SMS CERIA PROGRAM (SENAM MATA SEHAT CERDAS KOMBINASI RELAKSASI) FOR OVERCOMING COMPUTER VISION SYNDROME (CVS) IN ELEMENTARY SCHOOL STUDENT

Yogik Setia Anggreini¹, Y. Kambu², Ivony Fn Putriningtyas³

¹³Department of Nursing, Politeknik Kesehatan Kemenkes Sorong

Correspondence Email: yogik.setia89@gmail.com

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ABSTRACT

During the COVID-19 pandemic, children in school base exposed to more gadgets than 2-3 hours/per day. Position less body good moment using gadgets, poor intensity lighting good so will harm the eye's health. The purpose of the service program Public is to increase the independence of students in doing eye exercises and a combination of relaxation, knowledge, and eye health for Overcoming Computer Vision Syndrome (CVS) for Elementary School Children. This approach is participatory and active by sustainable. The activity consists of educating teachers and students about essential health eyes and impact CVS, giving eye exercise training to teachers and students, evaluating skills and knowledge, and advocating a party school for regulation does eye exercises combination applied relaxation routine at school. Monitoring and evaluation with the use of questionnaires and carrying out monitoring and evaluation with the use of questionnaires and sheets observation. Activity will be held for two months, starting from March until the moon of May 2022, at Inpres 25 Elementary School, Sorong City. The audience target for this activity is teachers and school students based in district Push, as many as 46 people. The results of this community service show that the average score of knowledge about eye health increased by 28.5 points, and the average eye health score increased by 8.5 points. After education, average grade knowledge, and eye health increase, participants could do eye exercises with combination relaxation independently. Empowerment Public in health eyes on children's school needs to be carried out by the government city push. We hope that the next community service can be focused on improving eye health in school children.

Keywords: Eye Exercises, Elementary School, Covid-19

1. PRELIMINARY

School is something the institution uses for activity teaching for educators to educate children with destination for give helpful knowledge as well as Becomes the place give and receive appropriate lessons with the field. At the beginning pandemic, the government applied the principle of prioritizing health and safety in maintaining education with considering growing flower children and the rights of children during a pandemic, especially in learning that is made online learning (M.-T. Kang et al., 2016; S. Kang et al., 2019). However, with a long decline in cases of covid-19,
the Minister of Education issued a policy in doing learning stare face the new average transition period (Arisandi et al., 2018; Mansa et al., 2022).

During the covid-19 pandemic, children in school must expose to gadgets for learning. Finally, many are used to not using gadgets only for the learning process but also for gaming or watching videos with duration exposure to more gadgets than 2-3 hours/day. So, the use of this gadget becomes a problem for good elementary school kids in learning and social interaction. Children who use gadgets generally focus on only staring at one object for a long time. Position less body good moment using gadgets, poor intensity lighting good so will impact badly to health eye (Gupta & Aparna, 2020; Maisal et al., 2020).

Eye health is essential for a man, especially children age school basic because the eye is one of the most common-sense organs used between fifth sense other. Since vision is the means main for gathering information from around us. Need is known; about 75% of the information, we accept is in the form of visual information. Signs and symptoms of health eye disturbed among the most frequent symptoms found is fatigue eye. Eye fatigue is also characterized by the presence of irritation to the eyes or conjunctivitis (conjunctiva) colored red could shed tears), vision double, sick head, power accommodation and convergence decrease, sharpness vision sensitivity contrast and speed perception (Nau et al., 2022).

The American Academy of Ophthalmology (AOA) also states that: the use of computer or old gadgets result in fatigue eyes, redness, vision blur, myopia, and symptoms of the eye other (S et al., 2017). Duration usage too long a computer causes gathering symptoms of fatigue eye called computer vision syndrome (CVS) (Mariana, 2018). For a child with CVS, symptoms can cause disturbance behavior like disturbance emotional, social, or concentration, distraction sleep, obesity, achievement decreased, and even cause problem violence.

Based on studies introduced at SD Inpres 25, few students have used cell phones, not only for necessary work Duty but also already used to watch and even play online games. According to the teacher, parents and students report that their son had time-sick eyes due to staring at too long gadget screens. This Thing naturally Becomes a problem if there is no quick follow-up because the teacher also very plays a role important in supervising students at school if anyone is using a gadget, besides that the role of parents is also vital in accompanying a child with the time play gadgets and limiting time for play so that child understands time to play and time study. Parents should always ensure that children use gadgets for positive things only, for example, for looking for material on the internet and communicating with the teacher or her friend to discuss the lesson.

