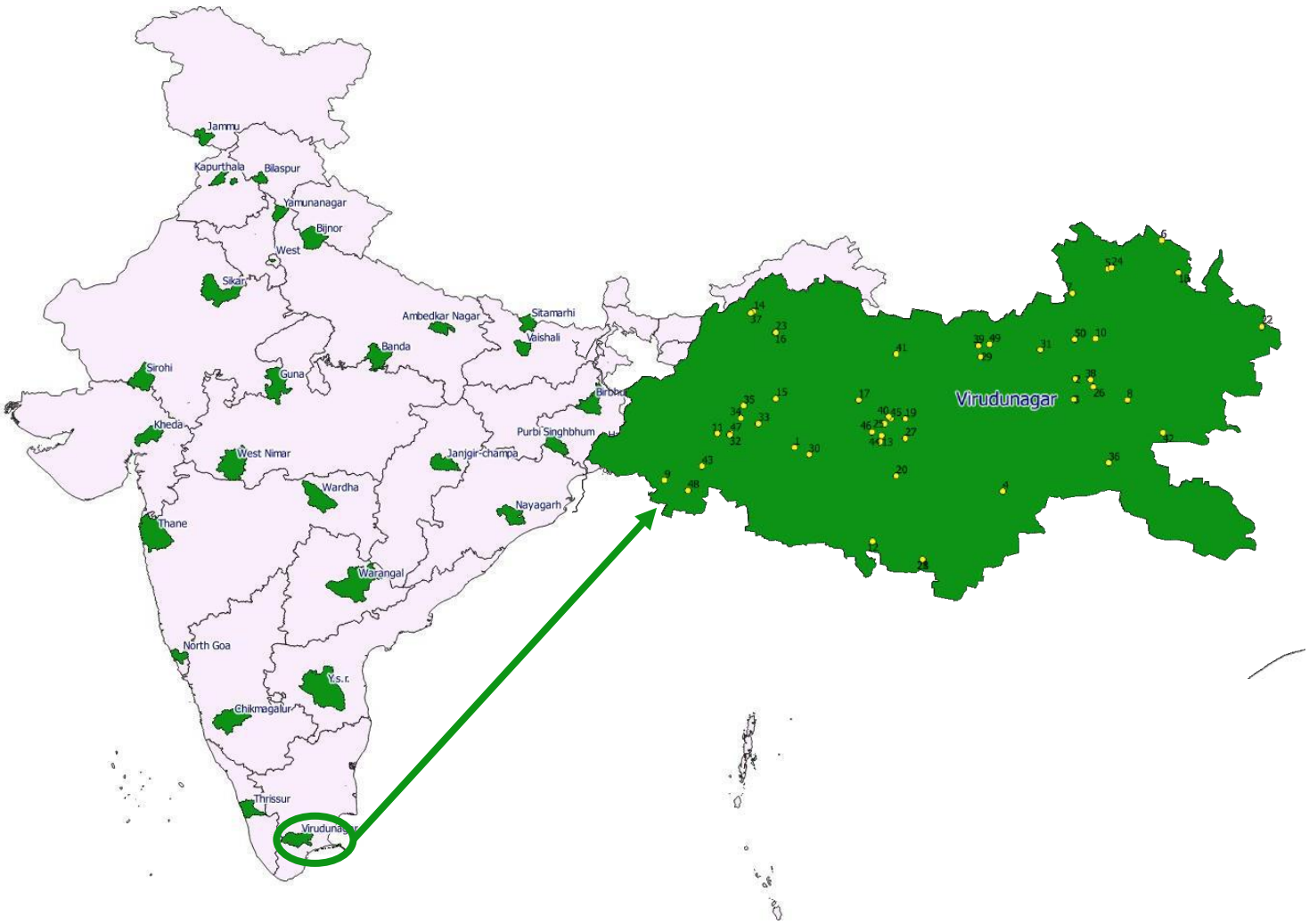
NPCB National Blindness Survey: 2015-2018

DISTRICT SUMMARY REPORT

Virudunagar, Tamil Nadu



Community Ophthalmology

Dr. Rajendra Prasad Centre for Ophthalmic Sciences

AIIMS, New Delhi - 110029

NPCB National Blindness Survey: 2015-2018

DISTRICT SUMMARY REPORT

Virudunagar, Tamil Nadu

April 2017

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RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

SUMMARY REPORT

Date and time of report: 29-Sep-16 1:40:17PM

This report is for the survey area: Virudhunagar

Year and month when survey was conducted: 2016- 8 until 2016- 9

This report shows the most important results from all the other reports. The 95% confidence interval (95% CI) is based on the sampling error in cluster sampling. More detailed information is provided in the other reports.

1. Eligible persons, coverage, absentees and refusals

	Examined		Not available		Refused		Not capable		Total	
	n	%	n	%	n	%	n	%	n	%
Males	1,007	85.8%	158	13.5%	3	0.3%	5	0.4%	**1,173**	**100.0%**
Females	1,747	95.6%	65	3.6%	11	0.6%	4	0.2%	**1,827**	**100.0%**
Total	**2,754**	91.8%	**223**	7.4%	**14**	0.5%	**9**	0.3%	**3,000**	**100.0%**

2. Age and gender distribution of people examined in the sample

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	355	35.3%	746	42.7%	**1,101**	**40.0%**
60 - 69 years	392	38.9%	599	34.3%	**991**	**36.0%**
70 - 79 years	185	18.4%	298	17.1%	**483**	**17.5%**
80+ years	75	7.4%	104	6.0%	**179**	**6.5%**
Total	**1,007**	**100.0%**	**1,747**	**100.0%**	**2,754**	**100.0%**

3. Sample prevalence of blindness, severe (SVI), moderate (MVI) and early (EVI) visual impairment - bilateral PVA

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Blindness	9	0.9 (0.3 - 1.5)	30	1.7 (1.1 - 2.3)	39	1.4 (1.0 - 1.9)
Severe VI	17	1.7 (1.0 - 2.4)	66	3.8 (2.8 - 4.8)	83	3.0 (2.3 - 3.7)
Moderate VI	126	12.5 (10.4 - 14.6)	229	13.1 (11.4 - 14.8)	355	12.9 (11.5 - 14.2)
Early VI	196	19.5 (16.9 - 22.0)	360	20.6 (18.2 - 23.0)	556	20.2 (18.1 - 22.3)
Functional Low Vision	8	0.8 (0.2 - 1.4)	12	0.7 (0.3 - 1.1)	20	0.7 (0.4 - 1.1)

4. Extrapolated magnitude of blindness, severe (SVI), moderate (MVI) and early (EVI) visual impairment - bilateral PVA

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Blindness	1,414	0.8 (0.2 - 1.4)	3,035	1.6 (1.0 - 2.2)	4,451	1.2 (0.7 - 1.6)
Severe VI	2,667	1.4 (0.7 - 2.1)	6,770	3.5 (2.5 - 4.5)	9,434	2.5 (1.8 - 3.2)
Moderate VI	19,837	10.7 (8.7 - 12.8)	24,439	12.6 (11.0 - 14.3)	44,277	11.7 (10.4 - 13.1)
Early VI	33,620	18.2 (15.7 - 20.7)	39,033	20.2 (17.8 - 22.6)	72,653	19.2 (17.1 - 21.3)
Functional Low Vision	1,266	0.7 (0.1 - 1.3)	1,237	0.6 (0.3 - 1.0)	2,502	0.7 (0.3 - 1.0)

5. Blindness prevalence (PVA<3/60 in better eye) by age group

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
50 - 59 years	1	0.3 (0.0 - 0.8)	1	0.1 (0.0 - 0.4)	2	0.2 (0.0 - 0.4)
60 - 69 years	4	1.0 (0.1 - 2.0)	10	1.7 (0.6 - 2.7)	14	1.4 (0.7 - 2.1)
70 - 79 years	3	1.6 (0.0 - 3.4)	12	4.0 (1.6 - 6.4)	15	3.1 (1.5 - 4.7)
80+ years	1	1.3 (0.0 - 3.9)	7	6.7 (2.3 - 11.2)	8	4.5 (1.7 - 7.2)
All 50+ years	9	0.9 (0.3 - 1.5)	30	1.7 (1.1 - 2.3)	39	1.4 (1.0 - 1.9)

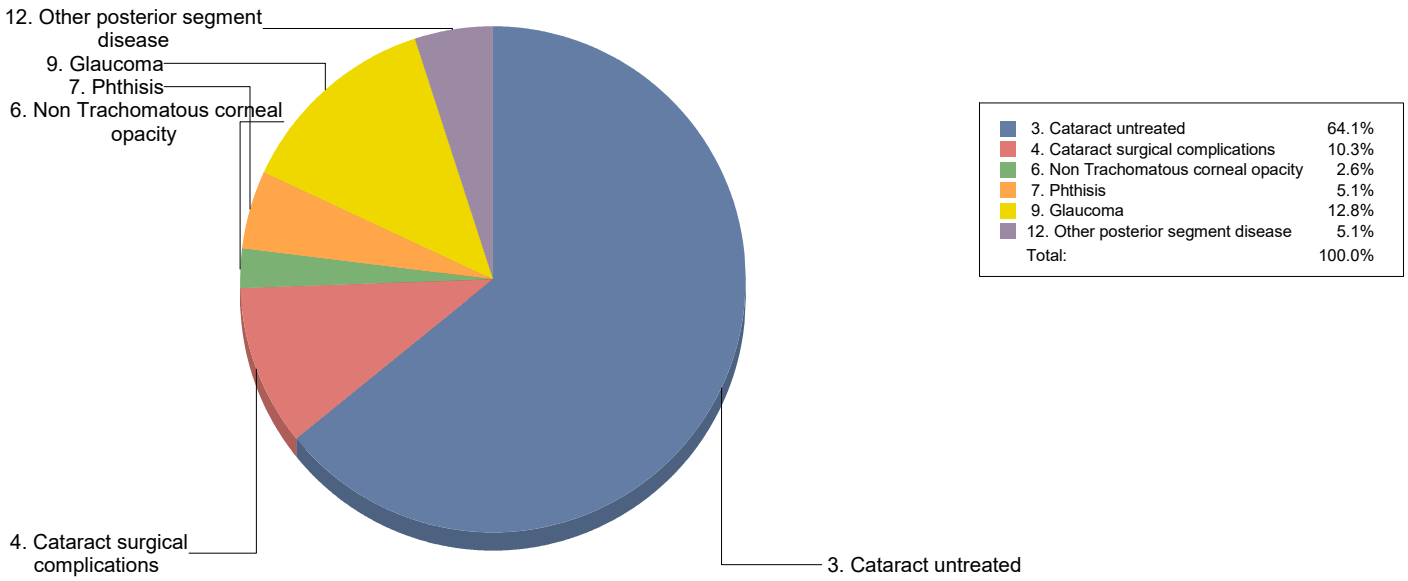
6. Principal cause of blindness, severe (SVI), moderate (MVI) and early (EVI) visual impairment in persons (PVA)

	Blindness		Severe VI		Moderate VI		Early VI	
	n	%	n	%	n	%	n	%
1. Refractive error	0	0.0%	0	0.0%	20	5.6%	442	79.5%
2. Aphakia uncorrected	0	0.0%	2	2.4%	1	0.3%	0	0.0%
3. Cataract untreated	25	64.1%	69	83.1%	306	86.2%	84	15.1%
4. Cataract surgical complications	4	10.3%	9	10.8%	18	5.1%	25	4.5%
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	0	0.0%	0	0.0%
6. Non Trachomatous corneal opacity	1	2.6%	0	0.0%	2	0.6%	1	0.2%
7. Phthisis	2	5.1%	0	0.0%	0	0.0%	0	0.0%
8. Onchocerciasis	0	0.0%	0	0.0%	0	0.0%	0	0.0%
9. Glaucoma	5	12.8%	1	1.2%	1	0.3%	0	0.0%
10. Diabetic retinopathy	0	0.0%	0	0.0%	2	0.6%	0	0.0%
11. ARMD	0	0.0%	1	1.2%	1	0.3%	1	0.2%
12. Other posterior segment disease	2	5.1%	0	0.0%	4	1.1%	3	0.5%
13. All other globe/CNS abnormalities	0	0.0%	1	1.2%	0	0.0%	0	0.0%
Total	**39**	**100.0%**	**83**	**100.0%**	**355**	**100.0%**	**556**	**100.0%**

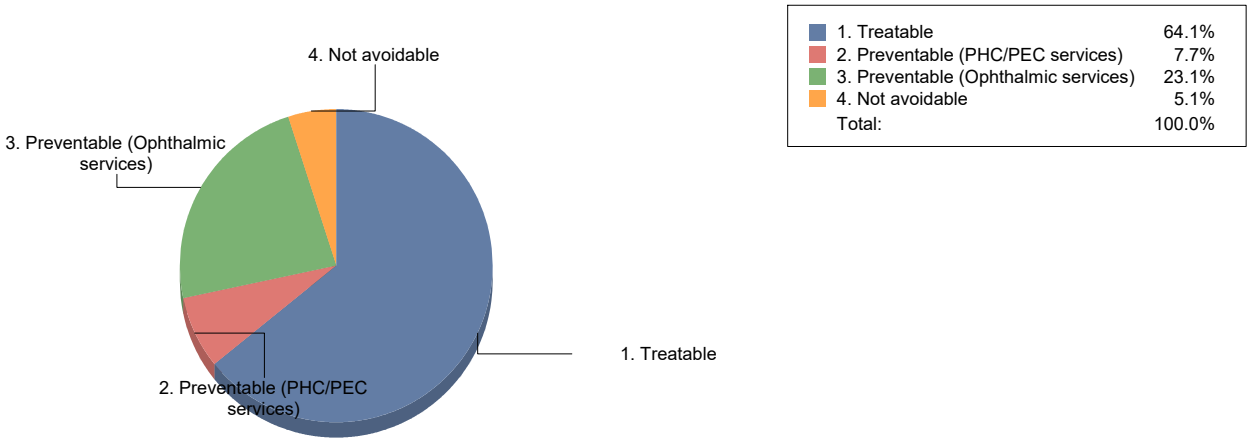
Blindness, SVI, MVI and EVI in persons by intervention category

A. Treatable (1,2,3)	25	64.1%	71	85.5%	327	92.1%	526	94.6%
B. Preventable (PHC/PEC services) (5,6,7,8)	3	7.7%	0	0.0%	2	0.6%	1	0.2%
C. Preventable (Ophthalmic services) (4,9,10)	9	23.1%	10	12.1%	21	5.9%	25	4.5%
D. Avoidable (A+B+C)	37	94.9%	81	97.6%	350	98.6%	552	99.3%
E. Posterior segment causes (8,9,10,11,12)	7	18.0%	2	2.4%	8	2.3%	4	0.7%

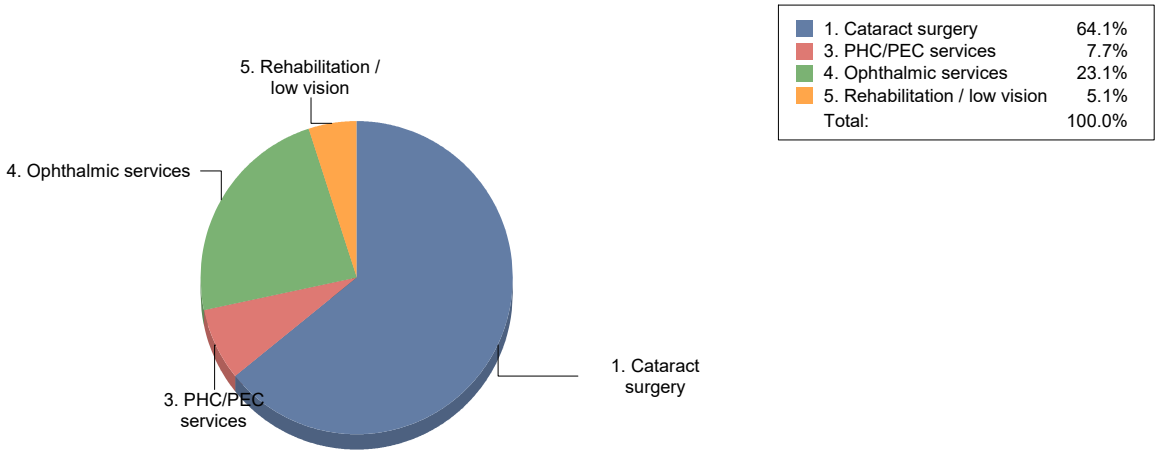
7. Graph: main cause of blindness in persons



8. Graph: main category of blindness in persons



9. Graph: action required to reduce blindness



10. Cataract surgical coverage (persons) - percentage

	Males	Females	Total
VA < 3/60	98.4	97.3	97.7
VA < 6/60	96.9	92.6	94.1
VA < 6/18	85.4	78.5	80.9

