Review article

Myopia – the global progressive healthproblem: Are wereadingtoomuch?

Rashiti M[1], Zahiti K[2]

Abstract

Myopia is becoming a global public health problem in our society. The global progression of myopia might develop due to near work activities (reading, writing, homework, computer) and less outdoor activities. Recent studies show that beside genetic component, geography and ethnicitiy do have also an impact in the development and progression of myopia.

Keywords: Myopia; Education; Sociomedical problems; Sociology; Continous reading

Bangladesh Journal of Medical Science Vol. 16 No. 03 July'17. Page : 337-338

Myopia is a common eye condition due to spherical error of refraction that might lead to visual impairment and blindness. The etiology of myopia is precisely unknown but there are different scientific approaches that try to explain where this condition derives from. Myopia is getting a global progressive public health problem in society. Generally seen there are approximately 27 % of children affected of myopia [1,2] with a higher prevalence of children living in a city than on the countryside (23,3% versus 12,5%)[1].

Children are spending on average almost 5 hours with near work activities (reading, writing, homework, computer)[1]. The spent time on mid-working distance activities (television, musical instruments etc.) is approximante 2.7hours[1].

More than 30 % of school children are taking beside school additional classes and>50% of children are reading 0-30 minutes on reading without a break, 18% even>60 minutes[1].

Children with myopia spent signifiant more time with near activities and less time with sports compared with emmetropes (normal réfraction)[3].

The main significant risk factors for myopia development are age, region, continous reading, school achèvement and parental myopia[1,4].

Even geography seems to play an important role in the development of myopia: The prevalence of myopia seems to be higher in Urban areas and Chinese population, but the regional and racial difference is not that apparent in population > 40 years[4].

Outdoor activities do have positive impact in the progression of myopia since *Rose et al.* could show that in the 12-year-students population higher outdoor activities were associated with less myopia and more hyperopic mean refraction in due consideration of near work, parental myopia and ethnicity[5].

The chance to become myopic is increased at lower amounts of sports and outdoor activities in children with two myopic parents[6]. *Sapkota et al.* published interesting finding selating to higher numbers of visual

Impairment with myopia in children among upper-middle socio economic school children in Kathmandu compared to rural areas in Nepal due to absent refractive correction[7].

Therapy consists of optimal refractive correction, physical activity and use of mydriatic eye drops to prevent progression of myopia.

Conclusion

Myopia might be an outcome of our near working lifestyle and daily requirements with the consequence that near sightedness is more relevant than far sightedness. Althoug hour eyes are biologically adapting to our modern life requirements the risk we

1. Rashiti Minevere[1], University of Prishtina, Department of Sociology, Rr. George Bush, 10 000 Prishtina, Kosovo, minevererashiti@yahoo.com
2. Zahiti Kaltrina, University Hospital Basel, Eye Clinic, Mittlere Strasse 91, 4056 Basel, Switzerland, email: kaltrina.zahiti@gmail.com

Correspondence to: Kaltrina Zahiti, University Hospital Basel, Eye Clinic_Mittlere Strasse 91, 4056 Basel, Switzerland, email: kaltrina.zahiti@gmail.com

are taking might result in severe ophthalmic diseases. Therefore keeping the golden mean (additional physical activities beside nearwork) could help us decelatering this global ophthalmic progression and its far-reaching effects in our society.

Competing interests
The authors declare that they have no competing interests.

Acknowledgement
Not applicable.

References

1. Giloyan A, Harutyunyan T, Petrosyan V. Riskfactors for developing myopia among school children in Yerevan and Gegharkunik Province, Armenia. OphthalmicEpidemiol. 2016 : 1-7 (ePub)
2. Adhikari S. Myopia in schoolchildrenfrom high mountain region of Nepal. Nepal J Ophthalmol. 2013; 5: 246-9 https://doi.org/10.3126/nepjoph.v5i2.8737
3. Mutti DO, Mitchell GL, Moeschberger ML. Parental myopia, nearwork, school achievement, and children`s refractive error. Invest Ophthalmol Vis Sci. 2002; 85: 521-6
4. Pan CW, Ramamurthy D, Saw SM. Worldwide prevalence and risk factors for myopia. Ophthalmic Physiol Opt. 2012 ; 32(1) : 3-16 https://doi.org/10.1111/j.1475-1313.2011.00884.x
5. Rose KA, Morgan IG, Ip J. Out door activity reduces the prevalence of myopia in children. Ophthalmology. 2008 ; 115 : 1279-85 https://doi.org/10.1016/j.ophtha.2007.12.019
6. Jones LA, Sinnott LT, Mutti DO. Parental history of myopia, sports and outdoor activities, and future myopia. Invest Ophthalmol Vis Sci 2007 ; 48 : 3524-32 https://doi.org/10.1167/iovs.06-1118
7. Sapkota YA, Adhikari BN, Pokharel GP. The prevalence of visualimpairment in school children of upper-middle socioeconomic status in Kathmandu. Ophthallmic Epidemiol. 2008 ; 15 : 17-23 https://doi.org/10.1080/09286580701772011