Impact harmful to healthy eyes and physique consequence excessive use of computers or gadgets could be prevented, one of with rest after use computer (Rizanti, 2021) Besides, that could prevent with do eye exercises. Eye exercise is one method for reducing CVS, increasing the eyes' ability, sharpening vision, and making muscle eye become elastic and robust. It could sharpen vision with several movements and specific things to do by routine (Joshi & Retharekar, 2017). A student could do eye exercises where only and when just, especially after 2 hours of study or after learning first done (if using a computer or gadgets) and can conduct not enough more than 10 minutes, then the eye will return relax and not dry (Khotimah et al., 2022). Other efforts are also needed to be conducted.
for healthy guard eyes from screen computers or devices other (Di Noto et al., 2013). Awareness Becomes step essential to prevent and treat disturbances in the healthy eye (Gupta & Aparna, 2020)

Study Mersha and team conclude that 90.2% of respondents are aware of CVS but have knowledge of Things to prevent CVS events only by 29.5% (Shareef et al., 2020). because of that needed effort, counseling for increased awareness will be essential to guard the health eye, especially for frequent students exposed to gadgets.

2. PROBLEMS AND QUESTION FORMULATION

Bustle daily, routine work or school make us almost not have time for exercising (exercise) eyes and caring sense vision us. Not existence time particular for taking care of one of the five senses could cause various eye disorders, including myopic diseases far away, eyes feel blur, eyes sore, and eyes red (Tsuneyoshi et al., 2019)

During the covid-19 pandemic, children must expose to gadgets for learning. Finally, many are used to with do not use gadgets only for the learning process teach but also for gaming or watching videos with duration exposed to more gadgets than 2-3 hours/per day. So, using these gadgets becomes a problem for good elementary school kids in learning and social interaction. Children who use gadgets generally focus on only staring at one object for a long time. Position less body good moment using gadgets, poor intensity lighting good so will impact badly to health eye (Mulya & Agustryani, 2020)

Based on studies Preliminary at SD Inpres 25, a few students use cell phones for necessary work Duty and are already used to watching, and even some play online games. According to the teacher, even the parents of students reported that their son had time-sick eyes due to staring at a gadget screen too long. This thing naturally Becomes a problem if there is no quick follow-up because the teacher also plays a role important in supervising students at school if some useful gadgets are. Besides that, the role of parents is also vital in accompanying the child at the time play gadgets and limiting time for play so that child understands time to play and time to study. Parents should always ensure that their child Uses gadgets for positive things only, for example, for looking for material on the internet and communicating with the teacher or her friend to discuss the lesson.

Online learning conducted during the pandemic compels students to be exposed to gadgets or computers. So that makes used to the student for exposed to gadgets. In transition, return learning is conducted through stare face. However, students no can free from the habit of using gadgets that are not only for studying again but already wrong Use for watching and gaming for quite a long time/duration. This impacts the health problem, especially the healthy eye, because of more screen time than 2 hours/per day. Duration usage too long a computer causes gathering symptoms of fatigue eye called computer vision syndrome (CVS). So, the problem could be formulated as "How do independent students do eye exercises combine relaxation to overcome Computer Vision Syndrome (CVS) for Elementary School Children?"
3. LITERATURE REVIEW

Computer Vision Syndrome (CVS), also known as visual fatigue or digital eye strain, is a term for related symptoms with disturbance eye consequence use of based gadgets computer such as laptops, cell phones and tablets. The longer the duration of use of a computer, the longer the symptoms could go on, even when the use computer is finished. Although more often attacking working adults at the office, however with situation moment this cannot deny that kids can too be affected by CVS. Form eye disorders this caused by blue light or light bright from the screen, and cause consequence from eye child who stares at a screen by focus when read in the long term and continuous continuously (S. Kang et al., 2019).

Even though not possible, there is a method for change forms the eyes; eye exercises can bring many benefits specifically for the muscle eye. One of them is to help resolve various disturbance eye. A doctor generally recommends eye exercise to someone who has problem vision like myopia (short-sightedness) far away, hypermetropia (short-sightedness) close), eyes blur, eye tension/stress, eye sensitive, and so on. Although possible, it cannot cure it up to 100%, but eye exercise can make the eye more comfortable. Unfortunately, eye exercises, it turns out not yet, can help people with dyslexia and those who often blink, suffer seizure eye (eye spasms), or have paralyzed muscle eyes (Bhutada, 2019).

The benefits of eye exercise for others who do not want loss are a critical increased function of eyes, strengthened muscles eyes, helped eye focus, launching of movement muscle or eyeball, stimulation of part of the brain that regulates vision, making the eye more relaxed, improves the quality of vision, so that becomes clearer, overcome eye dry and prevent disturbance eye. There are many methods for doing eye exercises. You can start it by warming up more first. How to do it, rub it second palm hand until it feels warm, then put it on for several seconds. Next, roll your eyes slowly same direction and opposite clockwise, do it 5-10 times per direction (Alficandra & Alficandra, 2021).

After heating is done, you can start core training with several movements like Changing focus from a distance close to far, far away,
staring at distant objects far more first. Wait until the object is seen as evidence before you change the point and look at more objects close so next (Li et al., 2020)

You can too, but second-palm hands in front eyes, stare at it. Then while an attractive breath, open your second hands and focus your view straight to the front. Exhale breath while returning position second palm hands in the front eye. This way could increase the power to look at the object far or close. How to do that is by seeing an object, and focusing eye on it for 1-2 minutes, for example, seeing a lizard on the wall. Hidari sees other things that make no focus. To do eye exercise movements so that the muscles are always eyed strong, move the eyeball to follow a specific pattern, for example, right-left, up down, four angles, and movement rotating. When finished, take a broken eye for 2-3 minutes with close it (Alficandra & Alficandra, 2021)

Look object farthest you can see with clarity. After that, give it a try and observe another little object far from that; behold, can see it clearly, too. Repeat the movement of these three sets for every eye; rest quickly if feel dizzy.

Eye exercise for increasing control of muscle is with writing on the wall. Sit on the top seat and face the wall. Then write it using view or eye movement, keeping the head not following the move. The bigger letters you can shape, the better control muscles and eyes.

Make a straight line, good vertical or horizontal; close eyes, let around seen dark for a momentary. After that, open eyes, center view to the middle. Now, the lyrics eye to on then makes a straight line (vertical) to the direction bottom. Take a breath when you glance up, and exhale while the eyeball leads to below, do it ten times. After that, close eyes again, open them and look to the left while exciting breathing. At the same time, exhale breath and direct view to the correct form of a horizontal line. Repeat up to 10 times before resting it with a closed eye. Sometimes eyes are so tired that they need one eye exercise. Because of that, when working, using a computer, or reading, for example, always rest your eye for 10 minutes every 1 hour with method closed eye. This can make the eye permanently healthy and not stressed.

How to do one eye exercise Blink quickly enough. Take a comfortable sitting position, then wink eye ten counts fast. After that, close eyes, and rest for 20 seconds. Repeat up to 5 rounds. Sit down in a cross-legged position. Lift the hand right so that position like pointing to the front, focus the eye on to end finger index finger. After that, bend the hand and take the index finger to the end nose; eyes must permanently focus on the index finger earlier. After that, return hand to position return (point). The moment does eye exercises, need to allow the eye to rest. During several minutes of practice, no make the eye so tired.

Eye exercise is the most effective and efficient prevention to reduce fatigue eyes experienced by students because eye exercises are quickly done and do not need a particular place, much cost, and a long time. Eye exercise could lower fatigue eye because eye exercises capable return power elasticity muscles, accommodating eyes, and reducing intensive stress on the functional eye (Shend, 2013).

4. METHOD
party schools, students, and parents. Participation is active from party school, especially Teachers, students, and parents. Activity this consist of several steps, namely: Stage first with giving education to teachers and students about the importance of health CVS eye and impact; stage second with giving eye exercise training to teachers and students; Stage third conduct evaluation skills and knowledge and Stage Fourth team advocacy to a party school for regulation do eye exercises combination applied relaxation routine at school.

Initially, the team made a video of eye exercises with a combination of relaxation, then TEAM netted Schools in Partner Work Teams and made a target group for training. The team does pre-tests about health points and CVS scores, as well as to do education about SMS CERIA with electronic media and
hands-on practice. The team conducts monitoring and evaluation with the use of questionnaire and carry out monitoring and evaluation with the use of questionnaires and sheets of observation. Activity will be held for two months from March until the moon of May 2022, at Inpres 25 Elementary School, Sorong City. The audience target for this activity is teachers and school students based in district Push, as many as 46 people.

5. RESEARCH RESULTS AND DISCUSSION
a. Results

1) Characteristics Participants
Activity devotion to Public this followed by 46 students. Mostly manifold sex men (52%) with 13 years old (26.1%), 6th grade (52.2%).

