Your eyes and your health patient education of ten common diseases Powerpoint presentation

Harpinder S. Gill
Pacific University

Xiaodong Wang
Pacific University

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Powerpoint presentation

Abstract
Many patients are affected by a vast number of ocular diseases and refractive conditions. Some of the most common eye conditions that readily affect the population are discussed here which include Glaucoma, ARMD, Cataracts, Presbyopia, Diabetes, Amblyopia, Myopia, Hyperopia, Astigmatism, and Strabismus. During the patient education component of an eye exam many individuals benefit from both verbal and visual aids for enhanced comprehension. With the development of modem technology, many patients look towards computers for information. The power-point presentations given here will allow patients to take advantage of that avenue. The power-point presentations use layman's terms to describe the eye diseases and refractive conditions, give their signs and symptoms, treatment options, outcomes, and prevention modalities.

PROBLEM STATEMENT Many times a patient comes in to have a routine eye exam and is diagnosed with one of the above ocular diseases or refractive conditions. Much of the explanation provided by the practitioner is done so with complex medical terms which are too difficult for the patient to understand. Furthermore, the patient can be in a state of shock such that they do not process a vast majority of what the practitioner is saying. At best the patient will remember about ten percent of what the practitioner told him or her. At the most a patient may receive some written literature from the practitioner to read at their leisure. Often this material is too complicated for the patient to understand and is quickly forgotten or is not available at all. Patient education is a vital component to managed care that should not be taken lightly. It can be the deciding factor that determines how successful the practitioner's treatment plan will be. How aggressive a doctor's patient education is will also determine the likely hood of the patient returning for future care which is crucial to the ultimate well being of the patient. In many practices a high volume of patients are seen and consequently patient education has taken a secondary role. Furthermore, a rigorous yet simple education tool can ensure quality and consistency of patient education in a multiple and fast-paced doctor practice, thus bringing patient education back to a primary setting.

SOLUTION Power-point presentations were developed that describe some of the most common eye conditions. These presentations focus on a brief description of the condition, signs, symptoms, management plans, treatment options, and things to do for prevention. The power-points were developed in simple-to-understand language for everyone to use. These presentations contain many pictures and can easily be used on a laptop computer during the patient education portion of the exam. The presentations can also be printed out to give to the patient to take home at the end of the exam. In the pages to come you will see a printed version of all the power-point presentations.

Degree Type
Thesis

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YOUR EYES AND YOUR HEALTH
PATIENT EDUCATION OF TEN COMMON DISEASES
POWERPOINT PRESENTATION

By

HARPDINDER S. GILL
XIAODONG WANG

A thesis submitted to the faculty of the
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Advisor:
Elizabeth Peake O.D.
AUTHOR: HARPINDER S. GILL, B.Sc.

AUTHOR: XIAODONG WANG

ADVISOR: ELIZABETH PEAKE O.D.
YOUR EYES AND YOUR HEALTH
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Harpinder S. Gill, B.Sc

Xiaodong Wang

Elizabeth Peake O.D.
Thesis Advisor
Biography

Harpinder S. Gill, B.Sc.

Harpinder is a fourth year Optometry student at Pacific University and will graduate in May 2004. Harpinder’s undergraduate degree is in Cell Biology and Genetics with a minor in Arts specializing in Psychology. Harpinder plans to go on in his studies to medical school while working as an associate optometrist for a private practice.

Xiaodong Wang,

Xiaodong is a fourth year optometry student at Pacific University and will graduate in May 2004. He earned a M.D. degree from Shandong Medical University in China. He won several awards including Toronto General Hospital Fellowship Award, Lions Club Scholarship Award, Kounan Asian Fellowship Award and Rotary Scholarship Award. He plans on having a primary care private practice.
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ABSTRACT

Many patients are affected by a vast number of ocular diseases and refractive conditions. Some of the most common eye conditions that readily affect the population are discussed here which include Glaucoma, ARMD, Cataracts, Presbyopia, Diabetes, Amblyopia, Myopia, Hyperopia, Astigmatism, and Strabismus. During the patient education component of an eye exam many individuals benefit from both verbal and visual aids for enhanced comprehension. With the development of modern technology, many patients look towards computers for information. The power-point presentations given here will allow patients to take advantage of that avenue. The power-point presentations use layman’s terms to describe the eye diseases and refractive conditions, give their signs and symptoms, treatment options, outcomes, and prevention modalities.

