PREVALENCE OF MYOPIA AMONG MEDICAL STUDENTS

AUTHORS:
1- DR. ANOSHA ZAFAR, PAKISTAN INSTITUTE OF MEDICAL SCIENCES, ISLAMABAD
2- DR. RUQAYYA JUNAID, AZMAT RASHEED HOSPITAL, RAWALPINDI.
3- DR. SARAH ASHFAQ, IBN-E-SENA RESEARCH INSTITUTE MULTAN MEDICAL AND DENTAL COLLEGE

ABSTRACT:
Near-sightedness, also known as short-sightedness and myopia, is an eye disorder where light focuses in front of, instead of on, the retina. This causes distant objects to be blurry while close objects appear normal. Other symptoms may include headaches and eye strain. Severe near-sightedness is associated with an increased risk of retinal detachment, cataracts, and glaucoma. This cross-sectional study was conducted among medical students at different medical colleges. All the students were given a predefined questionnaire. All the data was entered and analyzed with SPSS Ver. 23.0. There were 90 medical students included in this study. The mean age of the students was 20.45±2.17 years. There were 45 (50%) males and 45 (50%) females in this study. Out of 90 medical students, only 12 were suffering from near-sightedness and they were using glasses for this. Out of 12 students suffering from this condition, 7 were females.

KEYWORDS: MYOPIA, NEAR-SIGHTEDNESS
INTRODUCTION:
Near-sightedness, also known as short-sightedness and myopia, is an eye disorder where light focuses in front of, instead of on, the retina. This causes distant objects to be blurry while close objects appear normal. Other symptoms may include headaches and eye strain. Severe near-sightedness is associated with an increased risk of retinal detachment, cataracts, and glaucoma.

The underlying cause is believed to be a combination of genetic and environmental factors. Risk factors include doing work that involves focusing on close objects, greater time spent indoors, and a family history of the condition. It is also associated with a high socioeconomic class, (data reference is specifically for East Asia). The underlying mechanism involves the length of the eyeball growing too long or less commonly the lens being too strong. It is a type of refractive error. Diagnosis is by eye examination.

Tentative evidence indicates that the risk of near-sightedness can be decreased by having young children spend more time outside. This may be related to natural light exposure. Near-sightedness can be corrected with eyeglasses, contact lenses, or a refractive surgery. Eyeglasses are the easiest and safest method of correction. Contact lenses can provide a wider field of vision, but are associated with a risk of infection. Refractive surgery permanently changes the shape of the cornea.

Near-sightedness is the most common eye problem and is estimated to affect 1.5 billion people (22% of the population). Rates vary significantly in different areas of the world. Rates among adults are between 15% to 49%. In China the proportion of female is significantly higher than male. Among children, it affects 1% of rural Nepalese, 4% of South Africans, 12% of U.S. people, and 37% in some large Chinese cities. Rates have increased since the 1950s. Uncorrected near-
sightedness is one of the most common causes of vision impairment globally along with cataracts, macular degeneration, and vitamin A deficiency (1-3). The objective of this study was to see the prevalence of myopia among medical students of different medical colleges.

MATERIAL OF METHODS:
This cross-sectional study was conducted among medical students at different medical colleges. All the students were given a predefined questionnaire. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:
There were 90 medical students included in this study. The mean age of the students was 20.45±2.17 years. There were 45 (50%) males and 45 (50%) females in this study. Out of 90 medical students, only 12 were suffering from near-sightedness and they were using glasses for this. Out of 12 students suffering from this condition, 7 were females.

DISCUSSION:
Global refractive errors have been estimated to affect 800 million to 2.3 billion. The incidence of myopia within sampled population often varies with age, country, sex, race, ethnicity, occupation, environment, and other factors. Variability in testing and data collection methods makes comparisons of prevalence and progression difficult.

The prevalence of myopia has been reported as high as 70–90% in some Asian countries, 30–40% in Europe and the United States, and 10–20% in Africa. Myopia is about twice as common in Jewish people than in people of non-Jewish ethnicity. Myopia is less common in African people and associated diaspora. In Americans between the ages of 12 and 54, myopia has been found to
affect African Americans less than Caucasians. Various methods have been employed in an attempt to decrease the progression of myopia, although studies show mixed results. Many myopia treatment studies have a number of design drawbacks: small numbers, lack of adequate control group, and failure to mask examiners from knowledge of treatments used. Among myopia specialists, mydriatic eyedrops are the most favored approach, applied by almost 75% in North America and more than 80% in Australia. Behavioral intervention (counseling to spend more time outdoors and less time with near-work) is favored by 25% of specialists, usually in addition to the medications. The use of reading glasses when doing close work may improve vision by reducing or eliminating the need to accommodate. Altering the use of eyeglasses between full-time, part-time, and not at all does not appear to alter myopia progression. The American Optometric Association's Clinical Practice Guidelines found evidence of effectiveness of bifocal lenses and recommends it as the method for "myopia control". In some studies, bifocal and progressive lenses have not shown differences in altering the progression of myopia. In 2019 contact lenses to prevent the worsening of nearsightedness in children were approved for use in the United States (4-6).

REFERENCES:
