Impact of Non-physician Cataract Counselors on patients' Surgical Knowledge and Satisfaction

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EDITORIAL

Cataract Blindness

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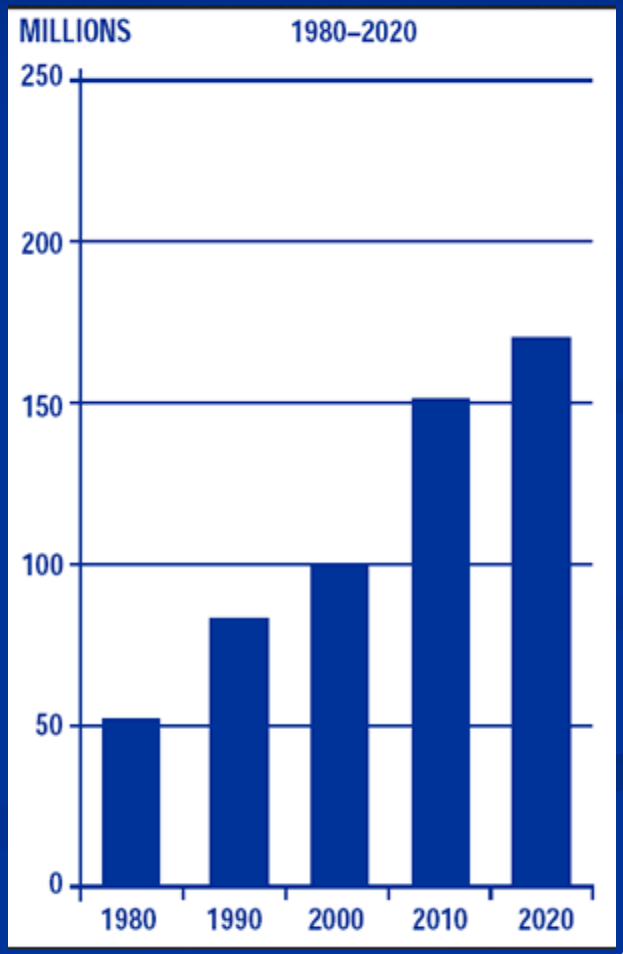
Cataracts

- A cause of blindness in low-income nations
- A leading cause of blindness in medically-underserved areas of high-income nations

The cataract surgical rate (CSR) parallels this disparity with a rate of 100 cataract surgeries per million people per year in some low-income countries to 6,000 cataract surgeries per million people per year in higher-income countries

Global estimates of the number of eyes with <6/60 due to cataract

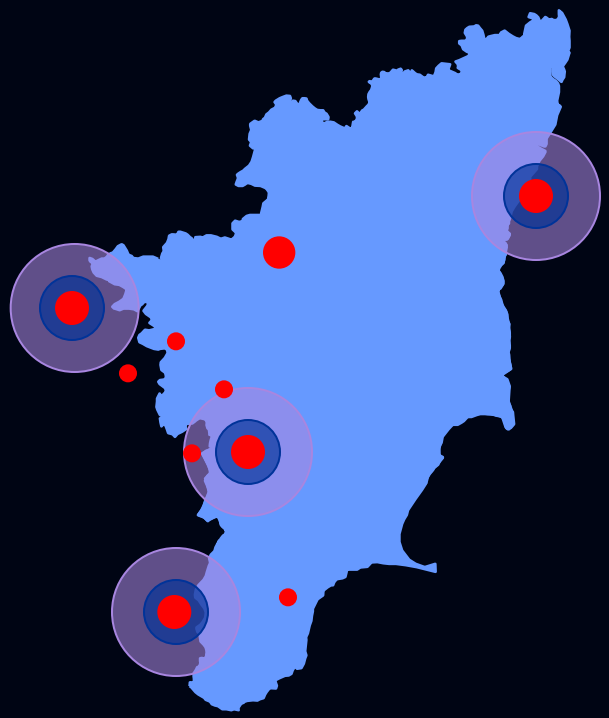


Foster A. Vision 2020: The cataract challenge. Community eye health / International Centre for Eye Health. 2000;13:17-9