PROBLEM STATEMENT

Many times a patient comes in to have a routine eye exam and is diagnosed with one of the above ocular diseases or refractive conditions. Much of the explanation provided by the practitioner is done so with complex medical terms which are too difficult for the patient to understand. Furthermore, the patient can be in a state of shock such that they do not process a vast majority of what the practitioner is saying. At best the patient will remember about ten percent of what the practitioner told him or her. At the most a patient may receive some written literature from the practitioner to read at their leisure. Often this material is too complicated for the patient to understand and is quickly forgotten or is not available at all.

Patient education is a vital component to managed care that should not be taken lightly. It can be the deciding factor that determines how successful the practitioner's treatment plan will be. How aggressive a doctor's patient education is will also determine the likelihood of the patient returning for future care which is crucial to the ultimate well being of the patient. In many practices a high volume of patients are seen and consequently patient education has taken a secondary role. Furthermore, a rigorous yet simple education tool can ensure quality and consistency of patient education in a multiple and fast-paced doctor practice, thus bringing patient education back to a primary setting.

SOLUTION

Power-point presentations were developed that describe some of the most common eye conditions. These presentations focus on a brief description of the condition, signs, symptoms, management plans, treatment options, and things to do for prevention. The power-points were developed in simple-to-understand language for everyone to use. These presentations contain many pictures and can easily be used on a laptop computer during the patient education portion of the exam. The presentations can also be printed out to give to the patient to take home at the end of the exam. In the pages to come you will see a printed version of all the power-point presentations.
What is myopia?
- Known more commonly as "near-sightedness"
- A disorder in which incoming light focuses at front of retina, like distance vision is normal, but near vision is poor.
- Very common condition; approximately 25% of population is myopic in United States.

What causes myopia
- Both hereditary conditions and environmental factors could cause myopia.
- Improper reading habits are probably the most common cause, i.e., holding reading material closer than 40 cm for extended periods of time.

Signs and Symptoms
- Blurred vision of distant objects
- Squinting
- Eyestrain
- Headaches
- General eye discomfort with distance viewing

Risk factors for developing myopia
- Family history
- Prolonged close-up work
- Working with small objects, for example jewelry, watches, etc.
- Excessive computer use
Astigmatism
What is astigmatism?
- A vision condition in which incoming light cannot be brought to a single focus, resulting in blurry vision at all distances.
- Astigmatism is very common and often occurs in conjunction with nearsightedness and farsightedness.

Why does astigmatism occur?
- Typically, astigmatism is caused by the front and back surfaces of the eye being different shapes, which allows light to focus improperly on the back of the eye (retina).
- May be hereditary.
- Mechanical pressure or KDE swellings and eye infections can cause astigmatism.
- Corneal scars and other eye diseases may also be contributing factors.

Signs and Symptoms
- Blurred or distorted vision at all distances
- Headaches
- Fatigue
- Glowing images or faint overlapping second images
- Starbursts
- Squinting
- Eye irritation and discomfort

How is astigmatism diagnosed
- School vision screenings are often not enough
- A visit to the eye doctor is necessary if you suffer any symptoms and signs
- Astigmatism is usually measured with a routine refraction.
How is astigmatism treated

- Eyeglasses
- Contact lenses
- Orthokeratology
- Refractive surgeries
- Yearly eye exams are recommended to monitor progress
Amblyopia
What is amblyopia?

- Amblyopia is vision loss that can not be corrected by glasses with no apparent structural abnormality seen to explain it.
- "Lazy eye" is a common non-medical term used to describe amblyopia because the amblyopic eye doesn't seem to be doing its job of seeing.
- Amblyopia is a very common cause of impaired vision in children, affecting approximately 2-4% of the population.

Common causes

- "Eye turns" could cause amblyopia: the two eyes are looking in two different directions at the same time. The brain is sent two different images and this causes confusion. Image from the misaligned eye is turned off to avoid double vision.
- A difference of prescriptions between the two eyes could cause amblyopia if the brain can't process the two dissimilar images, the brain will suppress the blurrier image, causing the eye to become amblyopic.

Common causes cont..

- Any ocular disease that blocks the visual images from reaching the back of the eye (retina) can cause amblyopia. Examples include congenital cataract (clouding of the lens), corneal opacities (from part of eye opacities) or pposis (the dropping of the upper eyelid).
- Nutritional deficiencies or chemical toxicity may result in amblyopia. Alcohol, tobacco, or a deficiency in the B vitamins may result in toxic amblyopia.
- Amblyopia can run in families.

