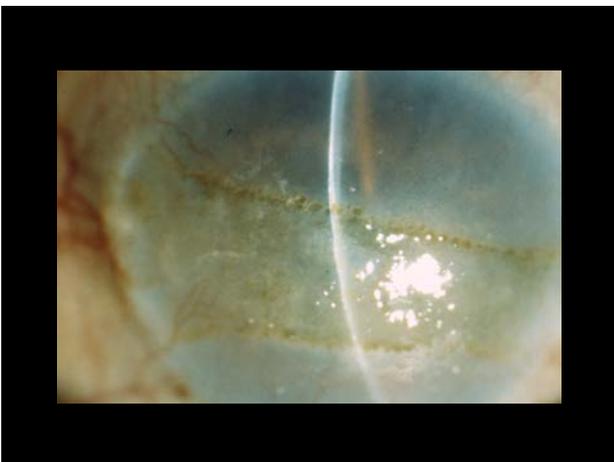
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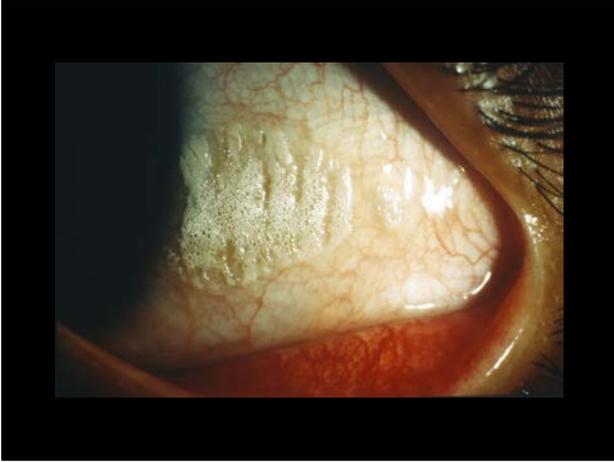
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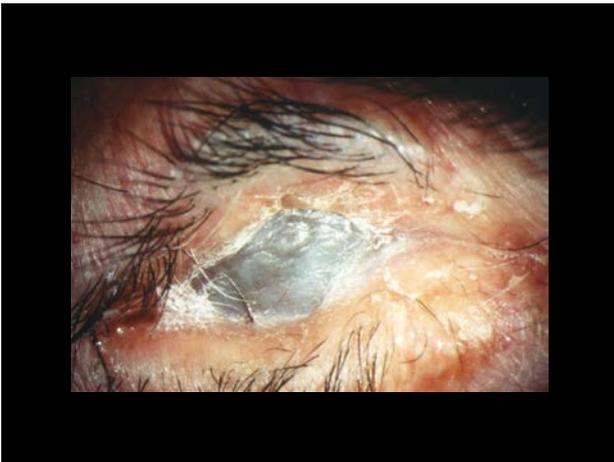
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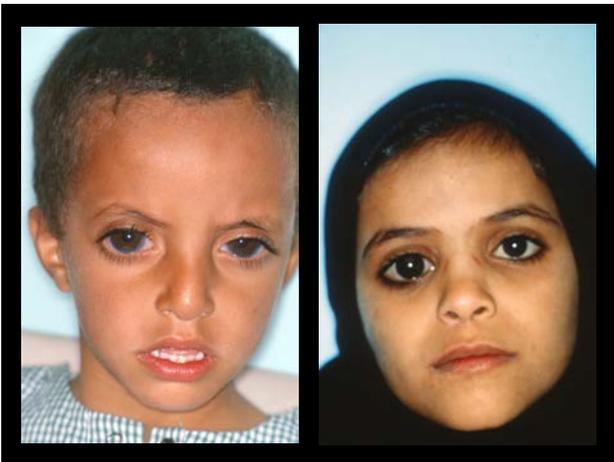
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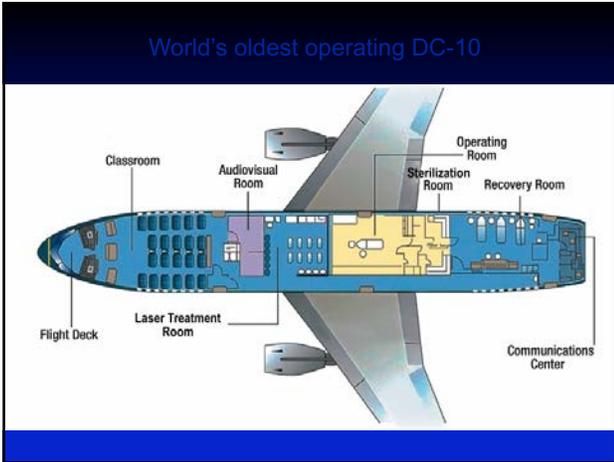
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