

RESULTS OF RAPID ASSESSMENT OF AVOIDABLE BLINDNESS

SAMPLING ERROR (CLUSTER SAMPLING) & DESIGN EFFECT

Date and time of report: 14/01/2016 15:01:04

This report is for the survey area: Peshawar District

Year and month when survey was conducted: 2013- 8 until 2013- 9

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 $SEcrs^2 / SEsr^2$.

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	27	1.72	1.10 - 2.33	0.62	0.52	0.40	0.92	0.31	
Females	17	1.12	0.61 - 1.64	0.52	0.43	0.34	0.95	0.26	
Total	44	1.43	1.00 - 1.85	0.43	0.36	0.28	1.04	0.22	

Blind eyes, best corrected

			Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs		
Males	176	5.57	4.54 - 6.59	1.03	0.86	0.67	0.82	0.52	
Females	130	4.27	3.35 - 5.19	0.92	0.77	0.60	0.82	0.47	
Total	304	4.93	4.15 - 5.71	0.78	0.66	0.51	1.05	0.40	

Bilateral SVI, best corrected

			Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs		
Males	8	0.51	0.17 - 0.85	0.34	0.28	0.22	0.92	0.17	
Females	11	0.73	0.33 - 1.12	0.40	0.33	0.26	0.86	0.20	
Total	19	0.62	0.34 - 0.89	0.28	0.23	0.18	1.02	0.14	

SVI eyes, best corrected

			Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs		
Males	26	0.83	0.53 - 1.12	0.29	0.25	0.19	0.43	0.15	
Females	42	1.39	0.90 - 1.88	0.49	0.41	0.32	0.68	0.25	
Total	68	1.10	0.80 - 1.40	0.30	0.25	0.20	0.67	0.15	

Bilateral MVI, best corrected

			Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs		
Males	31	1.97	1.24 - 2.70	0.73	0.61	0.48	1.13	0.37	
Females	45	2.98	2.05 - 3.90	0.92	0.78	0.60	1.16	0.47	
Total	76	2.46	1.87 - 3.06	0.60	0.50	0.39	1.19	0.30	

MVI eyes, best corrected

			Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs		
Males	92	2.93	2.19 - 3.67	0.74	0.62	0.48	0.79	0.38	
Females	128	4.20	3.22 - 5.18	0.98	0.82	0.64	0.94	0.50	
Total	220	3.55	2.91 - 4.19	0.64	0.53	0.42	0.95	0.33	

Bilateral blind, available correction

			Cluster sampling						
Cases in sample	Sample prev.	CI 95%	Var. 95%	Var. 90%	Var. 80%	DEFF	SEcrs		
Males	29	1.84	1.17 - 2.52	0.67	0.57	0.44	1.03	0.34	
Females	19	1.26	0.66 - 1.85	0.59	0.50	0.39	1.12	0.30	
Total	48	1.56	1.08 - 2.03	0.47	0.40	0.31	1.17	0.24	