ARAVIND EYE CARE SYSTEM

A Day at Aravind

- 10,000 Patient Examinations
- 1,500 Surgeries
- 5-6 Outreach camps
  - 300 transported to base for surgery
- Classes for 100 Residents & 300 techs & administrators



5 Specialty Care
Research
Training

Tertiary
Care Centers

1000 - 2000 patients

5 Cataract Services
Specialty Diagnosis

Secondary
Care Centers

150 - 400 patients

6 Comprehensive Eye Examination
Minor procedures

Community
Clinics

100 -150 patients

44 Comprehensive Eye Examination

Primary Care
Centers

20 -25 patients

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Patient's Acceptance of Cataract Surgery

- **Patient Counselors at Aravind** are highly trained (two years) high school graduates who act as physician extenders
- This allows physicians maximal time to diagnose and manage disease and perform surgery without sacrificing patient education

Effect of preoperative counseling on fear from visual sensations during phacoemulsification under topical anesthesia

J Cataract Refract Surg 2011; 37:814–818 © 2011 ASCRS and ESCRS

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Purpose

To evaluate the efficacy of non-physician pre-surgical educators in teaching patients about cataract and cataract surgery in improving patient knowledge, decisional conflict and satisfaction

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Methods

Inclusion criteria

- New paying patients
- Visually significant cataract
- ≥ 40 years old
- Speak fluent Tamil
- Live within 100 km of the hospital

Exclusion criteria

- Previously seen at the Aravind Eye Hospital for any eye condition
- Previous cataract surgery
- Traumatic cataract or secondary cataract

Enrollment : First five consecutive patients daily from the Cataract Clinic

Sample size

- Pilot study conducted with 20 patients
- 55 subjects needed to detect a significant difference between pre-and post-counseling knowledge and decisional conflict scores (Power=90%, Type I error = 0.05)

Data Collection:

- **Patient data:** Socio-demographic information, pre- and post-counseling Knowledge Questionnaire and Decisional Conflict Questionnaire, post-counseling satisfaction
- **Counselor data:** Counselor Knowledge Questionnaire, years of experience

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Patient Flow

Registration

Patients register upon entering the hospital

Outpatient Clinics

VA assessment, IOP &BP examination, preliminary examination, refraction & dilated examination

If cataract surgery is recommended

Keratometry, biometry, IOL power, Counselor for education

Pre-counseling questionnaire

Administered to the first 5 consecutive subjects who met inclusion criteria

Random allocation to blinded counselors

Standard counseling given & asked them to choose a date for cataract surgery, If they cannot choose a date , the counselors call the patients back on the telephone to discuss a date

Post-counseling questionnaire

Administered after the counseling session

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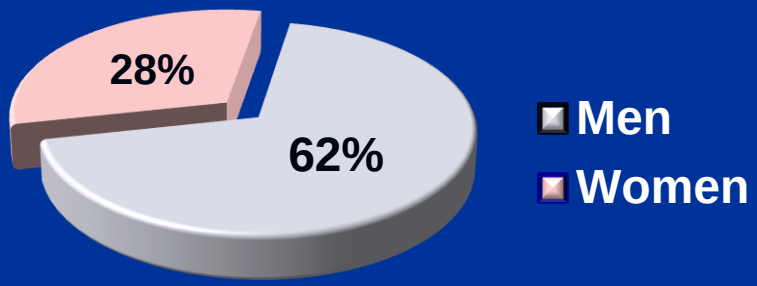
Results

