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**The depth of visual acuity failure and level of correction
in refractive errors among children**

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Visual acuity (VA) can be measured using Snellen's chart or Log mar chart in school children. This needs comprehension, concentration educational development, and verbal skills. Vision of pre-school children can be tested using symbols that are based on the principles of Snellens chart. Depth of VA failure may be different from person to person and depending on the type of error. The objective of this study was to assess the degree of VA failure and amount of correction among children with refractive errors. All school children (aged 3-14 years) of Bope-Poddala Health Unit area of Galle were screened for VA defects and subjected to refraction test to confirm the errors in positive cases. Their uncorrected VA levels were compared according to Snellen's test levels. Out of 128 unilateral and 223 bilateral refractive errors (total 574 eyes), VA levels were as shown in Table 1. Table 2 shows corrected VA after refraction, according to WHO VA categories.

Table 1. Visual Acuity (VA) levels in refractive errors

VA Levels	Unilateral refractive errors				Bilateral refractive Errors			
	Right	Left	Total	%	Right	Left	Total	%
<3/60	3	3	6	4.7	1	3	4	0.9
4/60	1	0	1	0.8	2	2	4	0.9
5/60	3	5	8	6.2	5	8	13	2.9
6/60	0	5	5	3.9	31	24	55	12.3
6/36	3	4	7	5.5	18	23	41	9.2
6/24	11	5	16	12.5	41	40	81	18.2
6/18	8	20	28	21.9	32	33	65	14.6
6/12	6	26	32	25.0	48	52	100	22.4
6/9	4	21	25	19.5	45	38	83	18.6
Total	39	89	128	100	223	223	446	100



Table 2.

Visual acuity	WHO category	Better eye				Worse eye			
		Before refraction		After refraction		Before refraction		After refraction	
		No	%	No	%	No	%	No	%
6/6	0	128	36.5	273	77.8	-	-	206	58.6
6/9	0	57	16.2	41	11.7	50	14.2	29	8.3
6/12	0	55	15.7	16	4.5	79	22.5	38	10.8
6/18	0	31	8.8	14	4.0	63	17.9	35	10.0
6/24 6/60	1	73	20.8	7	2.0	130	37.0	37	10.5
3/60	2	7	2.0	-	-	25	7.1	3	0.9
<3/60 NP	3	-	-	-	-	4	1.1	3	0.9
Total		351	100	351	100	351	100	351	100

Refraction makes the VA normal in a majority but about 2.0% of better eyes and 12.3% of worst eyes remain in severe visual impairment categories which need close observation and follow up.

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