11. Barriers to cataract surgery - bilateral VA<6/60 due to cataract

	Males		Females		Total	
	n	%	n	%	n	%
Need not felt	1	12.5%	8	18.6%	**9**	**17.6%**
Fear	2	25.0%	4	9.3%	**6**	**11.8%**
Cost	2	25.0%	12	27.9%	**14**	**27.5%**
Treatment denied by provider	1	12.5%	0	0.0%	**1**	**2.0%**
Unaware treatment is possible	0	0.0%	2	4.7%	**2**	**3.9%**
Cannot access treatment	1	12.5%	8	18.6%	**9**	**17.6%**
Local reason	1	12.5%	9	20.9%	**10**	**19.6%**
Total	**8**	**100.0%**	**43**	**100.0%**	**51**	**100.0%**

12. Outcome after cataract surgery with available correction (eyes)

	Males		Females		Total	
	n	%	n	%	n	%
Very good: can see 6/12	293	54.5%	481	51.2%	774	52.4%
Good: can see 6/18	148	27.5%	283	30.1%	431	29.2%
Borderline: can see 6/60	55	10.2%	102	10.9%	157	10.6%
Poor: cannot see 6/60	42	7.8%	73	7.8%	115	7.8%
Total	**538**	**100.0%**	**939**	**100.0%**	**1,477**	**100.0%**

13. Outcome by type of cataract surgery with available correction (eyes)

	Non-IOL		IOL		Total	
	n	%	n	%	n	%
Very good: can see 6/12	12	22.2%	762	53.5%	**774**	**52.4%**
Good: can see 6/18	7	13.0%	424	29.8%	**431**	**29.2%**
Borderline: can see 6/60	2	3.7%	155	10.9%	**157**	**10.6%**
Poor: cannot see 6/60	33	61.1%	82	5.8%	**115**	**7.8%**
Total	**54**	**100.0%**	**1,423**	**100.0%**	**1,477**	**100.0%**

14. Cause of PVA<6/12 (good, borderline and poor outcome) after cataract surgery

	Selection		Surgery		Spectacles		Sequelae		Can see 6/12	
	n	%	n	%	n	%	n	%	n	%
Very good: can see 6/12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	774	100.0%
Good: can see 6/18	5	6.8%	53	29.6%	359	92.3%	14	22.6%	0	0.0%
Borderline: can see 6/60	25	34.2%	85	47.5%	18	4.6%	29	46.8%	0	0.0%
Poor: cannot see 6/60	43	58.9%	41	22.9%	12	3.1%	19	30.6%	0	0.0%
Total	**73**	**100.0%**	**179**	**100.0%**	**389**	**100.0%**	**62**	**100.0%**	**774**	**100.0%**

RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

SAMPLE RESULTS - NOT ADJUSTED FOR AGE AND SEX

Date and time of report: 29-Sep-16 1:45:56PM

This report is for the survey area: Virudhunagar

Year and month when survey was conducted: 2016- 8 until 2016- 9

The sample size of the RAAB is sufficient to provide an acceptable accuracy of the overall prevalence of bilateral blindness (best corrected VA <3/60). The accuracy of prevalence estimates for any subgroup is far less and caution should be taken in the interpretation of these data.

1. Eligible persons, coverage, absentees and refusals in survey

	Examined		Not available		Refused		Not capable		Total	
	n	%	n	%	n	%	n	%	n	%
Males	1,007	85.8%	158	13.5%	3	0.3%	5	0.4%	**1,173**	**100.0%**
Females	1,747	95.6%	65	3.6%	11	0.6%	4	0.2%	**1,827**	**100.0%**
Total	**2,754**	**91.8%**	**223**	**7.4%**	**14**	**0.5%**	**9**	**0.3%**	**3,000**	**100.0%**

2. Prevalence of blindness, severe (SVI), moderate (MVI) and early visual impairment (EVI) - all causes

	Males		Females		Total	
	n	% (95%CI)	n	% (95%CI)	n	% (95%CI)
Blindness - VA < 3/60 in the better eye with best correction or pinhole						
All bilateral blindness	8	0.8% (0.3-1.3)	26	1.5% (0.9-2.1)	**34**	**1.2% (0.8-1.6)**
All blind eyes	129	6.4% (5.1-7.7)	190	5.4% (4.5-6.3)	**319**	**5.8% (5.0-6.6)**
Blindness - VA < 3/60 in the better eye with available correction (presenting VA)						
All bilateral blindness	9	0.9% (0.3-1.5)	30	1.7% (1.1-2.3)	**39**	**1.4% (1.0-1.9)**
All blind eyes	133	6.6% (5.3-7.9)	210	6.0% (5.0-7.0)	**343**	**6.2% (5.4-7.1)**
Severe visual impairment (SVI) - VA<6/60 - 3/60 in the better eye with available correction						
All bilateral Severe VI	17	1.7% (1.0-2.4)	66	3.8% (2.8-4.8)	**83**	**3.0% (2.3-3.7)**
All Severe VI eyes	74	3.7% (2.6-4.7)	195	5.6% (4.6-6.6)	**269**	**4.9% (4.1-5.6)**
Moderate visual impairment (MVI) - VA<6/18 - 6/60 in the better eye with available correction						
All bilateral MVI	126	12.5% (10.4-14.6)	229	13.1% (11.4-14.8)	**355**	**12.9% (11.5-14.2)**
All Moderate VI eyes	288	14.3% (12.4-16.2)	533	15.3% (13.6-16.9)	**821**	**14.9% (13.5-16.3)**
Early visual impairment (EVI) - VA<6/12 - 6/18 in the better eye with available correction						
All bilateral EVI	196	19.5% (16.9-22.0)	360	20.6% (18.2-23.0)	**556**	**20.2% (18.1-22.3)**
All Early VI eyes	409	20.3% (18.3-22.3)	776	22.2% (20.1-24.3)	**1,185**	**21.5% (19.8-23.2)**

3. Prevalence of presenting VA<3/60, VA<6/60, VA<6/18 and VA<6/12 - all causes (cumulative categories)

	Males		Females		Total	
	n	% (95%CI)	n	% (95%CI)	n	% (95%CI)
Blindness - VA < 3/60 in the better eye with available correction (presenting VA)						
All bilateral blindness	9	0.9% (0.3-1.5)	30	1.7% (1.1-2.3)	**39**	**1.4% (1.0-1.9)**
All blind eyes	133	6.6% (5.3-7.9)	210	6.0% (5.0-7.0)	**343**	**6.2% (5.4-7.1)**
VA<6/60 in the better eye, with available correction (presenting VA)						
All bilateral cases	26	2.6% (1.6-3.6)	96	5.5% (4.2-6.8)	**122**	**4.4% (3.5-5.3)**
All eyes	207	10.3% (8.5-12.0)	405	11.6% (9.9-13.3)	**612**	**11.1% (9.7-12.5)**
VA<6/18 in the better eye, with available correction (presenting VA)						
All bilateral cases	152	15.1% (12.9-17.3)	325	18.6% (16.3-20.9)	**477**	**17.3% (15.6-19.0)**
All eyes	495	24.6% (22.1-27.1)	938	26.9% (24.2-29.5)	**1,433**	**26.0% (24.0-28.1)**
VA<6/12 in the better eye, with available correction (presenting VA)						
All bilateral cases	348	34.6% (31.4-37.7)	685	39.2% (36.3-42.2)	**1,033**	**37.5% (35.1-39.9)**
All eyes	904	44.9% (41.8-47.9)	1,714	49.1% (46.1-52.0)	**2,618**	**47.5% (45.2-49.9)**

4. Principal cause of blindness in persons: VA<3/60 in better eye with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	0	0.0%	0	0.0%	**0**	**0.0%**
2. Aphakia uncorrected	0	0.0%	0	0.0%	**0**	**0.0%**
3. Cataract untreated	4	44.4%	21	70.0%	**25**	**64.1%**
4. Cataract surgical complications	2	22.2%	2	6.7%	**4**	**10.3%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	0	0.0%	1	3.3%	**1**	**2.6%**
7. Phthisis	1	11.1%	1	3.3%	**2**	**5.1%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	0	0.0%	5	16.7%	**5**	**12.8%**
10. Diabetic retinopathy	0	0.0%	0	0.0%	**0**	**0.0%**
11. ARMD	0	0.0%	0	0.0%	**0**	**0.0%**
12. Other posterior segment disease	2	22.2%	0	0.0%	**2**	**5.1%**
13. All other globe/CNS abnormalities	0	0.0%	0	0.0%	**0**	**0.0%**
Total	**9**	**100.0%**	**30**	**100.0%**	**39**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	4	44.4%	21	70.0%	25	64.1%
B. Preventable (PHC/PEC services) (5,6,7,8)	1	11.1%	2	6.7%	3	7.7%
C. Preventable (Ophthalmic services) (4,9,10)	2	22.2%	7	23.3%	9	23.1%
D. Avoidable (A+B+C)	7	77.8%	30	100.0%	37	94.9%
E. Posterior segment causes (8,9,10,11,12)	2	22.2%	5	16.7%	7	18.0%

5. Main cause of blindness in eyes - VA<3/60 with available correction, no pinhole

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	0	0.0%	0	0.0%	**0**	**0.0%**
2. Aphakia uncorrected	2	1.5%	5	2.4%	**7**	**2.0%**
3. Cataract untreated	81	60.9%	136	64.8%	**217**	**63.3%**
4. Cataract surgical complications	11	8.3%	15	7.1%	**26**	**7.6%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	3	2.3%	11	5.2%	**14**	**4.1%**
7. Phthisis	10	7.5%	15	7.1%	**25**	**7.3%**
8. Onchocerciasis	1	0.8%	0	0.0%	**1**	**0.3%**
9. Glaucoma	7	5.3%	16	7.6%	**23**	**6.7%**
10. Diabetic retinopathy	1	0.8%	0	0.0%	**1**	**0.3%**
11. ARMD	1	0.8%	1	0.5%	**2**	**0.6%**
12. Other posterior segment disease	14	10.5%	10	4.8%	**24**	**7.0%**
13. All other globe/CNS abnormalities	2	1.5%	1	0.5%	**3**	**0.9%**
Total	**133**	**100.0%**	**210**	**100.0%**	**343**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	83	62.4%	141	67.1%	224	65.3%
B. Preventable (PHC/PEC services) (5,6,7,8)	14	10.5%	26	12.4%	40	11.7%
C. Preventable (Ophthalmic services) (4,9,10)	19	14.3%	31	14.8%	50	14.6%
D. Avoidable (A+B+C)	116	87.2%	198	94.3%	314	91.5%
E. Posterior segment causes (8,9,10,11,12)	24	18.0%	27	12.9%	51	14.9%

6. Principal cause severe visual impairment in persons: VA<6/60 - 3/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	0	0.0%	0	0.0%	**0**	**0.0%**
2. Aphakia uncorrected	0	0.0%	2	3.0%	**2**	**2.4%**
3. Cataract untreated	14	82.4%	55	83.3%	**69**	**83.1%**
4. Cataract surgical complications	3	17.6%	6	9.1%	**9**	**10.8%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	0	0.0%	1	1.5%	**1**	**1.2%**
10. Diabetic retinopathy	0	0.0%	0	0.0%	**0**	**0.0%**
11. ARMD	0	0.0%	1	1.5%	**1**	**1.2%**
12. Other posterior segment disease	0	0.0%	0	0.0%	**0**	**0.0%**
13. All other globe/CNS abnormalities	0	0.0%	1	1.5%	**1**	**1.2%**
Total	**17**	**100.0%**	**66**	**100.0%**	**83**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	14	82.4%	57	86.4%	71	85.5%
B. Preventable (PHC/PEC services) (5,6,7,8)	0	0.0%	0	0.0%	0	0.0%
C. Preventable (Ophthalmic services) (4,9,10)	3	17.7%	7	10.6%	10	12.1%
D. Avoidable (A+B+C)	17	100.0%	64	97.0%	81	97.6%
E. Posterior segment causes (8,9,10,11,12)	0	0.0%	2	3.0%	2	2.4%

7. Main cause of severe visual impairment in eyes - VA<6/60 - 3/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	0	0.0%	1	0.5%	**1**	**0.4%**
2. Aphakia uncorrected	1	1.4%	4	2.1%	**5**	**1.9%**
3. Cataract untreated	53	71.6%	157	80.5%	**210**	**78.1%**
4. Cataract surgical complications	10	13.5%	17	8.7%	**27**	**10.0%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	5	6.8%	3	1.5%	**8**	**3.0%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	1	1.4%	1	0.5%	**2**	**0.7%**
10. Diabetic retinopathy	0	0.0%	1	0.5%	**1**	**0.4%**
11. ARMD	1	1.4%	4	2.1%	**5**	**1.9%**
12. Other posterior segment disease	2	2.7%	4	2.1%	**6**	**2.2%**
13. All other globe/CNS abnormalities	1	1.4%	3	1.5%	**4**	**1.5%**
Total	**74**	**100.0%**	**195**	**100.0%**	**269**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	54	73.0%	162	83.1%	216	80.3%
B. Preventable (PHC/PEC services) (5,6,7,8)	5	6.8%	3	1.5%	8	3.0%
C. Preventable (Ophthalmic services) (4,9,10)	11	14.9%	19	9.7%	30	11.2%
D. Avoidable (A+B+C)	70	94.6%	184	94.4%	254	94.4%
E. Posterior segment causes (8,9,10,11,12)	4	5.4%	10	5.1%	14	5.2%

8. Principal cause moderate visual impairment in persons: VA<6/18 - 6/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	8	6.3%	12	5.2%	**20**	**5.6%**
2. Aphakia uncorrected	1	0.8%	0	0.0%	**1**	**0.3%**
3. Cataract untreated	103	81.7%	203	88.6%	**306**	**86.2%**
4. Cataract surgical complications	9	7.1%	9	3.9%	**18**	**5.1%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	2	1.6%	0	0.0%	**2**	**0.6%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	1	0.8%	0	0.0%	**1**	**0.3%**
10. Diabetic retinopathy	0	0.0%	2	0.9%	**2**	**0.6%**
11. ARMD	1	0.8%	0	0.0%	**1**	**0.3%**
12. Other posterior segment disease	1	0.8%	3	1.3%	**4**	**1.1%**
13. All other globe/CNS abnormalities	0	0.0%	0	0.0%	**0**	**0.0%**
Total	**126**	**100.0%**	**229**	**100.0%**	**355**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	112	88.9%	215	93.9%	327	92.1%
B. Preventable (PHC/PEC services) (5,6,7,8)	2	1.6%	0	0.0%	2	0.6%
C. Preventable (Ophthalmic services) (4,9,10)	10	7.9%	11	4.8%	21	5.9%
D. Avoidable (A+B+C)	124	98.4%	226	98.7%	350	98.6%
E. Posterior segment causes (8,9,10,11,12)	3	2.4%	5	2.2%	8	2.3%

9. Main cause of moderate visual impairment in eyes - VA<6/18 - 6/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	16	5.6%	31	5.8%	**47**	**5.7%**
2. Aphakia uncorrected	0	0.0%	0	0.0%	**0**	**0.0%**
3. Cataract untreated	223	77.4%	410	76.9%	**633**	**77.1%**
4. Cataract surgical complications	36	12.5%	77	14.4%	**113**	**13.8%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	3	1.0%	1	0.2%	**4**	**0.5%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	1	0.3%	0	0.0%	**1**	**0.1%**
10. Diabetic retinopathy	0	0.0%	4	0.8%	**4**	**0.5%**
11. ARMD	1	0.3%	1	0.2%	**2**	**0.2%**
12. Other posterior segment disease	8	2.8%	9	1.7%	**17**	**2.1%**
13. All other globe/CNS abnormalities	0	0.0%	0	0.0%	**0**	**0.0%**
Total	**288**	**100.0%**	**533**	**100.0%**	**821**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	239	83.0%	441	82.7%	680	82.8%
B. Preventable (PHC/PEC services) (5,6,7,8)	3	1.0%	1	0.2%	4	0.5%
C. Preventable (Ophthalmic services) (4,9,10)	37	12.8%	81	15.2%	118	14.4%
D. Avoidable (A+B+C)	279	96.9%	523	98.1%	802	97.7%
E. Posterior segment causes (8,9,10,11,12)	10	3.5%	14	2.6%	24	2.9%