Signs and Symptoms

- Unless an obvious abnormality is present (e.g. crossed eyes) the amblyopic individual generally will have no obvious signs.
- Poor vision in one or both eyes
- Squinting or closing one eye while reading or watching television
- Turning or tilting the head when looking at an object.
Why should you try to “correct” amblyopia

- Amblyopia can be considered a “handicap” because it can limit the types of work and leisure activities you can do.
- In addition, should your “good eye” become injured or develop vision problems, you may have difficulty maintaining your normal activities.
- Because of safety concerns, your eye doctor may recommend polycarbonate lens material to protect your good eye.

How is amblyopia diagnosed

- A comprehensive eye examination by your eye doctor can determine the presence of amblyopia.
- The earlier it is diagnosed, the greater the chance for a complete recovery.
- Since the individual is generally unaware of the condition, early comprehensive eye exams are highly recommended for every child.

How is amblyopia treated

- The key to successful treatment of amblyopia is early detection.
- Because there are several causes of amblyopia, the treatments must match the cause.
- Glasses are often used to help amblyopic patients.
- Vision therapy (eye exercises)
- Surgery may be needed to correct underlying causes; however, surgery itself can’t correct amblyopia.

Vision therapy

- Can be a crucial component for successful treatment.
- Patching the “good eye” will force the amblyopic eye to work.
- Different eye activities and therapies used according to different conditions.
How do I find out if I am a myope?

- Go to the eye doctor if you experience any of the mentioned signs and symptoms.
- Make sure children are examined at high risk ages, 8 years old and every 2 years thereafter.
- Although it is relatively rare, high myopia could potentially lead to very serious complications, such as retinal detachment, macular degeneration, and glaucoma, so regular eye health examinations are very important and necessary.

Treatment Options for Myopia

- Eyeglasses
- Contact lenses
- Orthokeratology
- Refractive surgeries
- Vision therapy

Something you can do to slow down myopia

- Avoid prolonged periods of reading or viewing, or take frequent breaks when doing such work.
- Eyeglasses or contact lenses are prescribed for driving, working in an office, or TV.
- Special stress-reducing lenses called "plus lenses" and vision therapy (eye training) have been shown useful in reducing the chance of developing stress-related myopia.
Prognosis

- Usually very good if detected early.
- The success of antibiotic treatment largely depends upon the motivation of parents and the cooperation of the staff.
- Patients must understand the importance of the treatment and continue compliance with the antibiotic program.
- Other factors that determine the success of treatment are the severity of the child's disease, the site at which treatment is started, and other complicating factors such as a concurrent eye disease.
Strabismus
**What is strabismus?**

- Strabismus is a visual disorder where the eyes are misaligned (turning inward, outward, or downward) and point in different directions.
- This misalignment may be constantly present or it may come and go.
- Sometimes, only one eye may be affected while the other eye is directed straight ahead.

**Description**

- Strabismus can occur at any age, but it is a common condition in children. Strabismus occurs in 2-5% of all children. About half of strabismus children are born with the condition.
- Strabismus is equally common in boys and girls.
- Strabismus can sometimes run in families.

**Common types of strabismus**

- Eyes turning in: this is often referred to as "crossed eyes".
- Eyes turning out: this is also often referred to as "divergent eyes".
- Eyes turning up or down: meaning the eyes are out of alignment vertically.

**Infantile esotropia (eyes turning in)**

- Unknown cause, however it appears to be an inherited condition.
- Half of all cases of esotropia fall into the infantile category, and this condition usually becomes obvious by about six months of age.
- In infantile esotropia, the infant can develop a lazy eye without early treatment.
Accommodative esotropia

- Another common type of "eye turn" in children
- Hyperfusive children have to overwork their focusing system when looking at a near target, sometimes the eyes turn in as a result.
- Usually can be successfully treated by glasses.

What causes strabismus?

- Strabismus results from failure of the eye muscles to work together.
- The brain controls the eye muscles, so there appears to be a higher incidence of strabismus in children with disorders that affect the brain, such as cerebral palsy.
- Strabismus may also occur later in life as a result of an illness, cataracts (blurred, Kanak), or eye injury.

Signs and Symptoms

- Holding the book or object unusually close
- Closing one eye or covering an eye with a hand
- Twisting or tilting the head toward the book or object in order to favor one eye
- Frequently losing place when reading
- Using a finger to read
- Rubbing eyes during or after short periods of reading

Your child frequently complains of:

- Only being able to read for short periods of time
- Headaches or eyestrain
- Nausea or dizziness
- Motion sickness
- Double vision
Catch visual problems early!