Table 1 characteristics respondent

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2) Analysis Changes in eye health and knowledge

Table 2. Analysis eye health changes

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Based on table 2 above, the average value of knowledge about eye health increase as much as 28.5 points and the average eye health increase of 8.5 points.

b. Discussion
Activity Devotion To the community this, starting on March 01, 2022, begins with a survey location and preliminary studies as well as identification of class ages 5 and 6. later, on 5-10 March, next with making a relaxation combination eye exercise video. On March 25, 2022 - May 30, 2022, the next with held is devotion to the Community. Opening activities by the principal as a representative partner at SD Inpres 25,
Sorong City. This was conducted to give spirit empowerment to the participant, and as executor activity act continued.

Pre-test for measure CVS screening and knowledge participants about eye health use questionnaire. The analysis result shows that the score knowledge highest before giving education is score 80 (1 participant), and the lowest is score 10 (2 participants). It directly educates 46 participants (class 5 and grade 6 elementary school students). Any topic education provided is education eye health. Education is given for one hour. A discussion then followed it.

Post-test for measure knowledge participants after given education about eye health use questionnaire. Analysis results show that the highest knowledge score after education is 100 (2 participants), and the lowest is 40 (1 participant). The eye exercise training is carried out for 2 hours, starting with being taught each stage and carried out together by involving teachers and homeroom teachers. Then proceed to do it per group. After that, it is done independently (self-training). They were then followed with a discussion.

Stages of relaxation combined with an eye exercise that is performed warm-up movements according to stages. Move the eyeball to the right and left (try as if you want to see the ear), Lift the head, eyes look up (ceiling), then look down (floor), Move the eyeball up and down at opposite angles, starting from the corner top right to bottom left corner, Move eyeballs as before, but starting from the top left corner to the bottom right corner, Rotate eyeballs to the right clockwise, Rotate eyeballs to the left counterclockwise, Put your thumbs up, then look at your thumbs fingers, then look down, warms the palms and then rubs into the eyes, performs relaxation movements according to the stages.

Besides that, the team's devotion to the Public Advocates is the principal, so this relaxation combination eye exercise becomes a routine program carried out by the school. After one month of observation and follow-up on eye exercise activities routinely carried out by the school. Participants were very enthusiastic to follow activities seen to change knowledge before being given an education that knows, with the lowest score of 10 as many as 2 participants. After being given education experience improvement, with the lowest score of 40 as many as 1 participant, this shows that education successfully exceeds the target achievement.

Figure 2. Education About eye health

Education effectively increases participants' knowledge, where the change in knowledge average before and after education is from 46.67 to
75.0. Education provided in the form of health education is a something effort to create behavior conducive to society for health. Education health strives so that the community realizes or knows how to maintain health, avoid, or prevent harmful things, where they are, and the health of others. Should look for treatment if sick, etc. (Tsuneyoshi et al., 2019) This thing supported by group age lots of participants is a young age.

To empower not enough, only giving education needed something Skills so that he could be independent, keep, maintain even increase degrees his health. by him that through activity Devotion to this society, participants equipped with Skills to do a combination of relaxation eye exercises that can be done routinely and independently four times a day (if you are exposed to gadgets/computers for more than 2 hours per day) (Gosewade et al., 2013; M, 2018).

This result is in line with research conducted by (Zhuang et al., 2022) explain that effort to increase the health eye that is with to do exercise therapy. Eye exercise increases the eyes' ability, sharpens vision, and makes muscle eye Becomes elastic and robust and can sharpen vision. Eye exercise is the most effective and efficient prevention to reduce fatigue in eyes experienced by workers' hair fakes. Eye exercise is quickly done, does not need a special place, and costs a lot and time.

In this community empowerment activity, the team taught eye exercises, a combination of relaxation to students and teachers, which were practiced directly. Start with practice together, then per group, and continue independently. The hope is that students can do it directly wherever they are. Service Partner to the Community, namely school The basic instructions for 25 Sorong cities include the principal and all teachers expected could continue activities that have been carried out as a routine program every Friday where combined gymnastics is carried out for the entire class; it is recommended that the eyes exercise a combination of relaxation. Everything successful of the three applied interventions is education, skills, and applications. With existing abilities owned by teachers and students, eye health problems are expected to be adequately maintained so students can learn to focus more.
6. CONCLUSION
After education, 84.7% of participants had good knowledge (score >70). After being given the skills, 100% of participants can independently do eye exercises with a combination of relaxation. Gymnastics combination eye relaxation becomes a continuous program in schools every Friday combined sports. Community Empowerment in terms of eye health for school children, it is necessary to encourage the city government to overcome eye disorders in children by doing eye exercises with a combination of relaxation, especially for school-age children who are often exposed to gadgets. To maintain eye health from the influence of gadgets on school-age children in Sorong City, it is better if the eye exercise program can be carried out in other schools. We hope that the next community service can be focused on improving eye health in school children.

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