VISION HEALTH PROMOTION MESSAGES FOR ELDERs

Your vision helps you navigate your way through the world. Your eyes are wonderful devices. They are like small cameras.

Light enters the eye through the small hole called the pupil.

The coloured circle around the pupil is called the iris. The iris can make your pupil bigger or smaller, depending on how bright your surroundings are. In the dark our pupils grow large. In bright sunlight the pupil gets small.

The cornea and lens work together to focus the light on the retina at the back of the eye. Your retina is like a movie screen.

From the retina, messages about the image pass down the optic nerve to the brain, which makes sense of the image. It tells you what you are seeing.

Visual impairment can happen when there is something wrong with any point on this pathway: the cornea, the lens, the retina or the nerve to the brain.
PROBLEMS WITH THE CORNEA

The cornea can be affected by infections, such as trachoma, and by nutritional problems, such as vitamin A deficiency. Both conditions can severely scar the cornea. Once scarred, the cornea loses its transparency and light cannot enter the eye, resulting in vision loss.

Trachoma infection can be prevented by antibiotics and improved access to water to maintain personal hygiene and sanitation. Treatment becomes increasingly complex and unsuccessful in the more advanced phases of the disease. Surgery on the eyelid may be required to prevent blindness.

PROBLEMS WITH THE LENS

Problems with the lens are the most common problems with vision.

Fortunately it is possible to improve vision in most of these cases.

REFRACTIVE ERROR

In normal eyes the lens can become wider or thinner to focus the light on the retina. In some people the lens cannot focus light from distant objects. Glasses can help.

As we get older it becomes more difficult to focus on near objects. Reading glasses can solve this problem. Reading glasses are cheaper than glasses for distance vision.

CATARACT

Sometimes the clear lens becomes cloudy and light cannot pass through. This is called a cataract. Cataract usually develops gradually over several years. Despite being treatable, cataract is the leading cause of blindness worldwide.

Cataract can make vision blurred or cloudy. It may become especially difficult to see at night. When looking directly at a light, cataract can cause rings or a starburst effect around the light. Colours might fade. Once a cataract is mature, it has a great impact on personal independence, since only light and dark can be distinguished.

Fortunately cataract surgery is safe, cost-effective and has immediate results. In most countries the operation is performed by an ophthalmologist. After using an anaesthetic a very small cut is made at the side of the eye and the cloudy lens is removed. A new plastic clear lens is put in its place. The operation only takes 10–20 minutes and is not painful.

After the operation many patients will need glasses. It is important to follow the instructions for home care after the operation and attend a follow up appointment after six weeks. Medication and care is required for a few weeks until the eye is completely healed.

Cataract is more common as people get older. It is also a common complication of diabetes. Exposure to cooking smoke and cigarette smoke may also increase the risk of cataract.

PROBLEMS WITH THE RETINA

High blood sugar levels and high blood pressure can cause irreversible damage to the retina. Diabetic retinopathy is a complication of diabetes that affects the retina and is one of many related eye diseases that can cause vision impairment.

There are many small blood vessels at the back of the eye. High blood pressure and diabetes can cause the walls of these small vessels to weaken and bleed into the eye. These small bleeds prevent the retina working properly and can result in blurred vision. The damage can progress and cause catastrophic vision loss.

Treatment is more difficult than for lens problems. Early detection through an annual eye examination offers the chance to prevent vision loss. Prevention and treatment methods can include treating the retina with LASER (Light Amplification by Stimulated Emission of Radiation) and the injection of medications into the eye.
PROBLEMS WITH THE OPTIC NERVE

An increase in pressure of the fluid in the eye is called glaucoma. The increase in pressure can damage the optic nerve. Several different conditions can result in glaucoma: it may be inherited or occur after a severe eye infection or injury. The risk of glaucoma increases with age. Usually glaucoma does not cause symptoms so it is important to get your eyes examined every two years, or every year if you have any existing eye disease or family history of glaucoma.

PROBLEMS WITH THE BRAIN

Problems with the brain, such as stroke and tumours, can result in vision complications.

WHAT CAN YOU DO TO LOOK AFTER YOUR VISION?

- It is not inevitable to lose the ability to see clearly as you get older. It is possible to prevent or treat 80% of cases of vision loss
- Many people are blind because they cannot access affordable, good quality eye care
- There are new ways to prevent, detect and treat visual impairment
- When you can see well it helps you to be mobile, independent and to take part in your family and community
- Being able to see well helps you to feel good
- Smoking increases the risk of vision loss, as well as many other health problems. If you smoke, try to stop. It is difficult to stop smoking, but if two or more club members try to stop together they can help each other to be strong. Never smoke near other people or children
- Drinking a lot of alcohol can also cause vision loss, as well as many other problems. Again, club members can help each other to stop or limit drinking
- Smoke from the cooking fire may increase the risk of cataract, as well as lung and heart problems. Make sure that the cooking area is well ventilated, for example, make sure that the kitchen chimney works. If you do not have a chimney get help from the club to build one
- Try to get some physical exercise each day. Many elders get exercise through their work. But if you don't, see if there are other club members who would like to exercise together – going for a walk, dancing or playing a game. Physical exercise has many benefits. One benefit is preventing diabetes
- Have a health check once a year to check your vision and to test for high blood pressure and diabetes
- It is important to have an eye examination every two years, or every year if you have any existing disease such as diabetes, high blood pressure, history of cataract or family history of glaucoma
- Having your vision checked as part of an eye examination is not painful
- Spending on eye health (for example, for transport to the Eye Unit or for glasses) is an investment and will save you and your family money
- Many older people are scared of having cataract surgery. But cataract surgery is quick and effective and it is not painful. Talk to family or friends who have had cataract surgery
- If you are feeling scared arrange to take a family member, a friend, or a club member with you when you go to the hospital for the surgery
This document was written by Dr Wendy Holmes (Better Vision, Healthy Ageing Program) with Dr Raheema Ruhulla (Vision 2020 Programme), and edited by Kelly Durrant (Burnet Institute) and Rachel Coghlan (The Fred Hollows Foundation).

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