- Early detection greatly increases the chances of successful rehabilitation.
- This is why children should be examined by an eye doctor during infancy and preschool years to detect potential problems.
- Because it is often a hereditary condition, an early eye exam is of particular importance if any member of the family has had strabismus.

Appearances can be misleading

- A child may appear to have a turned eye, however, this appearance may actually be due to individual anatomical differences.

The goals of treating strabismus are:

- Preserving vision
- Straightening the eyes
- Restoring binocular (two-eye) vision
- Detecting and treating any underlying eye problems

Common treatments

- Glasses
- Patching
- Medication injected into an overactive eye muscle to straighten the eye
- Vision-therapy (eye exercises) to gain better binocularity
- Surgery to tighten, relax, or reposition eye muscles
What is hyperopia?
- A medical term for being "farsighted"
- A condition in which the incoming light focuses behind the eye
- Hyperopes see better in the distance than at near

Facts about hyperopia
- Approximately 25% of population is farsighted
- Often inherited
- More common in young children
- High amount of hyperopia could cause eye turns or lazy eyes and could possibly affect self-esteem

Signs and Symptoms
- Working extra hard to focus on near objects
- Difficulty maintaining focus
- Blurred vision
- Eyestrain
- Headaches
- Tiredness

Hyperopia & School Performance
- Hyperopia is very common in young children
- Hyperopic children tend to have more difficulties in school as compared to other children
How is hyperopia diagnosed

- School vision screenings often fail to diagnose hyperopia
- Go to the eye doctor if you suffer any symptoms or signs or if you suspect your child has this condition

If I see all right why do I need glasses?

- Hyperopia does not always cause blurred vision, it may cause eye strain and or an eye turn
- Hyperopia is correlated with ocular fatigue and learning disorders
- Glasses should be prescribed to take a "load" off the eyes

Treatment Options for Hyperopia

- Eyeglasses
- Contact lenses
- Refractive surgeries:
Presbyopia
What is presbyopia?

- Presbyopia is a natural aging process that affects the eye's focusing system.
- The eye's lens becomes less able to accommodate near vision.
- The lens becomes less flexible and age-related changes occur.
- Presbyopia is not a disease, but a natural part of aging.
- Symptoms begin around age 40.

What causes presbyopia?

- Age-related changes occur within the proteins of the lens, making the lens stiffer and less elastic.
- Age-related weakness of the ciliary muscles that help control the focusing ability of the lens decreases the eyes focusing.

Signs and symptoms of presbyopia?

- Commonly known as the "short arm syndrome".
- Fine print is held further away to read.
- Difficulty seeing clearly for close work.
- Text seems to have less contrast.
- Increased light required for reading.
- Fatigue and eyestrain when reading.

How is presbyopia detected and treated?

- A thorough testing of your near vision ability by an eye doctor will determine if presbyopia is present.
- The most common treatment includes glasses with bifocals or progressive addition lenses (PALS).
Bifocal glasses have the larger top lens for distance and the smaller bottom lens for near vision.

Other treatments include monovision, in which one eye is adjusted for distance vision and the other for near vision. This is used for contact lenses.

Can also use trifocals and contact lenses, and two pairs of glasses one for distance and one for near vision.

Some quick facts about presbyopia:

- Presbyopia is not a disease and can't be prevented since it is a normal aging process.
- Presbyopia will gradually increase as the presbyopic power increases and stabilize around age 40.
- After adjusting to your new glasses, presbyopia will most likely not have an effect on your lifestyle.
**What is the macula?**
- The center of the light-sensitive tissue layer at the back of the eye (retina)
- Contains cells that give macular and fine, sharp detail aspects of central vision that are necessary for activities like reading and driving

**What is ARMD?**
- Loss of vision in the central part of the retina
- Damage to blood vessels causes macular degeneration
- Dry Macular Degeneration
  - 90% of cases
  - Occurs in the eye that you can get in older eyes
  - Slow loss of light-sensitive cells in macula
  - Results in less severe and gradual loss of central vision
- Wet Macular Degeneration
  - Accounts for 10% of all cases
  - Responsible for 90% of severe central vision loss
  - Causes the blood vessels to leak, fluid builds up, and vision is affected
  - The weak blood vessels are trying to provide oxygen and nutrients to the affected macula

**Types of ARMD?**
Who is at risk for ARMD?
- Risk increases significantly with:
  - Age
  - Women more than men
  - Family History
  - Aortic atherosclerosis
  - Postmenopausal women on HRT (hormone replacement therapy)
  - High cholesterol
  - Sun exposure