Blind eyes, available correction			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	188	5.98	4.91	-	7.05	1.07	0.90	0.70	0.83	0.54
Females	146	4.83	3.83	-	5.82	1.00	0.84	0.65	0.85	0.51
Total	334	5.42	4.59	-	6.24	0.83	0.70	0.54	1.08	0.42
Bilateral SVI, available correction			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	17	1.08	0.62	-	1.55	0.46	0.39	0.30	0.83	0.24
Females	13	0.86	0.43	-	1.29	0.43	0.36	0.28	0.85	0.22
Total	30	0.97	0.66	-	1.29	0.31	0.26	0.21	0.82	0.16
SVI eyes, available correction			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	52	1.65	1.18	-	2.12	0.47	0.39	0.31	0.55	0.24
Females	54	1.75	1.22	-	2.28	0.53	0.45	0.35	0.65	0.27
Total	106	1.70	1.34	-	2.06	0.36	0.30	0.24	0.63	0.18
Bilateral MVI, available correction			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	89	5.66	4.41	-	6.91	1.25	1.05	0.82	1.19	0.64
Females	138	9.13	7.38	-	10.88	1.75	1.47	1.14	1.45	0.89
Total	227	7.36	6.25	-	8.47	1.11	0.93	0.73	1.46	0.57
MVI eyes, available correction			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	252	7.98	6.66	-	9.31	1.32	1.11	0.86	0.97	0.67
Females	330	10.88	9.22	-	12.54	1.66	1.39	1.08	1.12	0.85
Total	580	9.40	8.24	-	10.57	1.17	0.98	0.76	1.29	0.60
Bilateral cataract blind			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	8	0.51	0.17	-	0.85	0.34	0.28	0.22	0.91	0.17
Females	7	0.46	0.13	-	0.79	0.33	0.28	0.22	0.93	0.17
Total	15	0.49	0.24	-	0.73	0.24	0.20	0.16	0.98	0.12
Unilateral cataract blind			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	56	3.56	2.67	-	4.45	0.89	0.75	0.58	0.95	0.46
Females	57	3.77	2.71	-	4.83	1.06	0.89	0.69	1.22	0.54
Total	113	3.66	2.94	-	4.39	0.73	0.61	0.47	1.20	0.37
Eyes cataract blind			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	72	2.29	1.71	-	2.87	0.58	0.49	0.38	0.62	0.30
Females	72	2.35	1.69	-	3.01	0.66	0.55	0.43	0.75	0.34
Total	144	2.32	1.84	-	2.79	0.47	0.40	0.31	0.80	0.24
Bilateral cataract SVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	5	0.32	0.05	-	0.59	0.27	0.23	0.18	0.96	0.14
Females	5	0.33	0.05	-	0.61	0.28	0.24	0.18	0.94	0.14
Total	10	0.32	0.11	-	0.54	0.21	0.18	0.14	1.11	0.11
Unilateral cataract SVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	14	0.89	0.46	-	1.32	0.43	0.36	0.28	0.86	0.22
Females	14	0.93	0.41	-	1.44	0.52	0.43	0.34	1.14	0.26
Total	28	0.91	0.55	-	1.27	0.36	0.30	0.23	1.14	0.18

Eyes cataract SVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	18	0.57	0.31	-	0.84	0.27	0.22	0.17	0.51	0.14
Females	20	0.66	0.29	-	1.04	0.37	0.31	0.24	0.84	0.19
Total	38	0.62	0.37	-	0.86	0.25	0.21	0.16	0.81	0.13

Bilateral cataract MVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	21	1.34	0.76	-	1.91	0.57	0.48	0.37	1.02	0.29
Females	29	1.92	1.21	-	2.63	0.71	0.59	0.46	1.05	0.36
Total	50	1.62	1.17	-	2.08	0.45	0.38	0.30	1.04	0.23

Unilateral cataract MVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	38	2.42	1.66	-	3.17	0.76	0.63	0.49	0.99	0.39
Females	52	3.44	2.46	-	4.42	0.98	0.82	0.64	1.14	0.50
Total	90	2.92	2.25	-	3.58	0.66	0.56	0.43	1.25	0.34

Eyes cataract MVI			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	58	1.84	1.28	-	2.41	0.56	0.47	0.37	0.71	0.29
Females	92	3.04	2.24	-	3.84	0.80	0.67	0.52	0.85	0.41
Total	150	2.43	1.93	-	2.94	0.51	0.42	0.33	0.87	0.26

Bilateral (pseudo)aphakia			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	79	5.03	4.10	-	5.95	0.92	0.78	0.60	0.73	0.47
Females	63	4.17	3.15	-	5.18	1.01	0.85	0.66	1.01	0.52
Total	142	4.60	3.91	-	5.30	0.69	0.58	0.45	0.87	0.35

Unilateral (pseudo)aphakia			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	83	5.28	4.11	-	6.45	1.17	0.98	0.77	1.13	0.60
Females	89	5.89	4.56	-	7.21	1.33	1.11	0.87	1.25	0.68
Total	172	5.58	4.72	-	6.43	0.85	0.72	0.56	1.11	0.44

Eyes (pseudo)aphakia			Cluster sampling							
	Cases in sample	Sample prev.	CI 95%		Var. 95%	Var. 90%	Var. 80%	DEFF	SEcfs	
Males	242	7.67	6.58	-	8.75	1.09	0.91	0.71	0.68	0.55
Females	216	7.11	5.74	-	8.48	1.37	1.15	0.89	1.11	0.70
Total	456	7.39	6.49	-	8.30	0.90	0.76	0.59	0.96	0.46