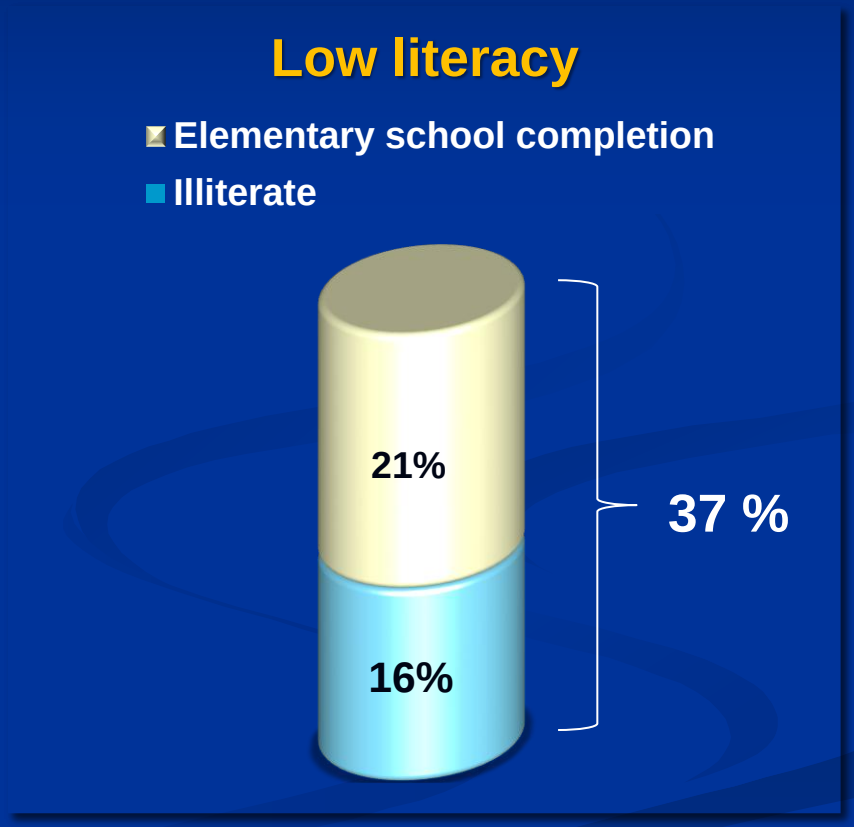
Socio-demographic Characteristics

- Mean age was 58 years old

Gender



Low literacy



- 20% had health insurance
- 64% were the primary decision maker