10. Principal cause early visual impairment in persons: VA<6/12 - 6/18 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	152	77.6%	290	80.6%	**442**	**79.5%**
2. Aphakia uncorrected	0	0.0%	0	0.0%	**0**	**0.0%**
3. Cataract untreated	36	18.4%	48	13.3%	**84**	**15.1%**
4. Cataract surgical complications	7	3.6%	18	5.0%	**25**	**4.5%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	0	0.0%	1	0.3%	**1**	**0.2%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	0	0.0%	0	0.0%	**0**	**0.0%**
10. Diabetic retinopathy	0	0.0%	0	0.0%	**0**	**0.0%**
11. ARMD	0	0.0%	1	0.3%	**1**	**0.2%**
12. Other posterior segment disease	1	0.5%	2	0.6%	**3**	**0.5%**
13. All other globe/CNS abnormalities	0	0.0%	0	0.0%	**0**	**0.0%**
Total	**196**	**100.0%**	**360**	**100.0%**	**556**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	188	95.9%	338	93.9%	526	94.6%
B. Preventable (PHC/PEC services) (5,6,7,8)	0	0.0%	1	0.3%	1	0.2%
C. Preventable (Ophthalmic services) (4,9,10)	7	3.6%	18	5.0%	25	4.5%
D. Avoidable (A+B+C)	195	99.5%	357	99.2%	552	99.3%
E. Posterior segment causes (8,9,10,11,12)	1	0.5%	3	0.8%	4	0.7%

11. Main cause of early visual impairment in eyes - VA<6/12 - 6/18 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	321	78.5%	643	82.9%	**964**	**81.4%**
2. Aphakia uncorrected	0	0.0%	0	0.0%	**0**	**0.0%**
3. Cataract untreated	57	13.9%	90	11.6%	**147**	**12.4%**
4. Cataract surgical complications	28	6.8%	38	4.9%	**66**	**5.6%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	1	0.2%	1	0.1%	**2**	**0.2%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	0	0.0%	0	0.0%	**0**	**0.0%**
10. Diabetic retinopathy	0	0.0%	0	0.0%	**0**	**0.0%**
11. ARMD	1	0.2%	1	0.1%	**2**	**0.2%**
12. Other posterior segment disease	1	0.2%	2	0.3%	**3**	**0.3%**
13. All other globe/CNS abnormalities	0	0.0%	1	0.1%	**1**	**0.1%**
Total	**409**	**100.0%**	**776**	**100.0%**	**1,185**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	378	92.4%	733	94.5%	1,111	93.8%
B. Preventable (PHC/PEC services) (5,6,7,8)	1	0.2%	1	0.1%	2	0.2%
C. Preventable (Ophthalmic services) (4,9,10)	28	6.8%	38	4.9%	66	5.6%
D. Avoidable (A+B+C)	407	99.5%	772	99.5%	1,179	99.5%
E. Posterior segment causes (8,9,10,11,12)	2	0.5%	3	0.4%	5	0.4%

12. Prevalence of cataract with VA<3/60, VA<6/60, VA<6/18 and VA<6/12 - best corrected VA or pinhole

	Males		Females		Total	
	n	% (95%CI)	n	% (95%CI)	n	% (95%CI)
Cataract and VA<3/60 with best correction or pinhole						
Bilateral cataract	4	0.4% (0.0-0.8)	12	0.7% (0.3-1.1)	**16**	**0.6% (0.3-0.9)**
Unilateral cataract	78	7.8% (5.8-9.6)	101	5.8% (4.7-6.9)	**179**	**6.5% (5.4-7.6)**
Cataract eyes	86	4.3% (3.1-5.4)	125	3.6% (2.9-4.3)	**211**	**3.8% (3.1-4.5)**
Cataract and VA<6/60 with best correction or pinhole						
Bilateral cataract	8	0.8% (0.3-1.3)	35	2.0% (1.4-2.6)	**43**	**1.6% (1.1-2.0)**
Unilateral cataract	91	9.0% (7.0-10.9)	128	7.3% (5.6-8.6)	**219**	**8.0% (6.4-9.1)**
Cataract eyes	107	5.3% (4.1-6.5)	198	5.7% (4.6-6.7)	**305**	**5.5% (4.6-6.5)**
Cataract and VA<6/18 with best correction or pinhole						
Bilateral cataract	45	4.5% (3.3-5.7)	128	7.3% (5.8-8.9)	**173**	**6.3% (5.2-7.4)**
Unilateral cataract	119	11.8% (9.7-13.9)	185	10.6% (9.1-12.1)	**304**	**11.0% (9.7-12.4)**
Cataract eyes	209	10.4% (8.6-12.2)	441	12.6% (10.7-14.5)	**650**	**11.8% (10.3-13.3)**
Cataract and VA<6/12 with best correction or pinhole						
Bilateral cataract	136	13.5% (11.3-15.7)	281	16.1% (14.0-18.2)	**417**	**15.1% (13.6-16.7)**
Unilateral cataract	148	14.7% (12.3-17.1)	236	13.5% (11.9-15.1)	**384**	**13.9% (12.5-15.4)**
Cataract eyes	420	20.9% (18.4-23.3)	798	22.8% (20.5-25.1)	**1,218**	**22.1% (20.3-24.0)**

13. Sample prevalence of (pseudo)aphakia

	Males		Females		Total	
	n	% (95%CI)	n	% (95%CI)	n	% (95%CI)
Bilateral (pseudo)aphakia	207	20.6% (17.5-23.6)	372	21.3% (18.8-23.8)	**579**	**21.0% (18.9-23.2)**
Unilateral (pseudo)aphakia	124	12.3% (10.0-14.7)	195	11.2% (9.7-12.6)	**319**	**11.6% (10.5-12.7)**
(Pseudo)aphakic eyes	538	26.7% (23.9-29.5)	939	26.9% (24.4-29.4)	**1,477**	**26.8% (24.8-28.8)**

14. Cataract Surgical Coverage

	Males	Females	Total
Cataract Surgical Coverage (eyes) - percentage			
VA < 3/60	86.2	88.3	87.5
VA < 6/60	83.4	82.6	82.9
VA < 6/18	72.0	68.0	69.4
Cataract Surgical Coverage (persons) - percentage			
VA < 3/60	98.4	97.3	97.7
VA < 6/60	96.9	92.6	94.1
VA < 6/18	85.4	78.5	80.9

15. Number and percentage of first eyes and second eyes operated

	Males		Females		Total	
	n	%	n	%	n	%
First eyes	331	61.5	567	60.4	**898**	**60.8**
Second eyes	207	38.5	372	39.6	**579**	**39.2**

16. Uncorrected refractive error and uncorrected presbyopia

	Males		Females		Total	
	n	%	n	%	n	%
Total refractive errors	287	28.5	463	26.5	**750**	**27.2**
Uncorrected refractive errors	161	16.0	304	17.4	**465**	**16.9**
Uncorrected presbyopia	847	84.1	1,593	91.2	**2,440**	**88.6**

17. Persons with Functional Low Vision: BCVA<6/18 - PL+ in the better eye; incurable

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59	2	0.6	2	0.3	**4**	**0.4**
60 - 69	2	0.5	3	0.5	**5**	**0.5**
70 - 79	1	0.5	5	1.7	**6**	**1.2**
80+	3	4.0	2	1.9	**5**	**2.8**
Total	8	0.8	12	0.7	**20**	**0.7**

18. Principal cause of functional low vision in persons: BCVA<6/18 - PL+ in better eye, incurable

	Males		Females		Total	
	n	%	n	%	n	%
1. Refractive error	0	0.0%	0	0.0%	**0**	**0.0%**
2. Aphakia uncorrected	0	0.0%	0	0.0%	**0**	**0.0%**
3. Cataract untreated	0	0.0%	0	0.0%	**0**	**0.0%**
4. Cataract surgical complications	4	50.0%	3	25.0%	**7**	**35.0%**
5. Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
6. Non Trachomatous corneal opacity	0	0.0%	0	0.0%	**0**	**0.0%**
7. Phthisis	0	0.0%	0	0.0%	**0**	**0.0%**
8. Onchocerciasis	0	0.0%	0	0.0%	**0**	**0.0%**
9. Glaucoma	1	12.5%	5	41.7%	**6**	**30.0%**
10. Diabetic retinopathy	0	0.0%	2	16.7%	**2**	**10.0%**
11. ARMD	1	12.5%	1	8.3%	**2**	**10.0%**
12. Other posterior segment disease	2	25.0%	0	0.0%	**2**	**10.0%**
13. All other globe/CNS abnormalities	0	0.0%	1	8.3%	**1**	**5.0%**
Total	**8**	**100.0%**	**12**	**100.0%**	**20**	**100.0%**
Intervention by this visual impairment						
A. Treatable (1,2,3)	0	0.0%	0	0.0%	0	0.0%
B. Preventable (PHC/PEC services) (5,6,7,8)	0	0.0%	0	0.0%	0	0.0%
C. Preventable (Ophthalmic services) (4,9,10)	5	62.5%	10	83.3%	15	75.0%
D. Avoidable (A+B+C)	5	62.5%	10	83.3%	15	75.0%
E. Posterior segment causes (8,9,10,11,12)	4	50.0%	8	66.7%	12	60.0%

19. Persons with FLV and proportion of all persons in corresponding category of visual impairment with available correction

	Males		Females		Total	
	n	%	n	%	n	%
BCVA<3/60 - PL+	2	22.2	4	13.3	**6**	**15.4**
BCVA<6/60 - 3/60	2	11.8	4	6.1	**6**	**7.2**
BCVA<6/18 - 6/60	4	3.2	4	1.8	**8**	**2.3**
Total	8	5.3	12	3.7	**20**	**4.2**

RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

REASONS WHY PEOPLE, BLIND DUE TO CATARACT, HAVE NOT BEEN OPERATED

Date and time of report: 29-Sep-16 1:46:27PM

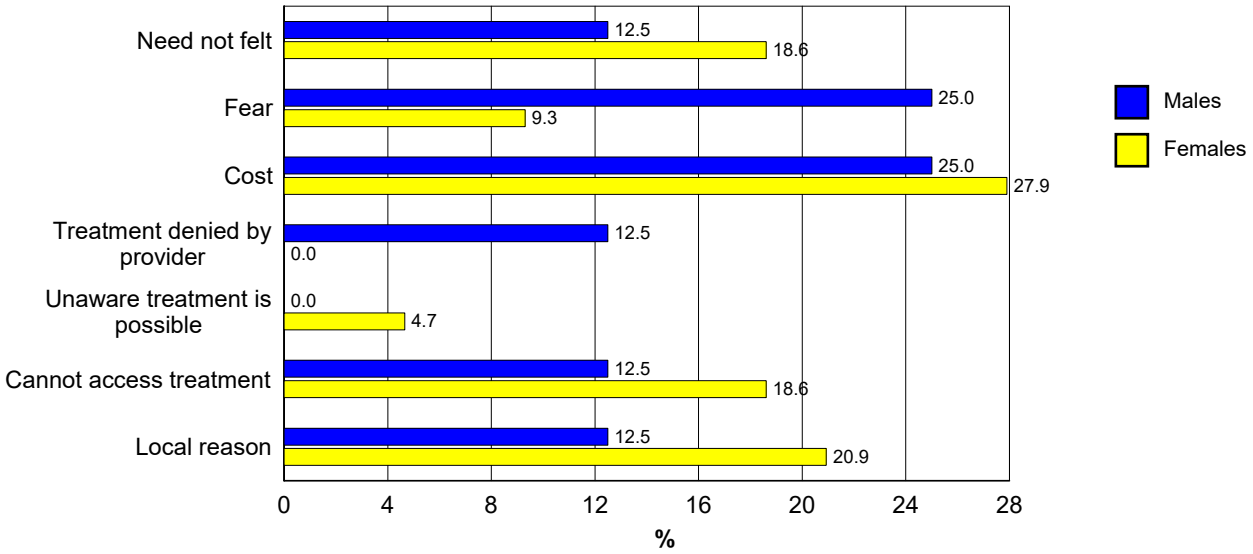
This report is for the survey area: Virudhunagar

Year and month when survey was conducted: 2016- 8 until 2016- 9

RAAB is designed as a rapid procedure and there is not enough time during the RAAB to hold in-dept interviews why people blind from cataract have not yet been operated. Hence, the data on barriers should be regarded as an indication whether more detailed qualitative studies are required.

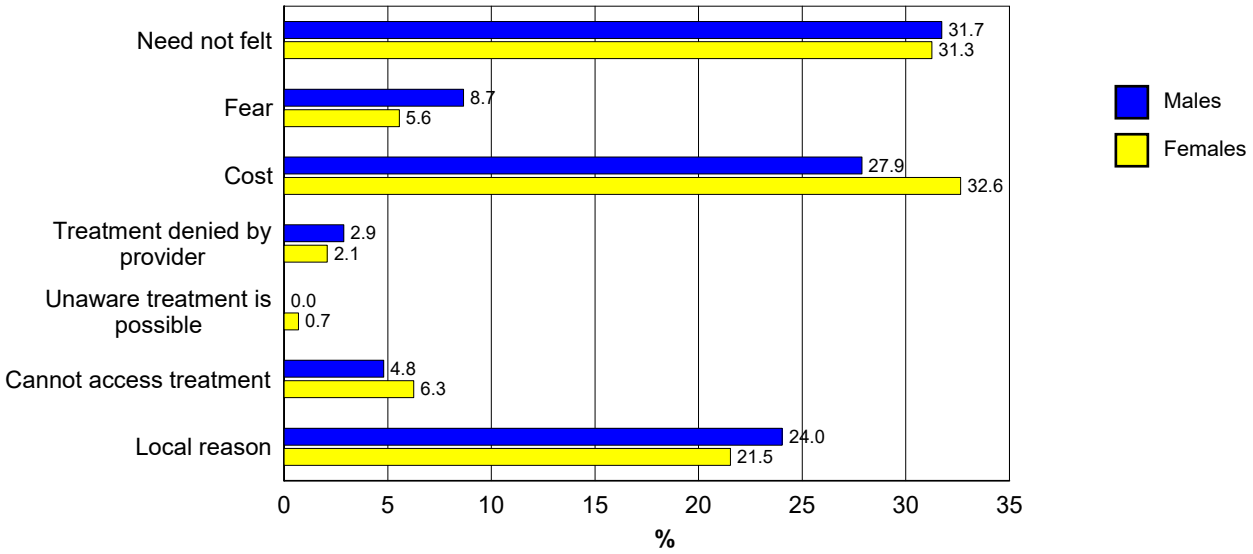
1. Barriers to cataract surgery in sample (bilateral BCVA<6/60 due to cataract)

	Males		Females		Total	
	n	%	n	%	n	%
Need not felt	1	12.5%	8	18.6%	9	17.6%
Fear	2	25.0%	4	9.3%	6	11.8%
Cost	2	25.0%	12	27.9%	14	27.5%
Treatment denied by provider	1	12.5%	0	0.0%	1	2.0%
Unaware treatment is possible	0	0.0%	2	4.7%	2	3.9%
Cannot access treatment	1	12.5%	8	18.6%	9	17.6%
Local reason	1	12.5%	9	20.9%	10	19.6%
Total	**8**	**100.0%**	**43**	**100.0%**	**51**	**100.0%**



2. Barriers to cataract surgery in sample (unilateral BCVA<6/60 due to cataract)

	Males		Females		Total	
	n	%	n	%	n	%
Need not felt	33	31.7%	45	31.3%	78	31.5%
Fear	9	8.7%	8	5.6%	17	6.9%
Cost	29	27.9%	47	32.6%	76	30.6%
Treatment denied by provider	3	2.9%	3	2.1%	6	2.4%
Unaware treatment is possible	0	0.0%	1	0.7%	1	0.4%
Cannot access treatment	5	4.8%	9	6.3%	14	5.6%
Local reason	25	24.0%	31	21.5%	56	22.6%
Total	**104**	**100.0%**	**144**	**100.0%**	**248**	**100.0%**



RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

VISUAL OUTCOME AFTER CATARACT SURGERY (LONG-TERM OUTCOME)

Date and time of report:	29-Sep-16	1:46:55PM
This report is for the survey area:	Virudhunagar	
Year and month when survey was conducted:	2016- 8 until 2016- 9	

The visual acuity of all subjects operated earlier is measured with available correction and with a pinhole. This report gives population based data on visual outcome, not specific for one surgeon or one hospital and with follow-up periods ranging from one month to several decades. When cataract surgery took place several years earlier, the chance of vision loss due to other causes than cataract increases. If the proportion of eyes with a visual outcome less than 6/60 is higher than 10%, research into the possible causes of poor visual outcome is indicated.

