

Supplementary table: Studies and data sets comprising the convenience sample.

Study and location	Year of publication	Age (Sub-group)	Sample size	Refractive threshold (D)	Prevalence (%)
Baltimore (USA) ¹	1997	40-49 (Black)	613	-0.5 -3 -6	30.7 3.3 1.0
		50-59 (Black)	666	-0.5 -3 -6	20.9 3.9 0.9
		40-49 (White)	531	-0.5 -3 -6	40.9 11.1 2.5
		50-59 (White)	598	-0.5 -3 -6	24.9 4.9 1.7
				-0.5 -4	14.4 3.0
				-0.5 -2.5 -5 -7.5 -10 -12.5	16.8 6.4 2.1 0.8 0.3 0.1
				-0.5 -5 -0.5 -5 -0.5 -5	45.2 11.3 25.2 4.3 51.7 15.9
				-0.5 -5 -6	27.1 4.8
				-1 -6	22.4 1.7
				-1 -6	13.6 2.3
Tanjong Pagar (Singapore) ⁴	2000	40-49 (Male)	124	-0.5 -5	45.2 11.3
		50-59 (Male)	115	-0.5 -5	25.2 4.3
		40-49 (Female)	151	-0.5 -5	51.7 15.9
		50-59 (Female)	188	-0.5 -5	27.1 4.8
				-1 -6	22.4 1.7
Sumatra ⁵	2002	≥ 21	358	-1 -6	22.4 1.7
Shihpai (Taiwan) ⁶	2003	≥ 65	1361	-1 -6	13.6 2.3
				-0.5 -1 -5 -6 -8	22.9 16.9 3.3 2.6 1.5
Beijing ⁷	2005	≥ 40	4319	-0.5 -1 -5 -6 -8	16.8 2.4
				-1 -6	16.8 2.4
				-0.5 -5 -0.5 -5 -0.5 -5	70.3 17.7 49.6 8.7 67.8 15.0
				-0.5 -5 -0.5 -5	42.4 7.1
				-0.5 -0.75 -1 -5	26.2 21.8 20.0 3.9
Los Angeles Latino ⁸	2006	≥ 40	5927	-1 -6	16.8 2.4
				-0.5 -5 -0.5 -5 -0.5 -5	70.3 17.7 49.6 8.7 67.8 15.0
Sawada ⁹	2008	40-49 Male		-0.5	42.4
		50-59 Male		-0.5	7.1
		40-49 Female		-0.5	26.2
		50-59 Female		-0.5	21.8
				-1	20.0
Singapore-Malay ¹⁰	2008	≥ 40	2974	-0.5 -0.75 -1 -5	3.9
				-0.5 -6	25.4 1.9
				-0.5 -5	32.3 5.0
				-0.5 -5	32.3 5.0
Segovia (Spain) ¹¹	2009	≥ 40	417	-0.5 -6	25.4 1.9
Liwan (China) ¹²	2009	≥ 50	1269	-0.5 -5	32.3 5.0

Central India ¹³	2010	≥ 30	4619	-0.5 -1 -6 -8	17.0 13.0 0.9 0.4
Multi-ethnic (USA) ¹⁴	2013	≥ 45 (White)	1667	-0.5 -5 -0.5 -5 -0.5 -5 -0.5 -5	31.0 5.4 37.2 11.8 21.5 3.1 14.2 1.8
		≥ 45 (Chinese)	487		
		≥ 45 (Black)	1230		
		≥ 45 (Hispanic)	1046		
SEED (Singapore) ¹⁵	2013	40-49	2437	-0.5 -1 -5 -0.5 -1 -5	47.4 37.7 11.5 35.9 28.8 6.7
Namil (South Korea) ¹⁶	2013	40-49 (Male)	96	-0.5 -6 -0.5 -6 -0.5 -6 -0.5 -6	29.2 1.0 42.2 2.9 17.9 0.7 23.8 2.8
Suzhou (China) ¹⁷	2017	≥ 60	4795	-0.5 -5	21.1 2.5
Chinese American (USA) ¹⁸	2017	≥ 50	4414	-0.5 -5	35.1 7.4
Kumejima (Japan) ¹⁹	2018	≥ 40	2383	-0.5 -6	29.5 1.9
Hisayama (Japan) ²⁰	2019	≥ 40 (2005)	1892	-0.5 -5 -8 -0.5 -5 -8 -0.5 -5 -8	37.7 5.8 1.5 40.6 8.0 2.5 45.8 9.5 3.0
		≥ 40 (2012)	2874		
		≥ 40 (2017)	2936		
Inner Mongolia (China) ²¹	2019	≥ 40	2090	-0.5 -6	29.4 3.6
Yunnan (China) ²²	2019	≥ 40 (Han)	302	-0.5 -6	27.8 3.0
		≥ 40 (Yi ethnicity)	77	-0.5 -6	14.2 1.1