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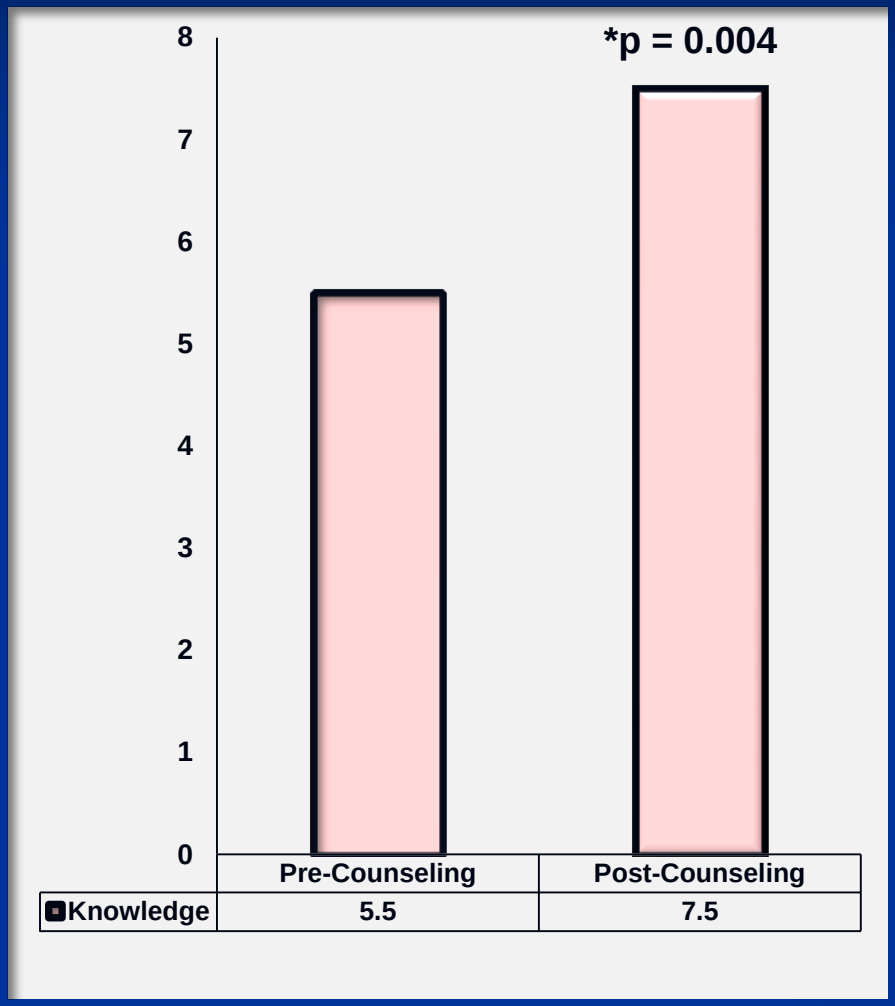
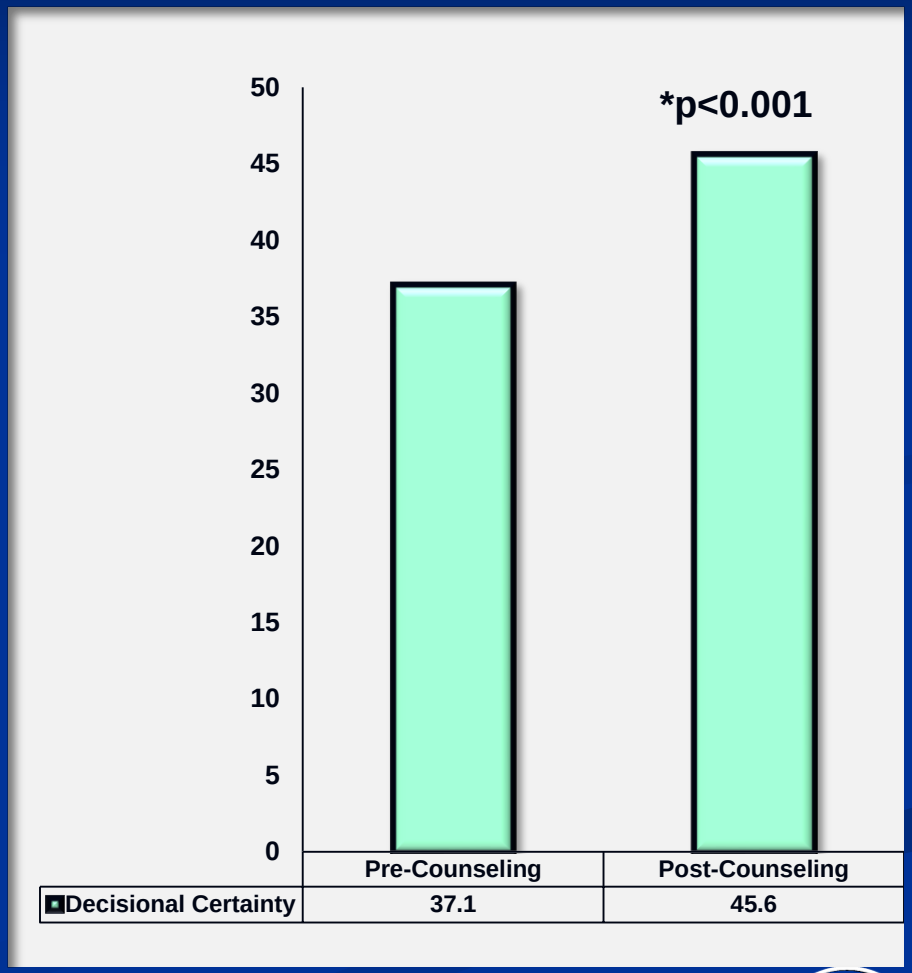
Change in Knowledge and Decisional Conflict