1. VA in operated eyes in sample with available correction (PVA)

	Non-IOL		IOL		Couching		Total	
	Eyes	%	Eyes	%	Eyes	%	Eyes	%
Very good: can see 6/12	12	22.2%	762	53.5%	0	0.0%	**774**	**52.4%**
Good: can see 6/18	7	13.0%	424	29.8%	0	0.0%	**431**	**29.2%**
Borderline: can see 6/60	2	3.7%	155	10.9%	0	0.0%	**157**	**10.6%**
Poor: cannot see 6/60	33	61.1%	82	5.8%	0	0.0%	**115**	**7.8%**
Total	**54**	**100.0%**	**1,423**	**100.0%**	**0**	**0.0%**	1,477	**100.0%**

2. VA in operated eyes in sample with best correction (BCVA)

	Non-IOL		IOL		Couching		Total	
	Eyes	%	Eyes	%	Eyes	%	Eyes	%
Very good: can see 6/12	15	27.8%	1,137	79.9%	0	0.0%	**1,152**	**78.0%**
Good: can see 6/18	9	16.7%	170	11.9%	0	0.0%	**179**	**12.1%**
Borderline: can see 6/60	9	16.7%	55	3.9%	0	0.0%	**64**	**4.3%**
Poor: cannot see 6/60	21	38.9%	61	4.3%	0	0.0%	**82**	**5.6%**
Total	**54**	**100.0%**	**1,423**	**100.0%**	**0**	**0.0%**	1,477	**100.0%**

3. VA in operated eyes in sample by years after surgery

	3 yrs postop		4 - 6 yrs postop.		7+ yrs postop		Total	
	Eyes	%	Eyes	%	Eyes	%	Eyes	%
Very good: can see 6/12	344	58.1%	206	53.5%	224	44.8%	**774**	**52.4%**
Good: can see 6/18	167	28.2%	113	29.4%	151	30.2%	**431**	**29.2%**
Borderline: can see 6/60	55	9.3%	43	11.2%	59	11.8%	**157**	**10.6%**
Poor: cannot see 6/60	26	4.4%	23	6.0%	66	13.2%	**115**	**7.8%**
Total	**592**	**100.0%**	**385**	**100.0%**	**500**	**100.0%**	1,477	**100.0%**

4. Age at time of surgery in males and females

	Males		Females		Total	
	Eyes	%	Eyes	%	Eyes	%
1 - 29	1	0.2%	4	0.4%	**5**	**0.3%**
30 - 39	4	0.7%	3	0.3%	**7**	**0.5%**
40 - 49	16	3.0%	52	5.5%	**68**	**4.6%**
50 - 59	151	28.1%	303	32.3%	**454**	**30.7%**
60 - 69	235	43.7%	391	41.6%	**626**	**42.4%**
70 - 79	110	20.4%	158	16.8%	**268**	**18.1%**
80+	21	3.9%	28	3.0%	**49**	**3.3%**
Total	**538**	**100.0%**	**939**	**100.0%**	1,477	**100.0%**

5. Place of surgery by sex

	Males		Females		Total	
	Eyes	%	Eyes	%	Eyes	%
Government Hosp.	95	17.7	225	24.0	**320**	**21.7**
Voluntary/charitable hospital	277	51.5	442	47.1	**719**	**48.7**
Private hospital	155	28.8	249	26.5	**404**	**27.4**
Eyecamp	11	2.0	23	2.4	**34**	**2.3**
Total	**538**	**100.0**	**939**	**100.0**	**1,477**	**100.0**

6. Post-op VA with available correction by place of surgery

	Gov. Hosp.		Vol. Hosp.		Priv. Hosp.		Eye camp		Total	
	Eyes	%	Eyes	%	Eyes	%	Eyes	%	Eyes	%
Very good: can see 6/12	135	42.2	407	56.6	216	53.5	16	47.1	**774**	**52.4**
Good: can see 6/18	100	31.3	191	26.6	129	31.9	11	32.4	**431**	**29.2**
Borderline: can see 6/60	40	12.5	71	9.9	39	9.7	7	20.6	**157**	**10.6**
Poor: cannot see 6/60	45	14.1	50	7.0	20	5.0	0	0.0	**115**	**7.8**
Total	**320**	**100.0**	**719**	**100.0**	**404**	**100.0**	**34**	**100.0**	**1,477**	**100.0**

7. Post-op presenting VA and causes of borderline and poor outcome

	Selection		Surgery		Spectacles		Sequelae		Can see 6/12		Total	
	Eyes	%	Eyes	%	Eyes	%	Eyes	%	Eyes	%	Eyes	%
Very good: can see 6/12	0	0.0	0	0.0	0	0.0	0	0.0	774	100.0	**774**	**52.4**
Good: can see 6/18	5	6.8	53	29.6	359	92.3	14	22.6	0	0.0	**431**	**29.2**
Borderline: can see 6/60	25	34.2	85	47.5	18	4.6	29	46.8	0	0.0	**157**	**10.6**
Poor: cannot see 6/60	43	58.9	41	22.9	12	3.1	19	30.6	0	0.0	**115**	**7.8**
Total	**73**	**100.0**	**179**	**100.0**	**389**	**100.0**	**62**	**100.0**	**774**	**100.0**	**1,477**	**100.0**

8. Proportion and type of surgery

	Males		Females		Total	
	Eyes	%	Eyes	%	Eyes	%
Non-IOL	18	3.3	36	3.8	**54**	**3.7**
IOL	520	96.7	903	96.2	**1,423**	**96.3**
Couching	0	0.0	0	0.0	**0**	**0.0**
Total	**538**	**100.0**	**939**	**100.0**	**1,477**	**100.0**

RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

INDICATORS BY SEX AND BY AGE GROUP - FINDINGS FROM SAMPLE

Date and time of report:	29-Sep-16	1:47:34PM
This report is for the survey area:	Virudhunagar	
Year and month when survey was conducted:	2016- 8 until 2016- 9	

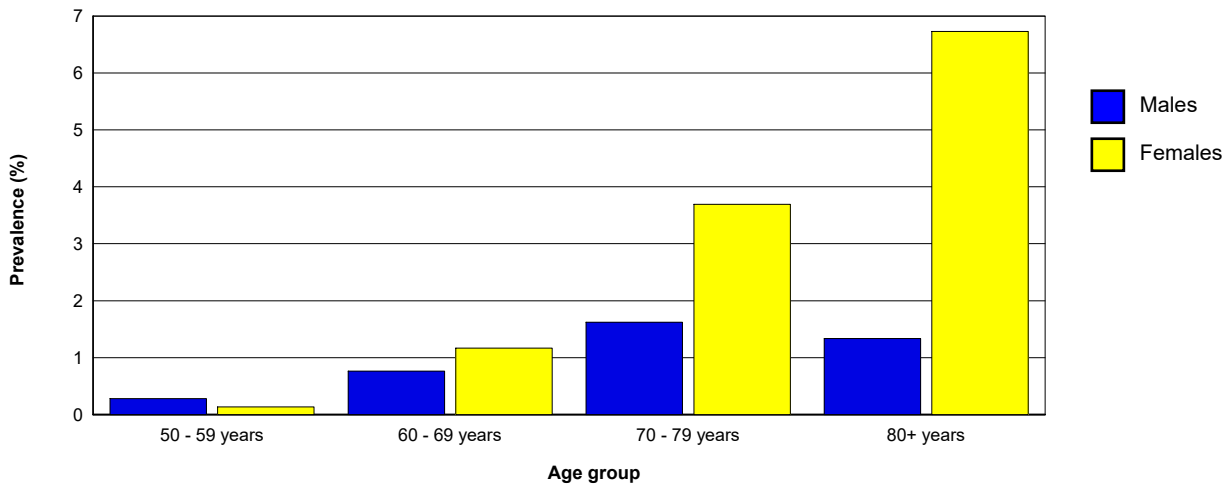
The sample size of the Rapid Assessment is sufficient to provide an acceptable accuracy of the overall prevalence of bilateral blindness (VA <3/60). The accuracy of prevalence estimates for any subgroup is far less and caution should be taken in the interpretation of these data. Confidence intervals for prevalence of various conditions can be calculated with menu Reports / Sampling error & Design Effect.

1. Age and sex distribution of people examined in the sample

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	355	35.3%	746	42.7%	1,101	39.0%
60 - 69 years	392	38.9%	599	34.3%	991	36.6%
70 - 79 years	185	18.4%	298	17.1%	483	17.7%
80+ years	75	7.4%	104	6.0%	179	6.7%
Total	**1,007**	**100.0%**	**1,747**	**100.0%**	**2,754**	**100.0%**

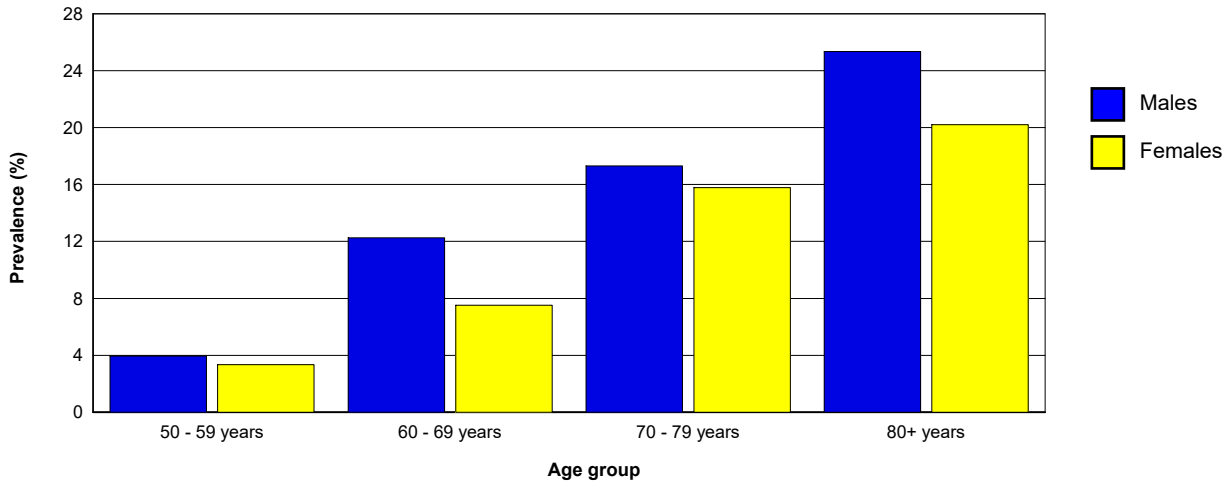
2. Prevalence of people with bilateral blindness - VA <3/60 in better eye with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	1	0.3%	1	0.1%	2	0.2%
60 - 69 years	3	0.8%	7	1.2%	10	1.0%
70 - 79 years	3	1.6%	11	3.7%	14	2.9%
80+ years	1	1.3%	7	6.7%	8	4.5%
Total	**8**	**0.8%**	**26**	**1.5%**	**34**	**1.2%**



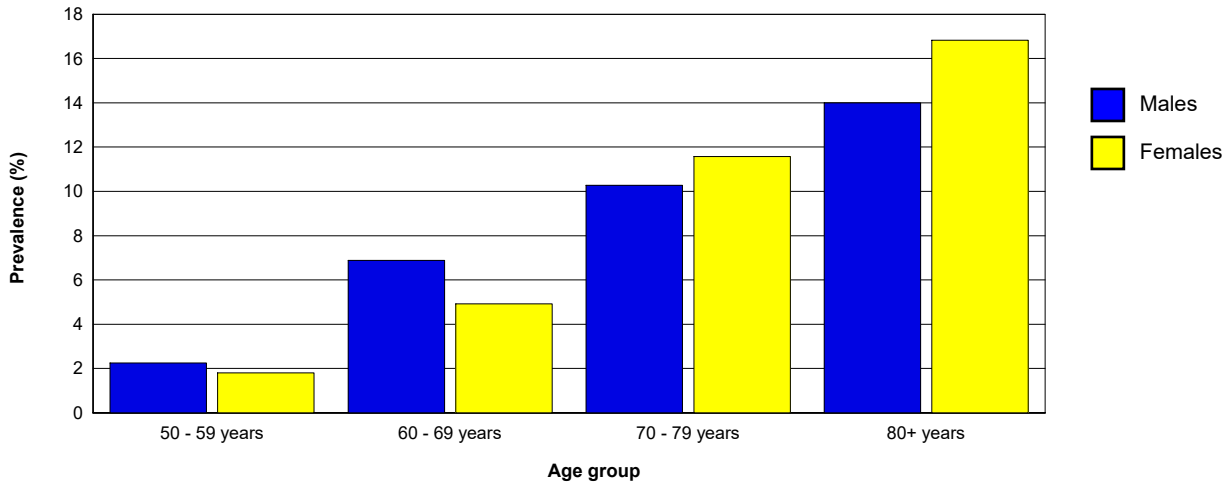
3. Prevalence of people with unilateral blindness - VA <3/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	14	3.9%	25	3.4%	39	3.5%
60 - 69 years	48	12.2%	45	7.5%	93	9.4%
70 - 79 years	32	17.3%	47	15.8%	79	16.4%
80+ years	19	25.3%	21	20.2%	40	22.3%
Total	**113**	**11.2%**	**138**	**7.9%**	**251**	**9.1%**



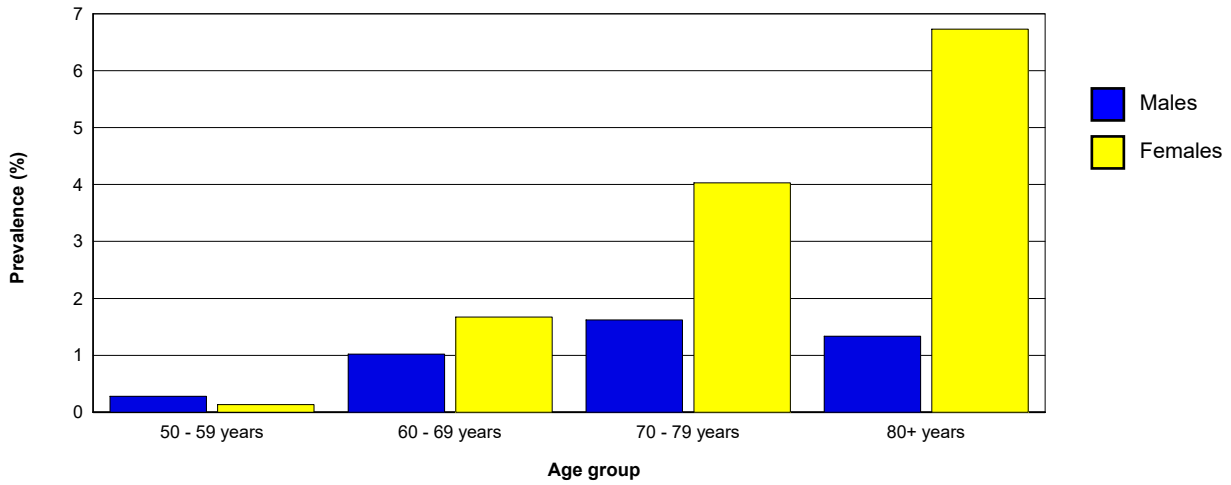
4. Prevalence of blind eyes - VA <3/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	16	2.3%	27	1.8%	43	2.0%
60 - 69 years	54	6.9%	59	4.9%	113	5.7%
70 - 79 years	38	10.3%	69	11.6%	107	11.1%
80+ years	21	14.0%	35	16.8%	56	15.6%
Total	**129**	**6.4%**	**190**	**5.4%**	**319**	**5.8%**



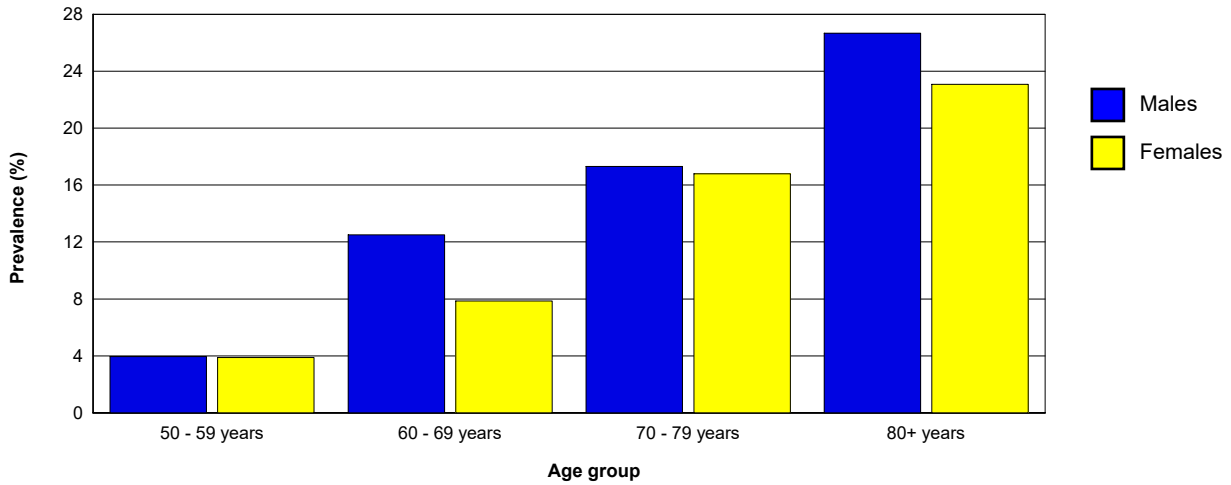
5. Prevalence of people with bilateral blindness - VA <3/60 in better eye with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	1	0.3%	1	0.1%	2	0.2%
60 - 69 years	4	1.0%	10	1.7%	14	1.4%
70 - 79 years	3	1.6%	12	4.0%	15	3.1%
80+ years	1	1.3%	7	6.7%	8	4.5%
Total	**9**	**0.9%**	**30**	**1.7%**	**39**	**1.4%**



