

RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

SAMPLING ERROR (CLUSTER SAMPLING) & DESIGN EFFECT

Date and time of report: 05-10-2017 08:59:30

This report is for the survey area: Dattawadi

Year and month when survey was conducted: 2017- 6 until 2017- 8

The accuracy of the estimate of the prevalence of a condition in the RAAB survey is calculated for cluster sampling (SEcrs) specifically using the formula's provided by:

Bennett S, Woods T, Liyanage WM, Smith DL. A simplified general method for cluster-sample surveys of health in developing countries World Health Stat Q. 1991;44(3):98-106. The design effect (DEFF) is calculated by $SEcrs^2 / SErs^2$.

The table below shows the number of cases and the prevalence (sample prev.) of various conditions in the sample population, and the corresponding 95% confidence interval (CI 95%).

When the age and sex composition of the sample differs from that in the entire survey area, the actual prevalence may differ from that calculated in the sample. Run the report 'Age & sex adjusted results' to calculate the prevalence for and estimated number of people with the condition in the entire survey area. The prevalence interval at 95% confidence and the corresponding sampling error are shown. Use the Var. 90% and the Var. 80% to calculate the prevalence intervals at 90% and 80% confidence. Var. 95% = 1.96 * SEcrs; Var. 90% = 1.65 * SEcrs; Var. 80% = 1.28 * SEcrs.

Bilateral blind, best corrected		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	21	1,46	0.87 - 2.05	0.59	0.49	0.38	0.90	0.30
Females	19	1,07	0.59 - 1.55	0.48	0.40	0.31	1.01	0.24
Total	40	1,24	0.87 - 1.61	0.37	0.31	0.24	0.93	0.19
Blind eyes, best corrected		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	146	5,07	4.20 - 5.94	0.87	0.73	0.57	0.59	0.44
Females	168	4,69	3.90 - 5.47	0.79	0.66	0.51	0.64	0.40
Total	314	4,86	4.29 - 5.43	0.57	0.48	0.37	0.59	0.29
Bilateral SVI, best corrected		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	11	0,76	0.34 - 1.19	0.43	0.36	0.28	0.90	0.22
Females	20	1,12	0.63 - 1.62	0.50	0.42	0.33	1.03	0.25
Total	31	0,96	0.63 - 1.30	0.34	0.28	0.22	0.99	0.17
SVI eyes, best corrected		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	34	1,18	0.78 - 1.58	0.40	0.34	0.26	0.51	0.20
Females	58	1,63	1.15 - 2.11	0.48	0.40	0.32	0.67	0.25
Total	92	1,43	1.10 - 1.75	0.32	0.27	0.21	0.63	0.17
Bilateral MVI, best corrected		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	110	7,64	6.21 - 9.06	1.42	1.20	0.93	1.08	0.73
Females	165	9,26	7.44 - 11.08	1.82	1.53	1.19	1.83	0.93
Total	275	8,54	7.17 - 9.90	1.37	1.15	0.89	2.00	0.70
MVI eyes, best corrected		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	328	11,35	9.81 - 12.90	1.55	1.30	1.01	0.89	0.79
Females	480	13,48	11.76 - 15.19	1.72	1.44	1.12	1.17	0.88
Total	808	12,53	11.18 - 13.87	1.34	1.13	0.88	1.38	0.69
Bilateral blind, available correction		Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	24	1,67	1.03 - 2.30	0.63	0.53	0.41	0.92	0.32
Females	22	1,24	0.70 - 1.77	0.54	0.45	0.35	1.09	0.27
Total	46	1,43	1.00 - 1.85	0.42	0.36	0.28	1.07	0.22