Knowledge



Decisional Conflict



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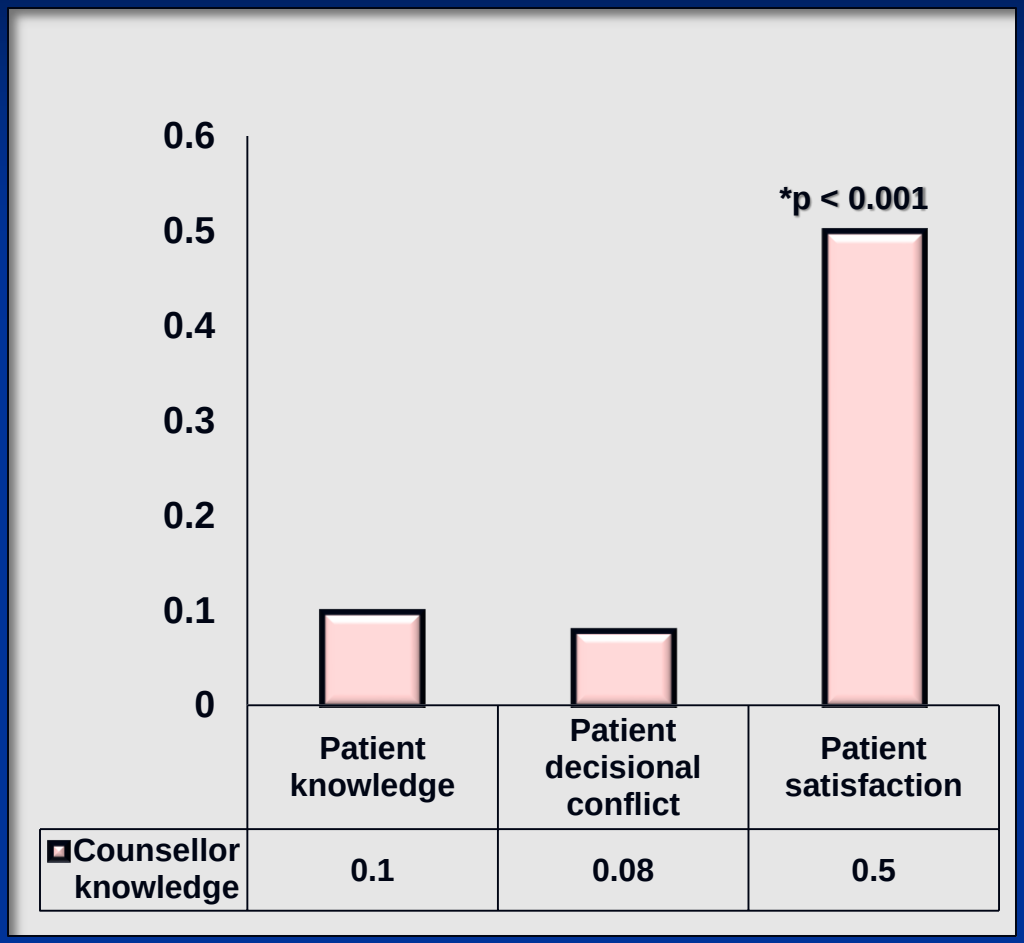
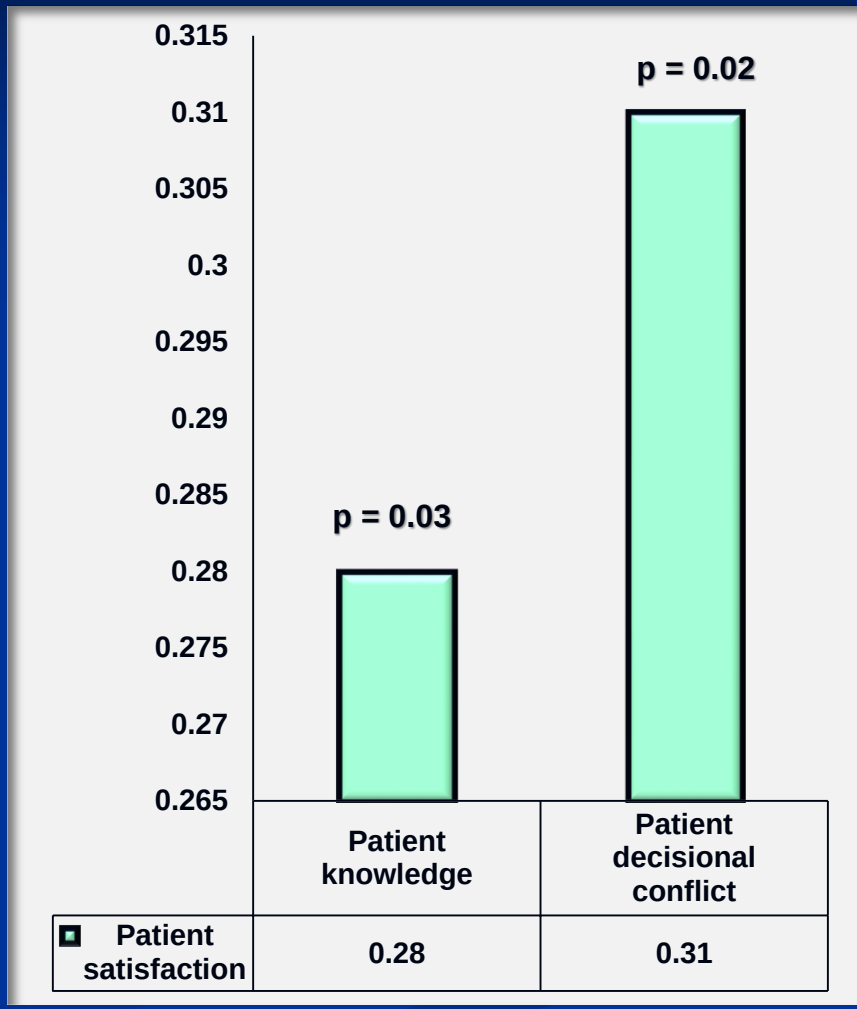
Counselor knowledge vs Change in patient knowledge, decisional conflict and patient satisfaction



Patient Satisfaction vs Change in patient knowledge and decisional conflict



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Multiple Regression: Predictors of Change in Patient Knowledge Score

Variables	Adjusted	
	Beta [95% CI]	P-value
Age	-0.060 [-0.12-0.00]	0.04
Sex (1 – Male, 2 – Female)	1.736 [0.31-3.16]	0.02
Literacy (1 – Yes, 2 – No)	2.096 [0.35-3.84]	0.02
Employment Status (1 – Employed, 2 – unemployed)	1.005 [-0.18-2.19]	0.10
Primary decision maker (1 – Yes, 2 – No)	-1.389 [-2.88-0.10]	0.07
Patient satisfaction score	0.146 [0.19-0.27]	0.03

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Conclusions

- Impact of non-physician cataract counselors is proved effective in
  - improving patient knowledge
  - reducing anxiety about making a decision to have surgery
  - improving patient satisfaction
- The effect of counseling on gain in knowledge was increased among women and among illiterate patients
- Increased use of high-quality counseling might help to further reduce the global burden of cataract blindness
- Non physician counselors also have a role in reducing blindness due to other diseases like glaucoma and diabetes which require the patient to participate in daily self-management and chronic therapies

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