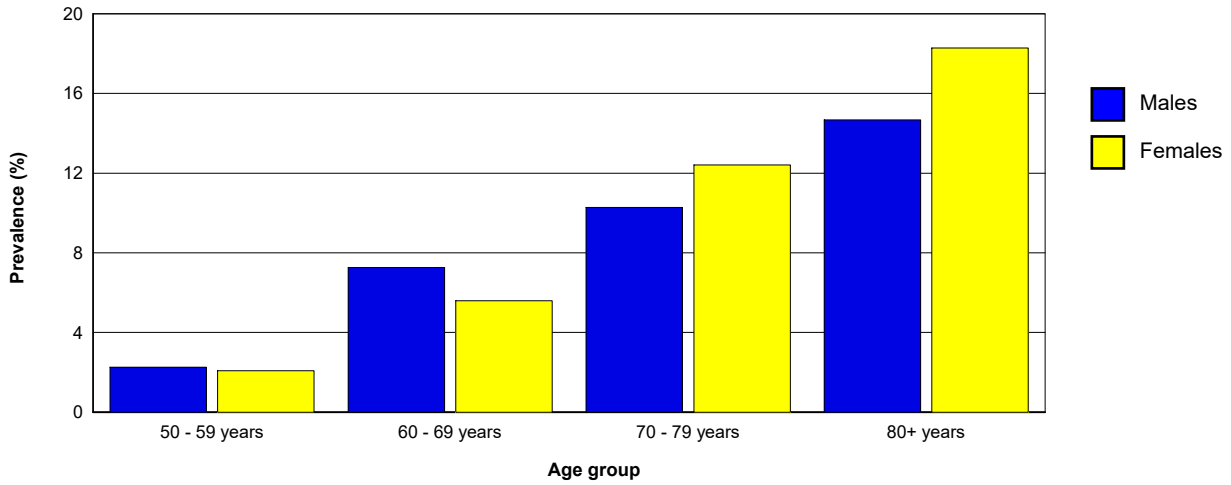
6. Prevalence of people with unilateral blindness - VA <3/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	14	3.9%	29	3.9%	43	3.9%
60 - 69 years	49	12.5%	47	7.8%	96	9.7%
70 - 79 years	32	17.3%	50	16.8%	82	17.0%
80+ years	20	26.7%	24	23.1%	44	24.6%
Total	**115**	**11.4%**	**150**	**8.6%**	**265**	**9.6%**



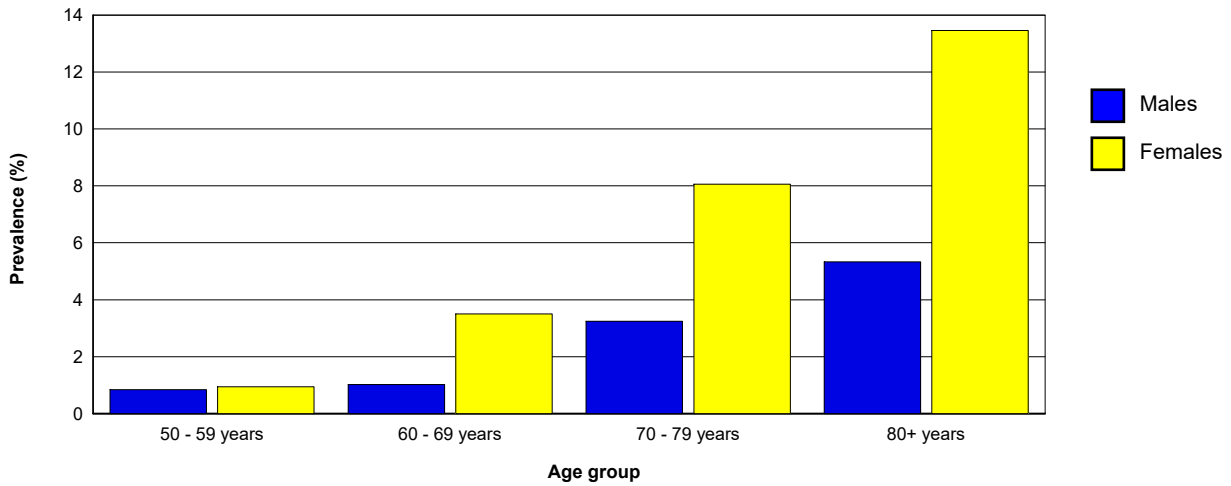
7. Prevalence of blind eyes - VA <3/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	16	2.3%	31	2.1%	47	2.1%
60 - 69 years	57	7.3%	67	5.6%	124	6.3%
70 - 79 years	38	10.3%	74	12.4%	112	11.6%
80+ years	22	14.7%	38	18.3%	60	16.8%
Total	**133**	**6.6%**	**210**	**6.0%**	**343**	**6.2%**



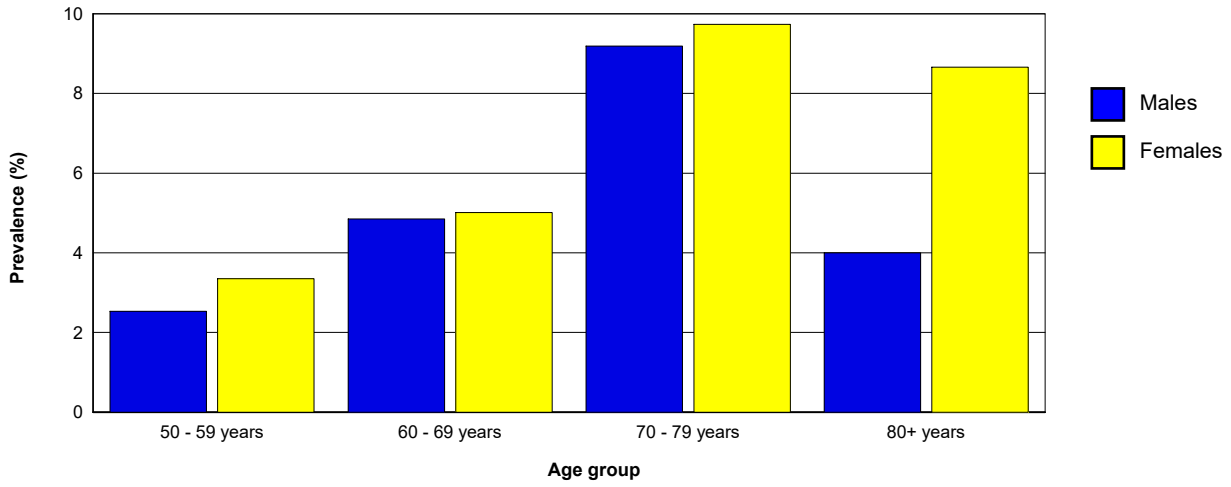
8. Prevalence of people with bilateral severe visual impairment - VA<6/60-3/60 in better eye with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	3	0.8%	7	0.9%	10	0.9%
60 - 69 years	4	1.0%	21	3.5%	25	2.5%
70 - 79 years	6	3.2%	24	8.1%	30	6.2%
80+ years	4	5.3%	14	13.5%	18	10.1%
Total	**17**	**1.7%**	**66**	**3.8%**	**83**	**3.0%**



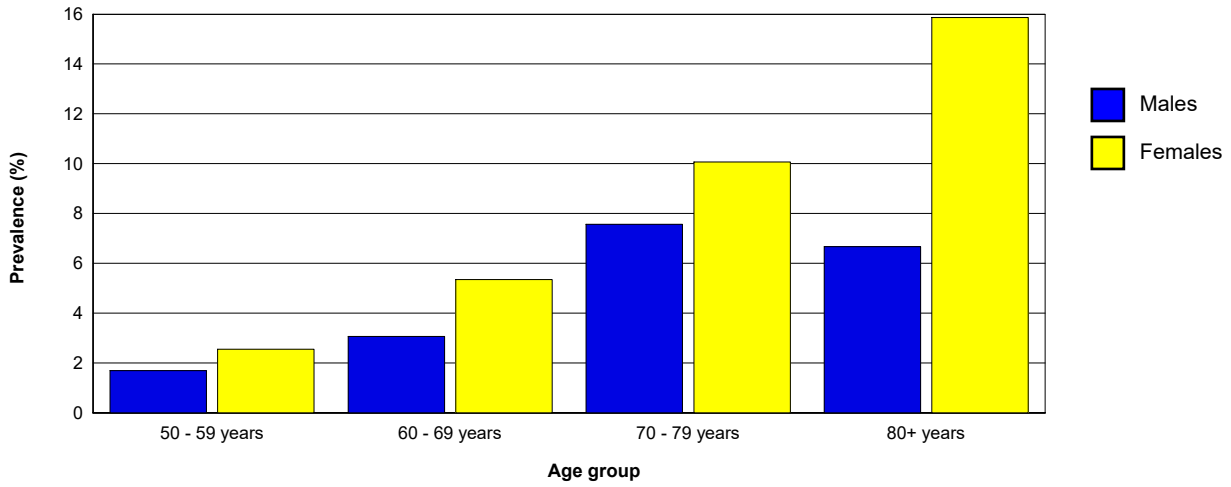
9. Prevalence of people with unilateral severe visual impairment - VA <6/60-3/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	9	2.5%	25	3.4%	34	3.1%
60 - 69 years	19	4.8%	30	5.0%	49	4.9%
70 - 79 years	17	9.2%	29	9.7%	46	9.5%
80+ years	3	4.0%	9	8.7%	12	6.7%
Total	**48**	**4.8%**	**93**	**5.3%**	**141**	**5.1%**



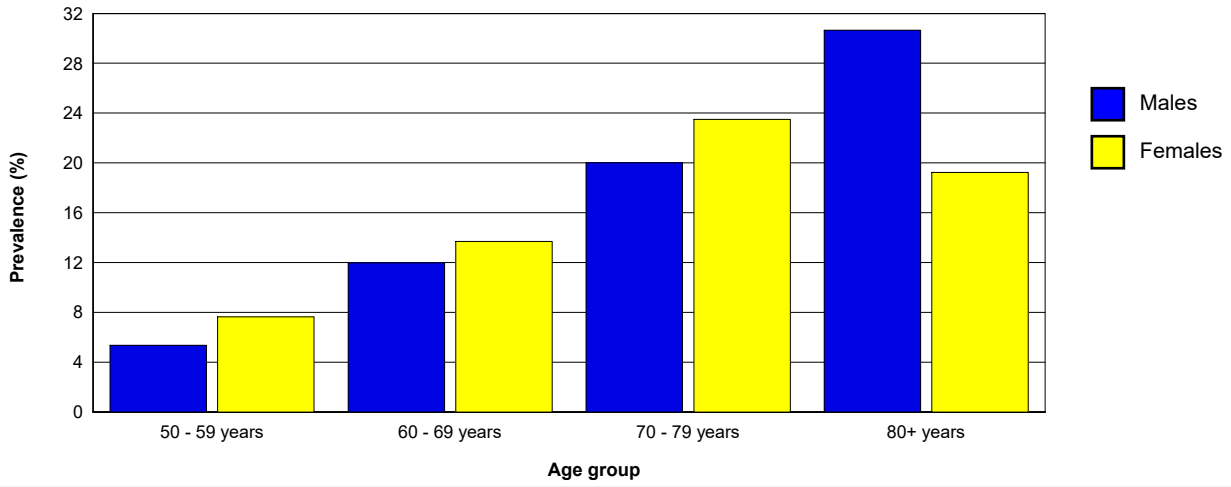
10. Prevalence of SVI eyes - VA VA<6/60-3/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	12	1.7%	38	2.5%	50	2.3%
60 - 69 years	24	3.1%	64	5.3%	88	4.4%
70 - 79 years	28	7.6%	60	10.1%	88	9.1%
80+ years	10	6.7%	33	15.9%	43	12.0%
Total	**74**	**3.7%**	**195**	**5.6%**	**269**	**4.9%**



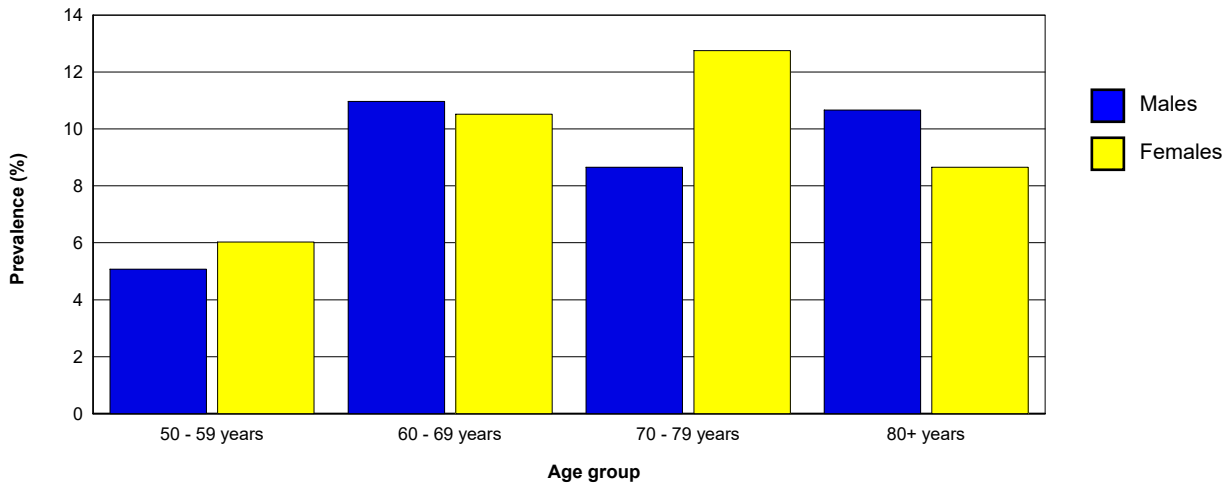
11. Prevalence of people with bilateral moderate visual impairment - VA <6/18-6/60 in better eye with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	19	5.4%	57	7.6%	76	6.9%
60 - 69 years	47	12.0%	82	13.7%	129	13.0%
70 - 79 years	37	20.0%	70	23.5%	107	22.2%
80+ years	23	30.7%	20	19.2%	43	24.0%
Total	**126**	**12.5%**	**229**	**13.1%**	**355**	**12.9%**



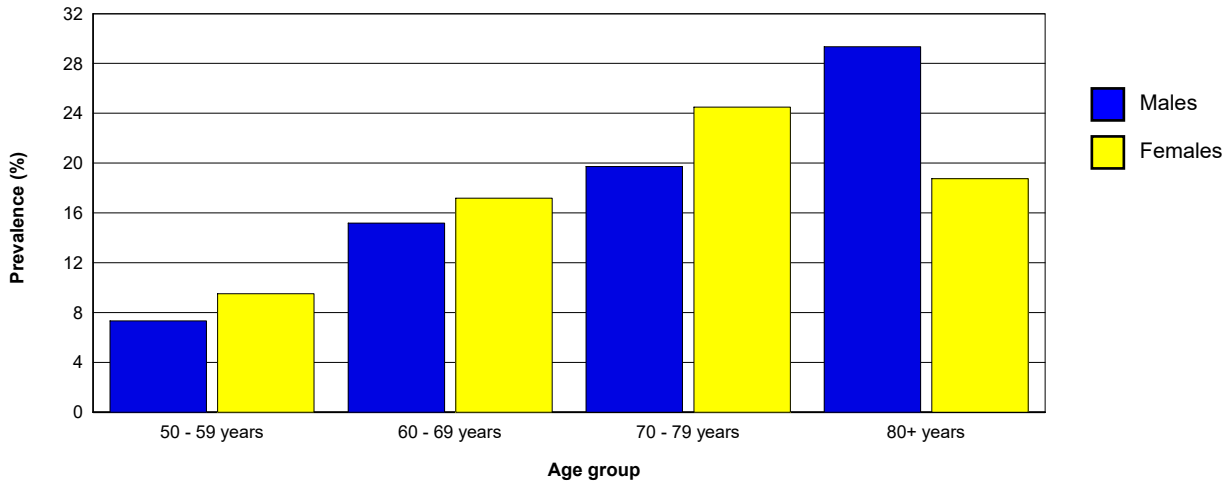
12. Prevalence of people with unilateral visual impairment - VA <6/18-6/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	18	5.1%	45	6.0%	63	5.7%
60 - 69 years	43	11.0%	63	10.5%	106	10.7%
70 - 79 years	16	8.6%	38	12.8%	54	11.2%
80+ years	8	10.7%	9	8.7%	17	9.5%
Total	**85**	**8.4%**	**155**	**8.9%**	**240**	**8.7%**



