

## **Выводы**

Завершение воспалительной реакции получено во всех группах на 14 сутки, однако в 1 группе сохранялось облаковидное помутнение в месте инстилляции с восстановлением идеальной прозрачности во 2 и 3 группах. Разница в клинической картине ярко выражена на 7 сутки: значительно меньше площадь дефекта в группе с применением активаторов регенерации. Для более эффективного лечения кератитов необходимо применение активаторов регенерации в дополнении к стандартной терапии в ранние сроки.

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**УДК 617.753.2:378.6-057.875**

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## **PROBLEM OF MYOPIA AMONG MEDICAL STUDENTS**

### **Introduction**

Myopia is one of the most common vision refractory errors in the world in this era. Main clinical presentations of myopia include reduction of distance vision, diminished contrast sensitivity, constriction of visual field, photophobia and loss of vision [1].

Myopia is a global public health threat, with many regions, particularly in East Asia, experiencing an increase in prevalence over the last few decades. By 2050, it is expected that roughly half of the global population will be myopic, with one-tenth being highly myopic (6.00D). Myopia prevalence varies significantly across races, regions, and ages, and it is significantly higher in East and Southeast Asian countries than in non-Asian countries.

The rapid increase in prevalence of myopia has huge social, educational, and economic consequences to society. Uncorrected myopia is a cause of potential productivity loss and complications such as macular degeneration, retinal detachment can lead to further productivity loss as well as complete vision loss [1, 2, 3].

The reasons for the increase of incidence of myopia among the medical students are as follows. Using the electronic gadgets for a long time for studies in medical universities, due to lack of time taking low nutritious foods, sedentary lifestyle, not using protective measures when using the electronic gadgets, improper alternation of work and rest etc. All these factors can directly or indirectly lead to the development and progression of myopia [4, 5].

Taking intervals in between studies, hydrating well, avoiding low nutritious foods, practicing eye exercises, doing physical exercises, having more green vegetables and fruits,

using protective screens to electronic gadgets, taking vitamins, annual or monthly eye checkups are preventive measures which lead to get rid of myopia as medical students [6].

### **Goal**

To identify the factors contributing to development of myopia and the awareness of complications of myopia among the medical students.

### **Material and methods of research**

The study was conducted via an online questionnaire form among the medical students in GSMU. There are 85 medical students in GSMU participating in this online questionnaire. We conducted the research between the students from 1<sup>st</sup> year to 6<sup>th</sup> year and the age between 21 to 27 years.

### **The Results of the Research and their Discussion**

During the study, it was found that 74.7 % of respondents have visual impairments, of which 78.7 % suffer from myopia, 26.6 % hypermetropia, 13.1 % astigmatism and only 25.3 % do not have any visual impairment.

The approximate time of appearance of myopia was specified: from pre- school age – 4.6 % (3), from school age – 69.2 % (45), at the university 26.2 % (17). Of those who have visual impairments 72.9 % uses glasses, 1.2 % uses contact lenses.

The study revealed that 11.9 % of respondents take less than one hour for homework. 29.8 % take 1-2 hours, 32.1% take 3–4 hours and 26, 2 % take 5 or more hours for homework.

It is noted that 65.9 % use textbooks to prepare for homework. 71.8 % use computers, 74.1% use phones and 27.1% use audio lectures to prepare for homework.

94.1 % of respondents use electronic gadgets to study daily and 5.9 % use them several times a week. 58.3 % are not using protective lenses when using electronic devices. 41.7 % are using though.

25.3% of respondents use the computer less than 1 hour while 18.1 % use 1–2 hours, 27.7 % use 3–4 hours and 28.9 % spend more than 5 hours at the computer per day.

54.1 % of respondents use mobile phone more than 5 hours while the 35.3 % use the mobile phone for 3–4 hours. 8.2 % spend 1–2 hours for mobile phone while 2.4 % use the mobile phone less than 1 hour for the mobile phone.

Among the studied population, 43.5 % spend 2–4 hours on social media, 27.1 % spend at least 1 hour, 14.1 % spend about 30 minutes and 15.3 % spend more than 5 hours on social media.

While preparing for classes, 81.2 % (69) use artificial lighting, 52.9 % (45) use natural lighting and 24.7 % (21) use a table lamp. When inquired whether the students make sure to keep an acceptable distance between eyes and books/electronic gadgets, respondents answered that 38.8 % do try to keep an acceptable distance and 23.5 % answered that they do not while, 37.6 % answered that they do not pay attention to keeping a proper eye distance while studying. Among those who answered no and maybe, 48.1 % answered that they study at the table, 34.6 % at the table or while lying down, while 17.3 % studies while lying down. Among those who answered that they try to keep an acceptable distance between eyes and study material, 50.0 % answered that they study at the table, 40.6 % either at the table or lying down while 9.4 % while lying down.

42.2 % answered that they study 30 minutes to 1 hour at one sitting, 28.9% 1-2 hours, 12 % 3–4 hours, 10.8 % 30 minutes and 6 % more than 5 hours at one sitting. But they also answered that 97.6% take breaks while preparing for classes whereas 2.4 % do not.

Respondents answered that, 70.2 % walk less than 1 hour daily, 22.6 % 2-3 hours and 7.1 % more than 4 hours.

Among those who are suffering from myopia 38.3 % are not aware of the complications while 61.7 % are aware of the complications. Among those who are aware of the complications 55.6 % are aware of all 3 myopic macular degeneration, retinal detachment, and open angle

glaucoma, 18.5 % aware of myopic macular degeneration, 11.1 % retinal detachment, 7.4 % both myopic macular degeneration and retinal detachment, 7.4 % both retinal detachment and open angle glaucoma.

It was revealed that students' awareness of existing ways to prevent visual impairments is quite high. 73.8 % of the students surveyed answered that they had an idea of methods of preventing myopia, 14.3 % answered that they are aware there maybe preventive methods while 11.9 % answered that they are not aware of any methods. When surveyed about the preventive measures used by the students, 79.5 % answered that they take breaks while studying for a long duration, and 66.7 % answered that they adhere to a proper diet where as 64.1 % admitted to getting proper amount of rest during sleep whereas only 30.8 % admitted to getting regular eye exams. Other methods such as; wearing sunglasses when going out (34.6 %), not studying too long at one sitting (59.0 %), avoiding prolonged exposure to screens (computers and mobile) (52.6 %), practicing good eye hygiene (52.6 %), taking a walk/exercising daily (35.9 %), keep eyes well moisturized (37.2 %), and refraining from bad habits such as smoking and drinking (56.4 %), were used by students.

It should be noted that the timely detection of risk factors and the impact on them directly or indirectly prevents the development of myopia or postpone its start to a later age, which leads to a decrease in the frequency of high degree of myopia, reduces the number of complicated forms of myopia and their severity.

### **Conclusion**

The prevalence of myopia among medical students of Sri Lanka was relatively high. Longer time spent on near-work activities and less time spent outdoors were the factors significantly associated with myopia among medical students.

In the course of the study, adverse factors contributing to the development of myopia in medical university students were identified.

### **LITERATURE**

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