Blind eyes, available correction			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	158	5,49	4.60 - 6.37	0.88	0.74	0.58	0.56	0.45
Females	186	5,22	4.37 - 6.07	0.85	0.71	0.55	0.67	0.43
Total	344	5,34	4.73 - 5.95	0.61	0.51	0.40	0.62	0.31
Bilateral SVI, available correction			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	20	1,39	0.84 - 1.94	0.55	0.46	0.36	0.82	0.28
Females	23	1,29	0.76 - 1.82	0.53	0.44	0.35	1.02	0.27
Total	43	1,33	0.95 - 1.72	0.39	0.33	0.25	0.97	0.20
SVI eyes, available correction			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	82	2,85	2.18 - 3.51	0.67	0.56	0.43	0.60	0.34
Females	94	2,64	2.07 - 3.20	0.56	0.47	0.37	0.58	0.29
Total	176	2,73	2.25 - 3.21	0.48	0.40	0.31	0.73	0.25
Bilateral MVI, available correction			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	166	11,53	9.70 - 13.35	1.82	1.53	1.19	1.22	0.93
Females	274	15,38	13.02 - 17.75	2.36	1.98	1.55	1.99	1.21
Total	440	13,66	11.92 - 15.40	1.74	1.46	1.14	2.15	0.89
MVI eyes, available correction			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	462	16,04	14.08 - 18.00	1.96	1.64	1.28	1.07	1.00
Females	724	20,30	18.09 - 22.50	2.21	1.85	1.44	1.40	1.13
Total	1,186	18,39	16.63 - 20.16	1.76	1.48	1.15	1.74	0.90
Bilateral cataract blind			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	9	0,63	0.25 - 1.00	0.37	0.31	0.24	0.83	0.19
Females	8	0,45	0.17 - 0.73	0.28	0.24	0.18	0.83	0.14
Total	17	0,53	0.29 - 0.77	0.24	0.20	0.16	0.93	0.12
Unilateral cataract blind			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	64	4,44	3.50 - 5.39	0.94	0.79	0.62	0.78	0.48
Females	80	4,49	3.22 - 5.76	1.27	1.06	0.83	1.74	0.65
Total	144	4,47	3.61 - 5.33	0.86	0.72	0.56	1.46	0.44
Eyes cataract blind			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	82	2,85	2.23 - 3.46	0.61	0.51	0.40	0.51	0.31
Females	96	2,70	2.00 - 3.39	0.69	0.58	0.45	0.84	0.35
Total	178	2,76	2.27 - 3.26	0.49	0.41	0.32	0.76	0.25
Bilateral cataract SVI			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	9	0,63	0.26 - 0.99	0.36	0.31	0.24	0.80	0.19
Females	14	0,79	0.38 - 1.19	0.40	0.34	0.26	0.96	0.20
Total	23	0,71	0.45 - 0.98	0.26	0.22	0.17	0.81	0.13
Unilateral cataract SVI			Cluster sampling					
	Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs
Males	17	1,18	0.63 - 1.73	0.55	0.46	0.36	0.97	0.28
Females	29	1,63	1.13 - 2.13	0.50	0.42	0.33	0.73	0.26
Total	46	1,43	1.02 - 1.83	0.40	0.34	0.26	0.97	0.21

Eyes cataract SVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	26	0,87	0.54	-	1.20	0.33	0.28	0.22	0.47	0.17
Females	40	1,09	0.73	-	1.46	0.36	0.30	0.24	0.56	0.18
Total	64	0,99	0.73	-	1.26	0.26	0.22	0.17	0.59	0.13
Bilateral cataract MVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	78	5,42	4.18	-	6.65	1.23	1.03	0.81	1.11	0.63
Females	95	5,33	3.91	-	6.76	1.42	1.19	0.93	1.86	0.73
Total	173	5,37	4.35	-	6.39	1.02	0.85	0.66	1.70	0.52
Unilateral cataract MVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	146	10,14	8.60	-	11.68	1.54	1.30	1.01	0.98	0.79
Females	183	10,28	8.93	-	11.62	1.34	1.13	0.88	0.91	0.69
Total	329	10,21	9.17	-	11.25	1.04	0.87	0.68	0.99	0.53
Eyes cataract MVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	258	8,96	7.62	-	10.30	1.34	1.12	0.88	0.82	0.68
Females	326	9,12	7.75	-	10.50	1.37	1.15	0.90	1.05	0.70
Total	584	9,05	8.00	-	10.10	1.05	0.88	0.69	1.13	0.54
Bilateral (pseudo)aphakia			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	167	11,60	9.39	-	13.80	2.20	1.85	1.44	1.77	1.12
Females	274	15,38	13.44	-	17.33	1.94	1.63	1.27	1.35	0.99
Total	441	13,69	12.09	-	15.30	1.61	1.35	1.05	1.83	0.82
Unilateral (pseudo)aphakia			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	131	9,10	7.63	-	10.56	1.47	1.23	0.96	0.97	0.75
Females	177	9,94	8.45	-	11.43	1.49	1.25	0.97	1.15	0.76
Total	308	9,56	8.61	-	10.51	0.95	0.80	0.62	0.87	0.48
Eyes (pseudo)aphakia			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs	
Males	466	16,15	13.68	-	18.61	2.46	2.07	1.61	1.68	1.26
Females	726	20,35	18.30	-	22.40	2.05	1.72	1.34	1.20	1.05
Total	1,190	18,47	16.71	-	20.23	1.76	1.48	1.15	1.73	0.90