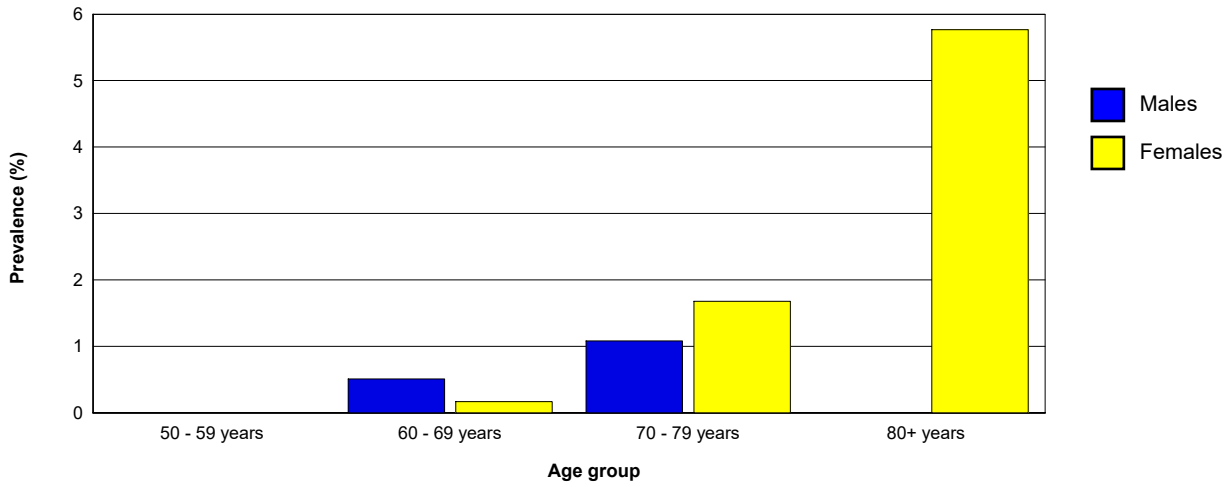
13. Prevalence of MVI eyes - VA<6/18-6/60 with available correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	52	7.3%	142	9.5%	194	8.8%
60 - 69 years	119	15.2%	206	17.2%	325	16.4%
70 - 79 years	73	19.7%	146	24.5%	219	22.7%
80+ years	44	29.3%	39	18.8%	83	23.2%
Total	**288**	**14.3%**	**533**	**15.3%**	**821**	**14.9%**



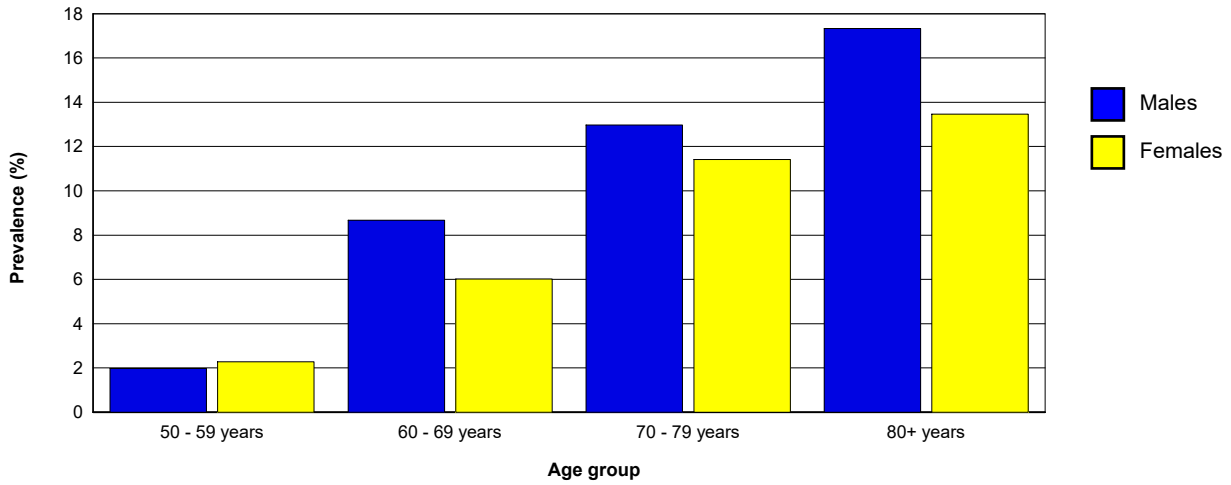
14. Prevalence of people bilateral blind due to cataract - VA<3/60 in better eye with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	0	0.0%	0	0.0%	0	0.0%
60 - 69 years	2	0.5%	1	0.2%	3	0.3%
70 - 79 years	2	1.1%	5	1.7%	7	1.4%
80+ years	0	0.0%	6	5.8%	6	3.4%
Total	**4**	**0.4%**	**12**	**0.7%**	**16**	**0.6%**



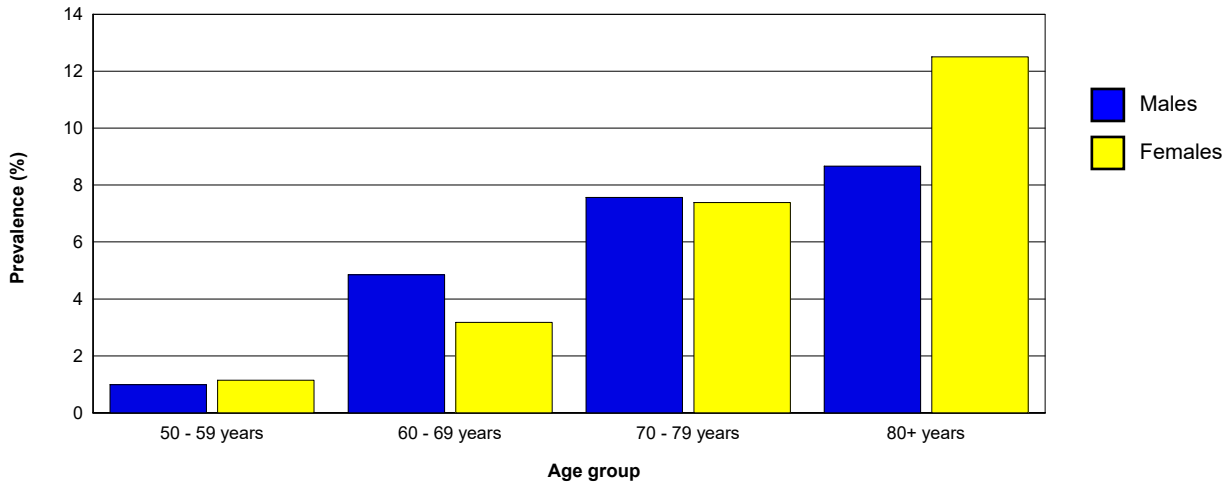
15. Prevalence of people unilateral blind due to cataract - VA <3/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	7	2.0%	17	2.3%	24	2.2%
60 - 69 years	34	8.7%	36	6.0%	70	7.1%
70 - 79 years	24	13.0%	34	11.4%	58	12.0%
80+ years	13	17.3%	14	13.5%	27	15.1%
Total	**78**	**7.7%**	**101**	**5.8%**	**179**	**6.5%**



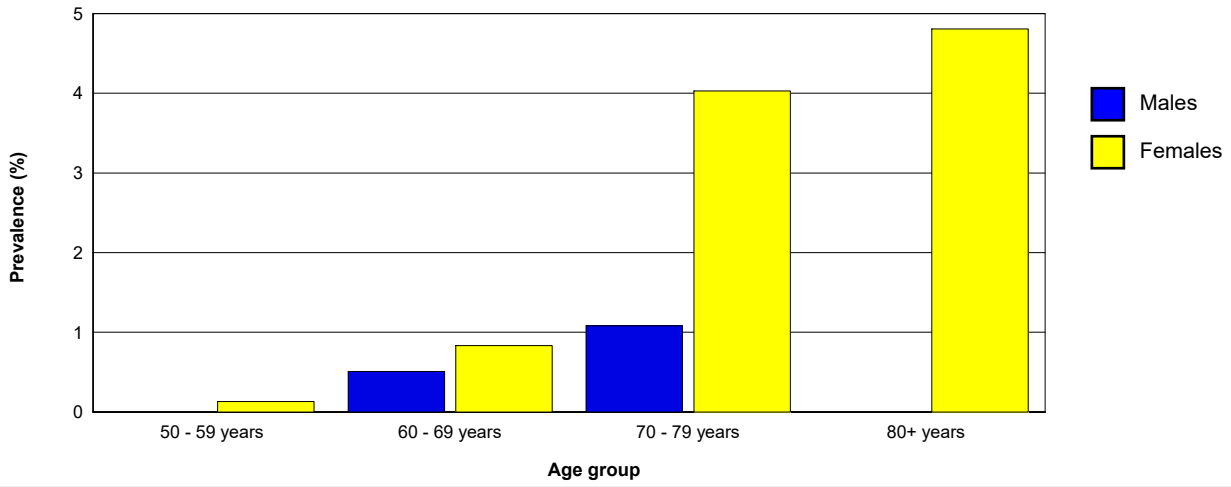
16. Prevalence of cataract blind eyes - VA <3/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	7	1.0%	17	1.1%	24	1.1%
60 - 69 years	38	4.8%	38	3.2%	76	3.8%
70 - 79 years	28	7.6%	44	7.4%	72	7.5%
80+ years	13	8.7%	26	12.5%	39	10.9%
Total	**86**	**4.3%**	**125**	**3.6%**	**211**	**3.8%**



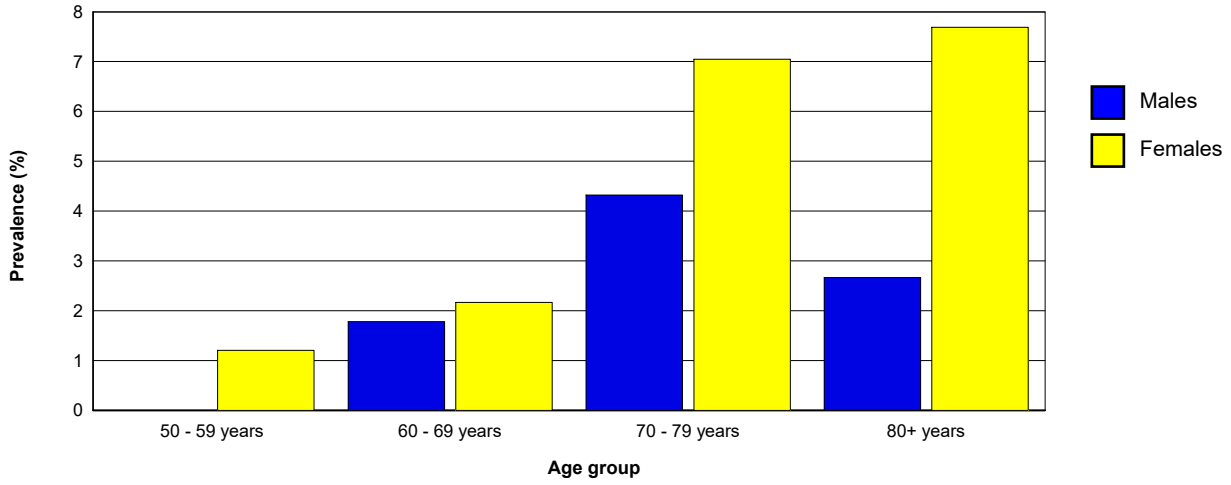
17. Prevalence of people with bilateral severe visual impairment due to cataract - VA <6/60-3/60 - best eye, best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	0	0.0%	1	0.1%	1	0.1%
60 - 69 years	2	0.5%	5	0.8%	7	0.7%
70 - 79 years	2	1.1%	12	4.0%	14	2.9%
80+ years	0	0.0%	5	4.8%	5	2.8%
Total	**4**	**0.4%**	**23**	**1.3%**	**27**	**1.0%**



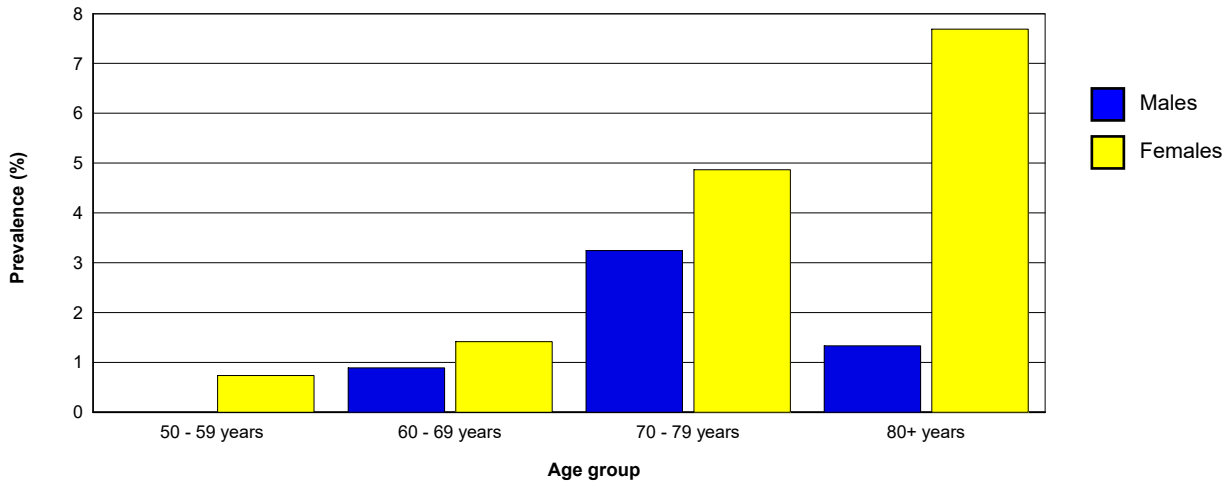
18. Prevalence of people with unilateral severe visual impairment due to cataract - VA<6/60-3/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	0	0.0%	9	1.2%	9	0.8%
60 - 69 years	7	1.8%	13	2.2%	20	2.0%
70 - 79 years	8	4.3%	21	7.0%	29	6.0%
80+ years	2	2.7%	8	7.7%	10	5.6%
Total	**17**	**1.7%**	**51**	**2.9%**	**68**	**2.5%**



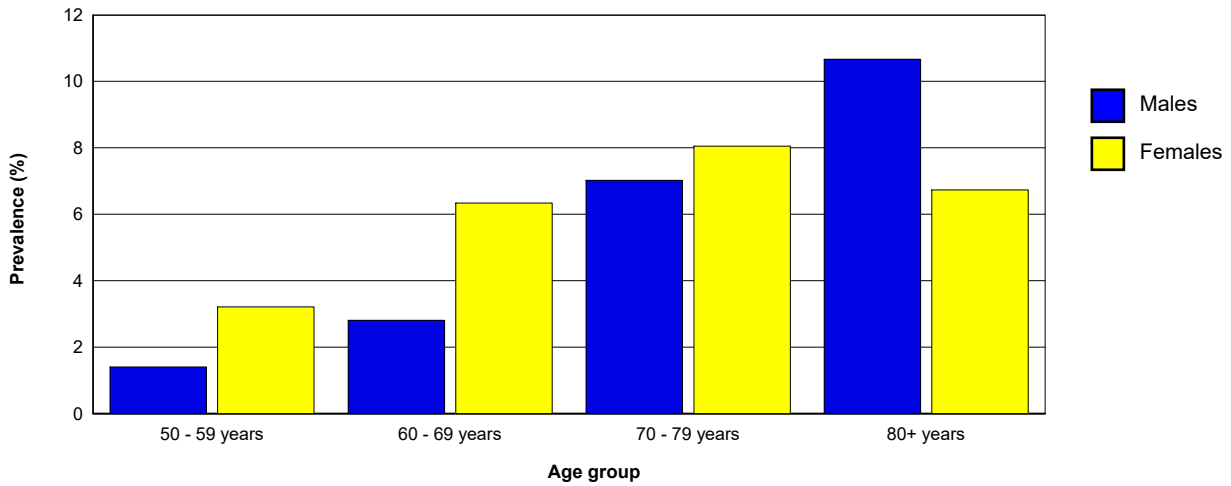
19. Prevalence of cataract SVI eyes - VA<6/60-3/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	0	0.0%	11	0.7%	11	0.5%
60 - 69 years	7	0.9%	17	1.4%	24	1.2%
70 - 79 years	12	3.2%	29	4.9%	41	4.2%
80+ years	2	1.3%	16	7.7%	18	5.0%
Total	**21**	**1.0%**	**73**	**2.1%**	**94**	**1.7%**