References

1. Katz J, Tielsch JM, Sommer A. Prevalence and risk factors for refractive errors in an adult inner city population. *Invest Ophthalmol Vis Sci.* 1997;38:334-340.
2. Attebo K, Ivers RQ, Mitchell P. Refractive errors in an older population - The blue mountains eye study. *Ophthalmol.* 1999;106:1066-1072.
3. Wensor M, McCarty CA, Taylor HR. Prevalence and risk factors of myopia in Victoria, Australia. *Arch Ophthalmol.* 1999;117:658-663.
4. Wong TY, Foster PJ, Hee J, et al. Prevalence and risk factors for refractive errors in adult Chinese in Singapore. *Invest Ophthalmol Vis Sci.* 2000;41:2486-2494.
5. Saw SM, Gazzard G, Koh D, et al. Prevalence rates of refractive errors in Sumatra, Indonesia. *Invest Ophthalmol Vis Sci.* 2002;43:3174-80.
6. Cheng CY, Hsu WM, Liu JH, Tsai SY, Chou P. Refractive errors in an elderly Chinese population in Taiwan: the Shihpai Eye Study. *Invest Ophthalmol Vis Sci.* 2003;44:4630-8.
7. Xu L, Li J, Cui T, et al. Refractive error in urban and rural adult Chinese in Beijing. *Ophthalmology.* 2005;112:1676-83.
8. Tarczy-Hornoch K, Ying-Lai M, Varma R, Los Angeles Latino Eye Study G. Myopic refractive error in adult Latinos: the Los Angeles Latino Eye Study. *Invest Ophthalmol Vis Sci.* 2006;47:1845-52.
9. Sawada A, Tomidokoro A, Araie M, Iwase A, Yamamoto T, Tajimi Study G. Refractive errors in an elderly Japanese population - The Tajimi study. *Ophthalmol.* 2008;115:363-370.
10. Saw SM, Chan YH, Wong WL, et al. Prevalence and risk factors for refractive errors in the Singapore Malay Eye Survey. *Ophthalmology.* 2008;115:1713-9.
11. Anton A, Andrade MT, Mayo A, Portela J, Merayo J. Epidemiology of refractive errors in an adult European population: the Segovia study. *Ophthalmic Epidemiol.* 2009;16:231-7.
12. He M, Huang W, Li Y, Zheng Y, Yin Q, Foster PJ. Refractive error and biometry in older Chinese adults: the Liwan eye study. *Invest Ophthalmol Vis Sci.* 2009;50:5130-6.
13. Nangia V, Jonas JB, Sinha A, Matin A, Kulkarni M. Refractive error in central India: the Central India Eye and Medical Study. *Ophthalmology.* 2010;117:693-9.
14. Pan CW, Klein BE, Cotch MF, et al. Racial variations in the prevalence of refractive errors in the United States: the multi-ethnic study of atherosclerosis. *Am J Ophthalmol.* 2013;155:1129-1138 e1.
15. Pan CW, Zheng YF, Anuar AR, et al. Prevalence of refractive errors in a multiethnic Asian population: the Singapore epidemiology of eye disease study. *Invest Ophthalmol Vis Sci.* 2013;54:2590-8.
16. Yoo YC, Kim JM, Park KH, Kim CY, Kim TW, Namil Study Group KGS. Refractive errors in a rural Korean adult population: the Namil Study. *Eye (Lond).* 2013;27:1368-75.
17. Xu C, Pan C, Zhao C, et al. Prevalence and risk factors for myopia in older adult east Chinese population. *BMC Ophthalmol.* 2017;17:191.
18. Varma R, Torres M, McKean-Cowdin R, et al. Prevalence and Risk Factors for Refractive Error in Adult Chinese Americans: The Chinese American Eye Study. *Am J Ophthalmol.* 2017;175:201-212.
19. Nakamura Y, Nakamura Y, Higa A, et al. Refractive errors in an elderly rural Japanese population: The Kumejima study. *PLoS One.* 2018;13:e0207180.
20. Ueda E, Yasuda M, Fujiwara K, et al. Trends in the Prevalence of Myopia and Myopic Maculopathy in a Japanese Population: The Hisayama Study. *Invest Ophthalmol Vis Sci.* 2019;60:2781-2786.
21. Wang M, Ma J, Pan L, et al. Prevalence of and risk factors for refractive error: a cross-sectional study in Han and Mongolian adults aged 40–80 years in Inner Mongolia, China. *Eye.* 2019;
22. Wang M, Cui J, Shan G, et al. Prevalence and risk factors of refractive error: a cross-sectional Study in Han and Yi adults in Yunnan, China. *BMC Ophthalmol.* 2019;19:33.