

# THE IMPACT OF DRY EYE ON PATIENT QUALITY OF LIFE

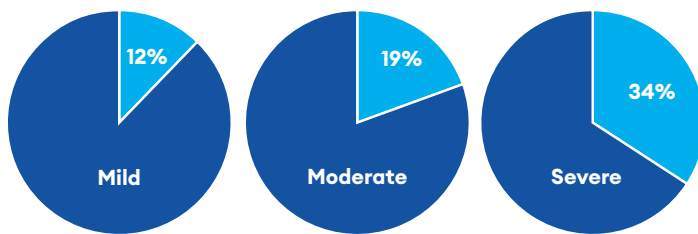
Dry eye is a chronic, often painful condition that reduces quality of life

Dry eye is uncomfortable, painful, and impacts visual function:

- Pain associated with DED can have psychological and physical impacts, and the chronic nature of the disease can affect social life<sup>1-4</sup>
- Corneal irregularities from epithelial degradation, and an unstable tear film can introduce higher order aberrations, which decrease the quality of vision<sup>1</sup>

Patients with dry eye experience restrictions in activities and social life,<sup>5,6</sup> reporting up to 34% impairment in daily activities (Figure 1).<sup>7</sup>

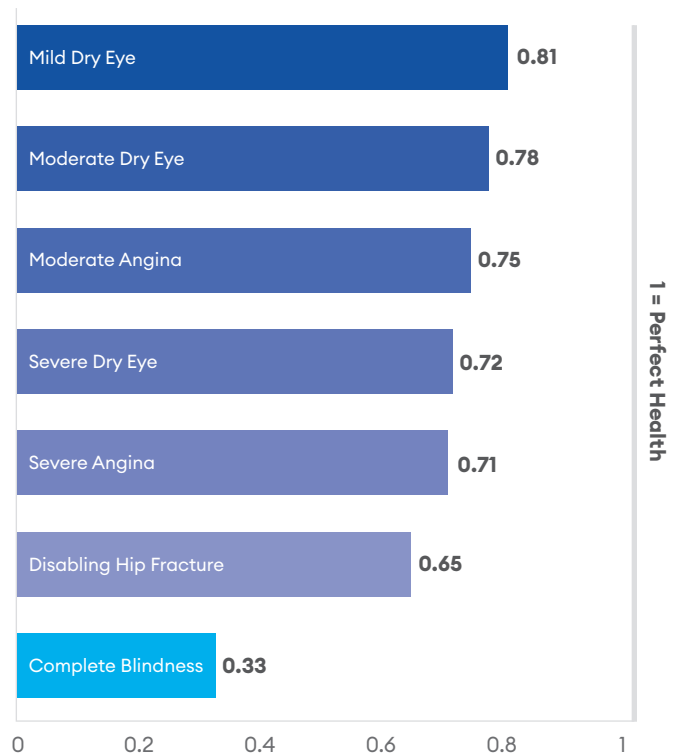
**Figure 1:** Patient-reported level of daily activity impairment with varying levels of severity of dry eye.<sup>7</sup>



Participants were asked to rate their level of daily activity impairment, for example, performing chores, shopping, exercise, child care, or studying.

The impact of dry eye on quality of life is comparable to other disabling conditions, and even mild to moderate dry eye can reduce quality of life (Figure 2).<sup>8</sup>

**Figure 2:** U.S. health-related quality of life for dry eye disease compared with other health states<sup>8†</sup>



<sup>†</sup>Utility is a rating of quality of life, derived by assessing a person's preference for living with a certain condition. A higher utility indicates a better quality of life, with 1 representing perfect health and 0 representing death.

**!** A recent systematic literature review identified 32 studies assessing mental health in patients with dry eye, reporting ~40% suffered from depression and anxiety. Meta-analyses revealed the odds of depression and anxiety were 1.8 and 2.3 times higher, respectively, in patients with dry eye disease compared to controls.<sup>9</sup>

**Patients with dry eye were 2-3x more likely to report difficulties in daily activities than those without dry eye<sup>10</sup>**



**Reading & Writing**



**Professional Work**



**Driving Ability**



**Watching TV**

**References:** 1. Stapleton F, Alves M, Bunya VY, Jalbert I, Lekhanont K et al. (2017) TFOS DEWS II Epidemiology Report. *Ocul Surf* 15 (3): 334-365. 2. Rasendran C, Imran Y, Talcott KE (2021) Incremental Economic Burden of Depression in Ophthalmic Patients. *Am J Ophthalmol* 229:184-193. 3. Sayegh RR, Yu Y, Farrar JT, Kuklinski EJ, Shtein RM et al. (2021) Ocular Discomfort and Quality of Life Among Patients in the Dry Eye Assessment and Management Study. *Cornea* 40 (7): 869-876. 4. Morthen MK, Magno MS, Utheim TP, Snieder H, Hammond CJ et al. (2021) The physical and mental burden of dry eye disease: A large population-based study investigating the relationship with health-related quality of life and its determinants. *Ocul Surf* 21:107-117. 5. Pouyeh B, Viteri E, Feuer W, Lee DJ, Florez H et al. (2012) Impact of ocular surface symptoms on quality of life in a United States veterans affairs population. *Am J Ophthalmol* 153 (6): 1061-1066.e1063. 6. McDonald M, Patel DA, Keith MS, Snedecor SJ (2016) Economic and Humanistic Burden of Dry Eye Disease in Europe, North America, and Asia: A Systematic Literature Review. *Ocul Surf* 14 (2): 144-167. 7. Patel VD, Watanabe JH, Strauss JA, Dubey AT (2011) Work productivity loss in patients with dry eye disease: an online survey. *Curr Med Res Opin* 27 (5): 1041-1048. 8. Schiffman RM, Walt JG, Jacobsen G, Doyle JJ, Lebovics G et al. (2003) Utility assessment among patients with dry eye disease. *Ophthalmology* 110 (7): 1412-1419. 9. Basiliou A, Xu CY, Malvankar-Mehta MS (2021) Dry eye disease and psychiatric disorders: A systematic review and meta-analysis. *Eur J Ophthalmol* 11206721211060963. 10. Miljanovic B, Dana R, Sullivan DA, Schaumberg DA (2007) Impact of dry eye syndrome on vision-related quality of life. *Am J Ophthalmol* 143 (3): 409-415. ©2023 Alcon Inc. GLB-DEOH-2300005