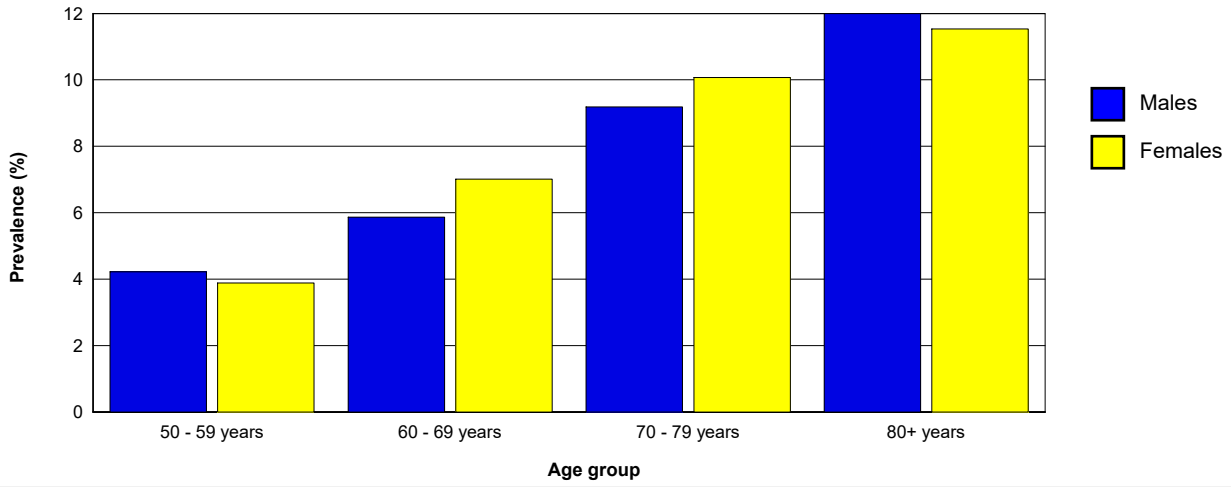
20. Prevalence of people with bilateral moderate visual impairment due to cataract - VA<6/18-6/60 - best eye, best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	5	1.4%	24	3.2%	29	2.6%
60 - 69 years	11	2.8%	38	6.3%	49	4.9%
70 - 79 years	13	7.0%	24	8.1%	37	7.7%
80+ years	8	10.7%	7	6.7%	15	8.4%
Total	**37**	**3.7%**	**93**	**5.3%**	**130**	**4.7%**



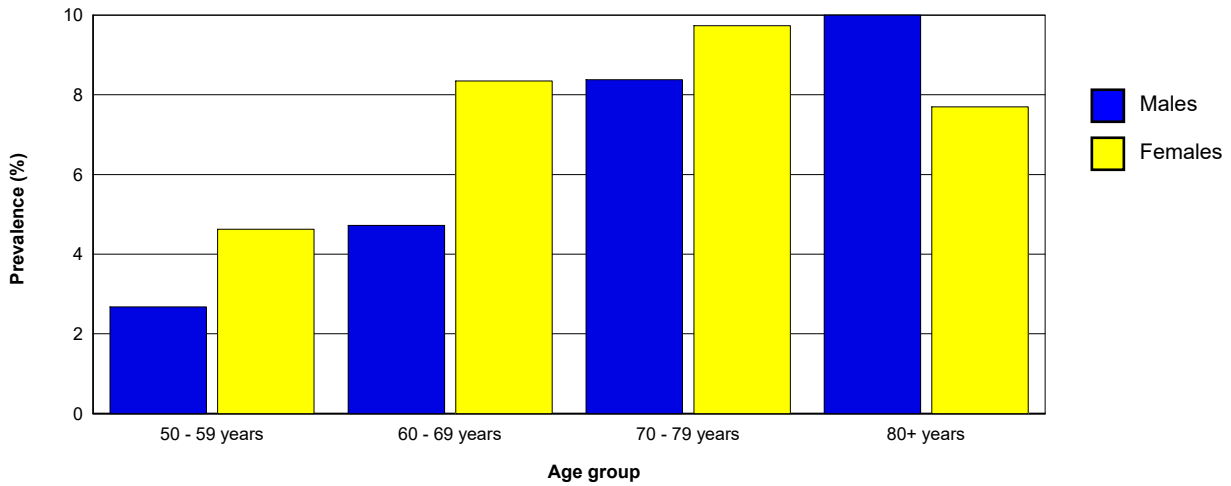
21. Prevalence of people with unilateral moderate visual impairment due to cataract - VA<6/18-6/60 best corrected

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	15	4.2%	29	3.9%	44	4.0%
60 - 69 years	23	5.9%	42	7.0%	65	6.6%
70 - 79 years	17	9.2%	30	10.1%	47	9.7%
80+ years	9	12.0%	12	11.5%	21	11.7%
Total	**64**	**6.4%**	**113**	**6.5%**	**177**	**6.4%**



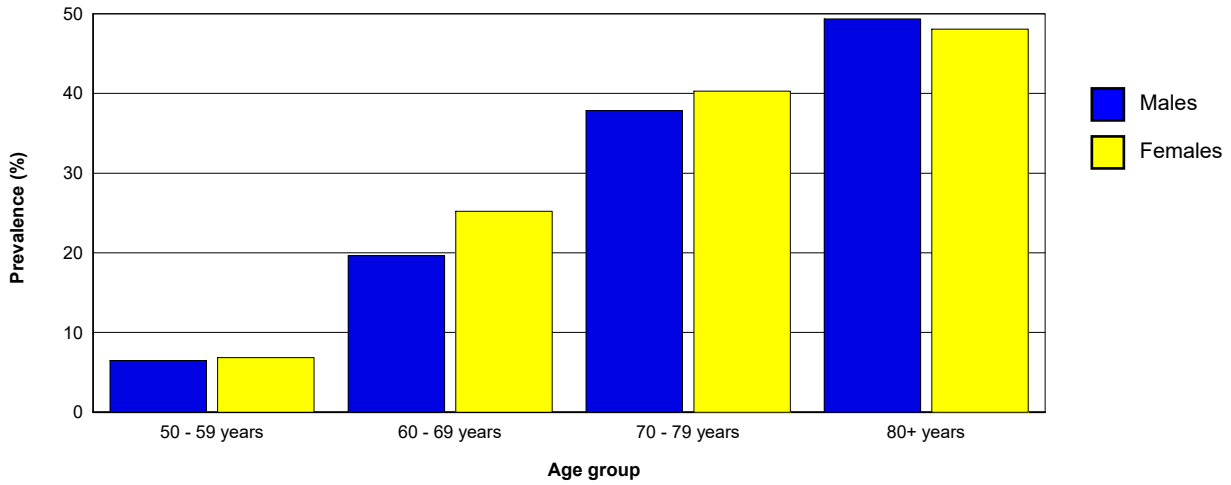
22. Prevalence of cataract MVI eyes - VA <6/18-6/60 with best correction

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	19	2.7%	69	4.6%	88	4.0%
60 - 69 years	37	4.7%	100	8.3%	137	6.9%
70 - 79 years	31	8.4%	58	9.7%	89	9.2%
80+ years	15	10.0%	16	7.7%	31	8.7%
Total	**102**	**5.1%**	**243**	**7.0%**	**345**	**6.3%**



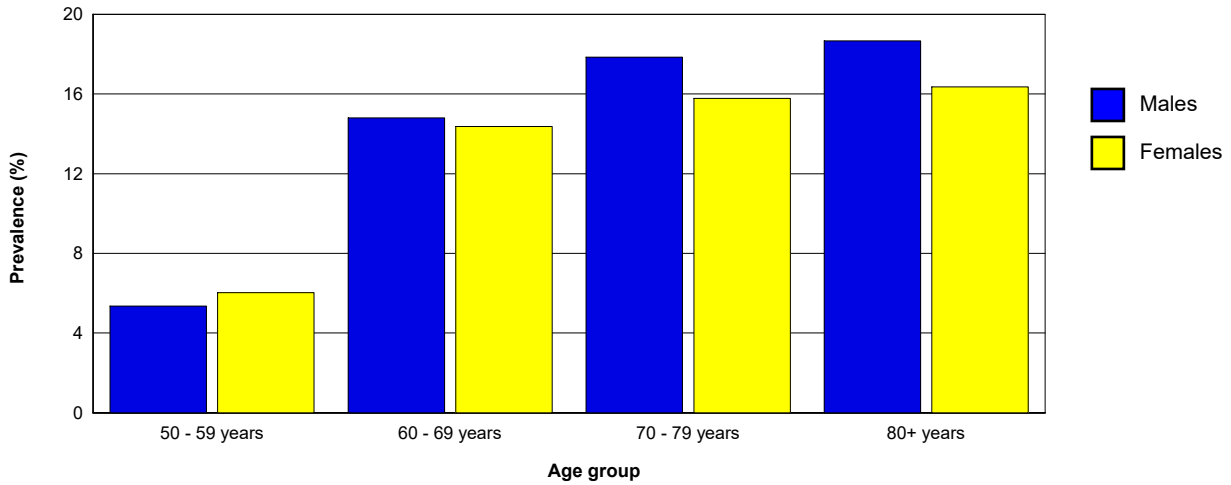
23. Prevalence of people with bilateral (pseudo)aphakia

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	23	6.5%	51	6.8%	74	6.7%
60 - 69 years	77	19.6%	151	25.2%	228	23.0%
70 - 79 years	70	37.8%	120	40.3%	190	39.3%
80+ years	37	49.3%	50	48.1%	87	48.6%
Total	**207**	**20.6%**	**372**	**21.3%**	**579**	**21.0%**



24. Prevalence of people with unilateral (pseudo)aphakia

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	19	5.4%	45	6.0%	64	5.8%
60 - 69 years	58	14.8%	86	14.4%	144	14.5%
70 - 79 years	33	17.8%	47	15.8%	80	16.6%
80+ years	14	18.7%	17	16.3%	31	17.3%
Total	**124**	**12.3%**	**195**	**11.2%**	**319**	**11.6%**



RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

AGE AND SEX ADJUSTED PREVALENCE AND ESTIMATED NUMBERS

Date and time of report: 29-Sep-16 1:48:08PM

This report is for the survey area: Virudhunagar

Year and month when survey was conducted: 2016- 8 until 2016- 9

The prevalence of blindness and visual impairment increases strongly with age and in most communities, females are more affected than males. Normally, the people examined in the sample should have the same composition by age and by sex as the total population in the survey area. When there is a difference, the prevalence for the survey area will also differ. Table 2 and 3 compare the composition in the sample with that of the survey area. By combining the age and sex specific prevalence with the actual population, the age and sex adjusted prevalence and the actual number of people affected in the survey area can be calculated. The 95% confidence interval, based on the sample error in cluster sampling, is also given.

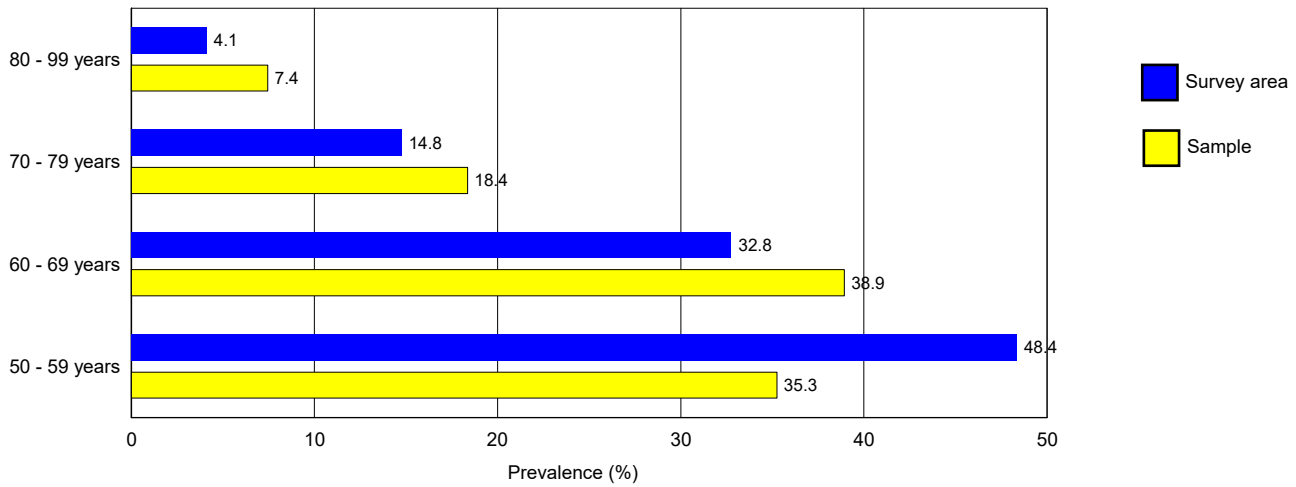
1. Age and sex distribution of people examined in the sample

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	355	35.3%	746	42.7%	**1,101**	**40.0%**
60 - 69 years	392	38.9%	599	34.3%	**991**	**36.0%**
70 - 79 years	185	18.4%	298	17.1%	**483**	**17.5%**
80 - 99 years	75	7.4%	104	6.0%	**179**	**6.5%**
Total	**1,007**	**100.0%**	**1,747**	**100.0%**	**2,754**	**100.0%**

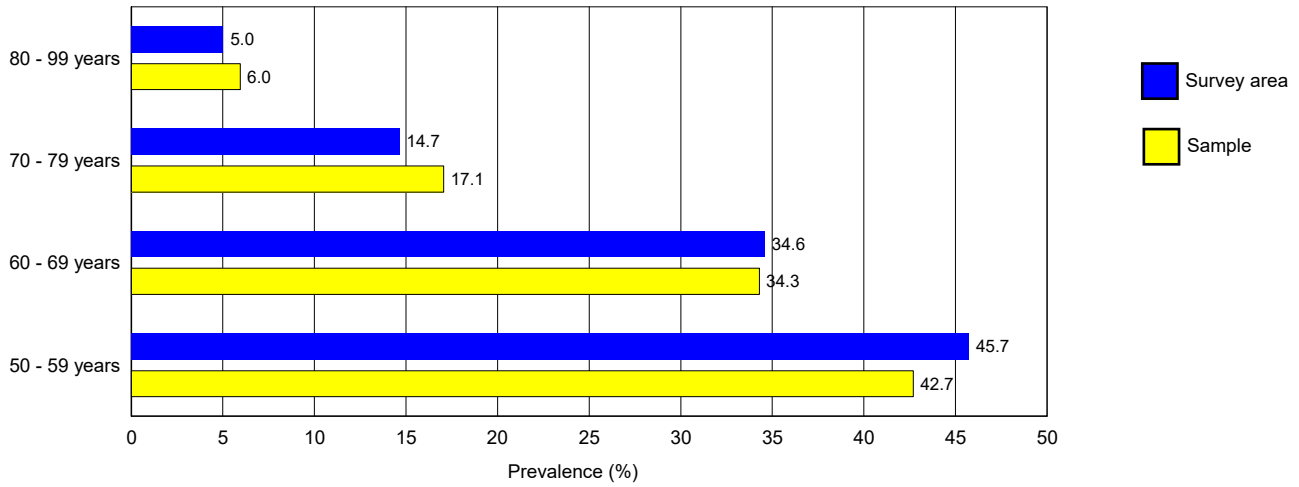
2. Total number of people aged 50+ in survey area

	Males		Females		Total	
	n	%	n	%	n	%
50 - 59 years	89,371	48.4%	88,409	45.7%	**177,780**	**47.0%**
60 - 69 years	60,539	32.8%	66,875	34.6%	**127,414**	**33.7%**
70 - 79 years	27,296	14.8%	28,332	14.7%	**55,628**	**14.7%**
80 - 99 years	7,617	4.1%	9,735	5.0%	**17,352**	**4.6%**
Total	**184,823**	**100.0%**	**193,351**	**100.0%**	**378,174**	**100.0%**

3. Proportion of males in total survey area and in sample



4. Proportion of females in total survey area and in sample



5. Adjusted results for all causes of blindness, severe (SVI), moderate (MVI) and early visual impairment (SVI)

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Blindness - VA < 3/60 in the better eye with best correction or pinhole						
All bilateral cases	1,260	0.7 (0.2 - 1.2)	2,602	1.3 (0.8 - 1.9)	3,862	1.0 (0.6 - 1.4)
All eyes	20,108	5.4 (4.2 - 6.7)	19,623	5.1 (4.2 - 6.0)	39,731	5.3 (4.4 - 6.1)
Blindness - VA < 3/60 in the better eye with available correction (presenting VA)						
All bilateral cases	1,415	0.8 (0.2 - 1.4)	3,031	1.6 (1.0 - 2.2)	4,446	1.2 (0.7 - 1.6)
All eyes	20,672	5.6 (4.3 - 6.9)	21,746	5.6 (4.6 - 6.6)	42,418	5.6 (4.7 - 6.5)
Severe visual impairment (SVI) - VA<6/60 - 3/60 in the better eye with available correction						
All bilateral cases	2,664	1.4 (0.7 - 2.2)	6,767	3.5 (2.5 - 4.5)	9,431	2.5 (1.8 - 3.2)
All eyes	11,874	3.2 (2.2 - 4.3)	20,441	5.3 (4.3 - 6.3)	32,315	4.3 (3.5 - 5.0)
Moderate visual impairment (MVI) - VA<6/18 - 6/60 in the better eye with available correction						
All bilateral cases	19,836	10.7 (8.7 - 12.8)	24,437	12.6 (11.0 - 14.3)	44,273	11.7 (10.4 - 13.0)
All eyes	46,709	12.6 (10.7 - 14.5)	57,360	14.8 (13.2 - 16.5)	104,069	13.8 (12.4 - 15.1)
Early visual impairment (EVI) - VA<6/12 - 6/18 in the better eye with available correction						
All bilateral cases	33,619	18.2 (15.7 - 20.7)	39,035	20.2 (17.8 - 22.6)	72,654	19.2 (17.1 - 21.3)
All eyes	71,084	19.2 (17.2 - 21.2)	84,883	22.0 (19.9 - 24.0)	155,967	20.6 (18.9 - 22.3)

6. Adjusted results for all causes of blindness, VA<3/60, <6/60 and <6/18 with available correction

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Blindness - VA < 3/60 in the better eye with available correction (presenting VA)						
All bilateral cases	1,415	0.8 (0.2 - 1.4)	3,031	1.6 (1.0 - 2.2)	4,446	1.2 (0.7 - 1.6)
All eyes	20,672	5.6 (4.3 - 6.9)	21,746	5.6 (4.6 - 6.6)	42,418	5.6 (4.7 - 6.5)
VA<6/60 in the better eye, with available correction (presenting VA)						
All bilateral cases	4,078	2.2 (1.2 - 3.2)	9,798	5.1 (3.8 - 6.3)	13,876	3.7 (2.8 - 4.6)
All eyes	32,546	8.8 (7.1 - 10.6)	42,188	10.9 (9.2 - 12.6)	74,734	9.9 (8.5 - 11.3)
VA<6/18 in the better eye, with available correction (presenting VA)						
All bilateral cases	23,915	12.9 (10.7 - 15.2)	34,235	17.7 (15.4 - 20.0)	58,150	15.4 (13.7 - 17.1)
All eyes	79,255	21.4 (18.9 - 23.9)	99,548	25.7 (23.1 - 28.4)	178,803	23.6 (21.6 - 25.7)
VA<6/12 in the better eye, with available correction (presenting VA)						
All bilateral cases	57,533	31.1 (28.0 - 34.3)	73,270	37.9 (35.0 - 40.8)	130,803	34.6 (32.1 - 37.0)
All eyes	150,338	40.7 (37.6 - 43.7)	184,430	47.7 (44.8 - 50.6)	334,768	44.3 (41.9 - 46.6)

7. Adjusted results for cataract and blindness, SVI, MVI and EVI (best corrected)

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Cataract and VA<3/60 with best correction or pinhole						
Bilateral cataract	604	0.3 (0.0 - 0.7)	1,149	0.6 (0.2 - 1.0)	1,753	0.5 (0.2 - 0.8)
Unilateral cataract	11,874	6.4 (4.5 - 8.3)	10,577	5.5 (4.4 - 6.6)	22,451	5.9 (4.8 - 7.1)
Cataract eyes	13,082	3.5 (2.4 - 4.7)	12,874	3.3 (2.7 - 4.0)	25,956	3.4 (2.7 - 4.1)
Cataract and SVI - VA<6/60 - 3/60 in better eye with best correction or pinhole						
Bilateral cataract	604	0.3 (0.1 - 0.6)	2,286	1.2 (0.8 - 1.5)	2,890	0.8 (0.5 - 1.0)
Unilateral cataract	2,155	1.2 (0.4 - 2.0)	4,074	2.1 (1.2 - 3.0)	6,229	1.6 (1.0 - 2.3)
Cataract eyes	3,055	0.8 (0.3 - 1.3)	7,457	1.9 (1.3 - 2.6)	10,512	1.4 (0.9 - 1.8)
Cataract and Moderate VI (MVI) - VA<6/18 - 6/60 in better eye with best correction or pinhole						
Bilateral cataract	5,688	3.1 (2.3 - 3.8)	10,023	5.2 (4.2 - 6.2)	15,711	4.2 (3.5 - 4.8)
Unilateral cataract	7,984	4.3 (2.9 - 5.8)	9,203	4.8 (3.6 - 6.0)	17,187	4.5 (3.6 - 5.5)
Cataract eyes	16,594	4.5 (3.5 - 5.5)	26,353	6.8 (5.6 - 8.1)	42,947	5.7 (4.8 - 6.6)
Cataract and Early VI (EVI) - VA<6/12 - 6/18 in better eye with best correction or pinhole						
Bilateral cataract	15,411	4.2 (2.6 - 5.7)	16,518	4.3 (3.2 - 5.3)	31,929	4.2 (3.3 - 5.1)
Unilateral cataract	9,958	2.7 (0.9 - 4.5)	11,696	3.0 (1.6 - 4.4)	21,654	2.9 (1.7 - 4.0)
Cataract eyes	36,379	9.8 (8.0 - 11.6)	38,875	10.1 (8.9 - 11.2)	75,254	10.0 (8.9 - 11.0)

8. Adjusted results for cataract and VA<3/60, <6/60, < 6/18 and <6/12 with best correction

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Cataract and VA<3/60 with best correction or pinhole						
Bilateral cataract	604	0.3 (0.0 - 0.7)	1,149	0.6 (0.2 - 1.0)	1,753	0.5 (0.2 - 0.8)
Unilateral cataract	11,874	6.4 (4.5 - 8.3)	10,577	5.5 (4.4 - 6.6)	22,451	5.9 (4.8 - 7.1)
Cataract eyes	13,082	3.5 (2.4 - 4.7)	12,874	3.3 (2.7 - 4.0)	25,956	3.4 (2.7 - 4.1)
Cataract and VA<6/60 with best correction or pinhole						
Bilateral cataract	1,208	0.7 (0.2 - 1.1)	3,435	1.8 (1.3 - 2.3)	4,643	1.2 (0.9 - 1.6)
Unilateral cataract	14,029	7.6 (5.6 - 9.6)	14,651	7.6 (5.8 - 9.3)	28,680	7.6 (6.0 - 9.2)
Cataract eyes	16,137	4.4 (3.2 - 5.5)	20,329	5.3 (4.2 - 6.3)	36,466	4.8 (3.9 - 5.8)
Cataract and VA<6/18 with best correction or pinhole						
Bilateral cataract	6,896	3.7 (2.7 - 4.7)	13,458	7.0 (5.8 - 8.1)	20,354	5.4 (4.6 - 6.2)
Unilateral cataract	22,014	11.9 (9.1 - 14.8)	23,855	12.3 (10.0 - 14.7)	45,869	12.1 (10.0 - 14.3)
Cataract eyes	32,732	8.9 (7.0 - 10.7)	46,685	12.1 (10.2 - 14.0)	79,417	10.5 (9.0 - 12.0)
Cataract and VA<6/12 with best correction or pinhole						
Bilateral cataract	22,308	12.1 (10.3 - 13.9)	29,976	15.5 (14.0 - 17.0)	52,284	13.8 (12.8 - 14.9)
Unilateral cataract	31,973	17.3 (13.7 - 20.9)	35,551	18.4 (15.4 - 21.4)	67,524	17.9 (15.1 - 20.6)
Cataract eyes	69,111	18.7 (16.3 - 21.1)	85,560	22.1 (19.8 - 24.4)	154,671	20.5 (18.6 - 22.3)

9. Adjusted results for aphakia and pseudophakia

	Males		Females		Total	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
Bilateral (pseudo)aphakia	31,768	17.2 (14.1 - 20.2)	38,991	20.2 (17.7 - 22.7)	70,759	18.7 (16.6 - 20.9)
Unilateral (pseudo)aphakia	20,031	10.8 (8.5 - 13.2)	20,993	10.9 (9.4 - 12.3)	41,024	10.8 (9.7 - 12.0)
Eyes (pseudo)aphakia	83,566	22.6 (19.8 - 25.4)	98,977	25.6 (23.1 - 28.1)	182,543	24.1 (22.1 - 26.2)

10. Adjusted results for cataract surgical coverage

	Males	Females	Total
Cataract Surgical Coverage (eyes) - percentage			
VA < 3/60	86.5	88.5	87.6
VA < 6/60	83.8	83.0	83.3
VA < 6/18	71.9	68.0	69.7
Cataract Surgical Coverage (persons) - percentage			
VA < 3/60	98.5	97.6	98.0
VA < 6/60	97.2	93.4	95.1
VA < 6/18	86.6	79.5	82.6

RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

FINDINGS ON DIABETES AND DIABETIC RETINOPATHY

Date and time of report: 29-Sep-16 1:49:37PM

This report is for the survey area: Virudhunagar

Year and month when survey was conducted: 2016- 8 until 2016- 9

The diagnosis of diabetes is based on either a history of known diabetes, or, in case the person is not known with diabetes, on a random blood sugar of 200 mg/dl or higher.

1. Prevalence of known and newly diagnosed diabetes by age group and by gender

	Males		Females		Total	
	n	p (95% CI)	n	p (95% CI)	n	p (95% CI)
50 - 59	82	23.1% (18.3-27.9)	164	22.0% (18.5-25.5)	246	22.3% (19.4-25.3)
60 - 69	105	26.8% (22.2-31.4)	110	18.4% (14.5-22.2)	215	21.7% (18.5-24.9)
70 - 79	49	26.5% (18.4-34.5)	48	16.1% (11.5-20.7)	97	20.1% (15.4-24.7)
80+	10	13.3% (6.7-20.0)	12	11.5% (5.9-17.2)	22	12.3% (7.6-17.0)
All ages	246	24.4% (21.2-27.7)	334	19.1% (16.4-21.8)	580	21.1% (18.6-23.5)

2. Diabetics and random blood sugar level

		Males		Females		Total	
		n	%	n	%	n	%
All diabetics	Known diabetes	163	66.3%	216	64.7%	**379**	**65.3%**
	Newly diagnosed diabetes	83	33.7%	118	35.3%	**201**	**34.7%**
	Total	**246**	**100.0%**	**334**	**100.0%**	**580**	**100.0%**
Known diabetes	Bloodsugar <200 mg/dl	47	28.8%	77	35.6%	**124**	**32.7%**
	Bloodsugar >200 mg/dl	116	71.2%	139	64.4%	**255**	**67.3%**
	Total	**163**	**100.0%**	**216**	**100.0%**	**379**	**100.0%**

3. Treatment in people with known diabetes

	Males		Females		Total	
	n	%	n	%	n	%
No treatment	9	5.5%	4	1.9%	**13**	**3.4%**
Diet only	2	1.2%	1	0.5%	**3**	**0.8%**
Tablets	141	86.5%	205	94.9%	**346**	**91.3%**
Insulin	8	4.9%	5	2.3%	**13**	**3.4%**
Tablets + Insulin	3	1.8%	1	0.5%	**4**	**1.1%**
Other	0	0.0%	0	0.0%	**0**	**0.0%**
Total	**163**	**100.0%**	**216**	**100.0%**	**379**	**100.0%**

4. Last eye examination for DR among known diabetics

	Males		Females		Total	
	n	%	n	%	n	%
Never had eye examination for DR	147	90.2%	196	90.7%	**343**	**90.5%**
0-12 months ago	14	8.6%	10	4.6%	**24**	**6.3%**
13-24 months ago	2	1.2%	6	2.8%	**8**	**2.1%**
>24 months ago	0	0.0%	4	1.9%	**4**	**1.1%**
Total	**163**	**100.0%**	**216**	**100.0%**	**379**	**100.0%**

5. Prevalence of DR in diabetics and in entire sample

	N	Among diabetics p (95% CI)	Full sample p (95% CI)
Retinopathy grade			
No retinopathy (R0)	358	61.7% (56.8-66.6)	13.0% (11.0-15.0)
Background DR - mild (R1)	64	11.0% (7.8-14.3)	2.3% (1.6-3.0)
Background DR - observable (R2)	14	2.4% (0.8-4.0)	0.5% (0.2-0.8)
Background DR - referable (R3)	8	1.4% (0.5-2.2)	0.3% (0.1-0.5)
Proliferative DR (R4)	1	0.2% (0.0-0.5)	0.0% (0.0-0.1)
Ungradable DR (R6)	14	2.4% (1.2-3.6)	0.5% (0.3-0.8)
Any retinopathy	101	17.4% (13.8-21.1)	3.7% (2.9-4.4)
Maculopathy grade			
No maculopathy (M0)	390	67.2% (62.4-72.1)	14.2% (12.2-16.2)
Maculopathy - observable (M1)	8	1.4% (0.4-2.4)	0.3% (0.1-0.5)
Maculopathy - referable (M2)	7	1.2% (0.3-2.2)	0.3% (0.1-0.5)
Any maculopathy	69	11.9% (8.8-15.0)	2.5% (1.9-3.1)
Any retinopathy and/or maculopathy	131	22.6% (18.5-26.7)	4.8% (3.9-5.6)
Sight threatening DR (R4 and/or M2)	10	1.7% (0.7-2.8)	0.4% (0.1-0.6)
Any laser scars	56	9.7% (6.9-12.4)	2.0% (1.5-2.6)

6. Prevalence of any retinopathy and/or maculopathy by age and gender

	Males		Females		Total	
	n	p (95% CI)	n	p (95% CI)	n	p (95% CI)
50 - 59	9	11.0% (3.4-18.5)	16	9.8% (4.9-14.6)	25	10.2% (6.3-14.0)
60 - 69	21	20.0% (12.3-27.7)	23	20.9% (12.6-29.3)	44	20.5% (13.8-27.2)
70 - 79	6	12.2% (3.6-20.9)	9	18.8% (8.9-28.6)	15	15.5% (8.3-22.6)
80+	1	10.0% (0.0-28.8)	2	16.7% (0.0-38.3)	3	13.6% (0.0-28.6)
All ages	37	15.0% (10.1-19.9)	50	15.0% (10.5-19.4)	87	15.0% (11.2-18.8)

7. Prevalence of MVI, SVI and blindness among people with and without diabetes

	Persons with diabetes		Persons without diabetes	
	n	p (95% CI)	n	p (95% CI)
Normal vision	393	67.8% (64.0-71.5)	1,328	61.1% (58.6-63.6)
Early VI	97	16.7% (13.9-19.5)	459	21.1% (18.8-23.5)
Moderate VI	69	11.9% (9.2-14.6)	286	13.2% (11.6-14.7)
Severe VI	17	2.9% (1.5-4.4)	66	3.0% (2.2-3.8)
Blindness	3	0.5% (0.0-1.1)	25	1.2% (0.6-1.7)

8. Causes of visual impairment among people with and without diabetes

	Blindness				Severe VI				Moderate VI				Early VI			
	DM		Non-DM		DM		Non-DM		DM		Non-DM		DM		Non-DM	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Refr. error	0	0%	0	0%	1	5%	1	1%	6	8%	15	5%	82	84%	360	78%
Cataract	2	50%	23	65%	14	82%	55	83%	53	76%	253	88%	13	13%	71	15%
DR	0	0%	0	0%	0	0%	0	0%	2	2%	0	0%	0	0%	0	0%
Other PSD	0	0%	7	20%	0	0%	2	3%	3	4%	3	1%	0	0%	4	0%
Other	2	50%	5	14%	2	11%	8	12%	5	7%	15	5%	2	2%	24	5%
Total	**4**	**100%**	**35**	**100%**	**17**	**100%**	**66**	**100%**	**69**	**100%**	**286**	**100%**	**97**	**100%**	**459**	**100%**