Signs and Symptoms of ARMD?
- No pain for early form of ARMD
- Spot of blood vessel or pigment spot near fovea or in the vitreous gel
- Macular edema, sometimes painless and unnoticed
- Difficulty doing tasks that require good vision, such as reading or threading a needle
- Faint, wavy, or distorted vision

How is ARMD detected?
- An ophthalmologist will perform the following tests:
  - Visual Acuity: Tests the eye's ability to see objects at a distance.
  - Visual Fields: Tests the eye's ability to see objects at different angles.
  - Fluorescein Angiography: Examines blood vessels and tissue activity in the macula to detect any abnormality.
- An OCT scan will show a specific pattern that indicates ARMD.
- A visual field test will show a loss of central vision.
- A fundus photograph will show the back of the eye.
**How to do the Amsler Grid?**

- Hold the Amsler chart at arm's length and focus on the grid lines.
- Close one eye or use a pencil with the other eye.
- Trace the grid lines with the pencil, aiming for the center of the chart.
- Look at the grid for any distortions or blurriness.

**Normal**

**ARMD**

**How is ARMD treated?**

- **Symptoms:**
  - Visual blurring or distortion
  -.: yellow spot in the center of your vision
- **Treatment Options:**
  - Laser therapy to improve vision
  - Medical therapy to slow the progression
- **Preventive Measures:**
  - Quit smoking
  - Maintain healthy blood pressure
  - Eat a balanced diet

**What can you do to protect your vision?**

- Stop smoking
- Control high blood pressure
- Wear sunglasses that block UV and blue light
- Consume low saturated fats and more fruits and leafy green vegetables
- Get plenty of cardiovascular exercise
Diabetes

Normal

Diabetic Retinopathy
What is Diabetes?

- Glucose is the main energy source for cells and requires insulin to enter the cells.
- When a person can't make insulin or can't properly use insulin then glucose builds up in the bloodstream.
- High levels of glucose in the blood or urine lead to diagnosis of diabetes.

- Type 1 (insulin dependent) diabetes occurs in children and young adults (<30 y.o.)
- In type 1 diabetes the body produces little or no insulin and daily insulin injections are required.

Who is at risk for Diabetes?

- Individuals with a family history (i.e., parents, siblings, grandparents)
- Women with unexplained miscarriages (babies who have died before being born or are born at a very low birth weight)
- African Americans, Hispanics, Native Alaskan Americans
- Individuals with high blood pressure and high cholesterol
- Individuals who are obese
- Individuals over age 65
What is Diabetic Retinopathy?

- 90% of diabetics have some form of the disease present in the eye over their lifetime.
- As a result of high blood sugar, some blood vessels become weak and start to leak nutrients, fluid, and blood.

What is Diabetic Retinopathy?

- Early stages of DR with small, leaky blood vessels.
- Weak blood vessels leak fat, protein, or blood.
- The fat and protein form deposits.
- Fluid build-up in macula can cause blurred vision.

- Vision is usually not seriously affected in this stage.
- However, diabetic retinopathy can progress into a more serious type called proliferative retinopathy.
What is Proliferative Diabetic Retinopathy?

- Advanced stages of the disease affecting 5% of all diabetics
- New abnormal blood vessels grow over the retina
- These weak blood vessels can leak blood into the vitreous causing impaired vision
- If left untreated it may lead to blindness

Signs and Symptoms?

- Most often no external signs such as red eyes, discharge or bleeding are present
- Changes occur inside the eye involving the retina
- Vision may become blurry
- Possibly no signs or symptoms in early stages of diabetic retinopathy

How is Diabetic Retinopathy monitored?

- Bleeding occurs in PR causing blurry vision or complete loss
- Retinal pulling causes distortion and blurred vision
- However, possibly no symptoms if changes occur in the outer retina

- Instruments and dilation drops are used to magnify the structures of the eye
- Fluorescein angiography, where a dye is injected into the body and tracked by taking a series of photos to determine the extent of vessel leakage
- The doctor looks for leaky blood vessels, retinal swelling, fatty deposits, damaged nerve tissue and bleeding
How is Diabetic Retinopathy treated?

- Treatment begins with you!
- Properly managed diabetes will possibly minimize any vision loss.
- An eye exam is required every year if not sooner as deemed necessary by your eye doctor.
- If DVA affects central vision then laser treatment may be needed.

Laser treatments can help decrease leaky blood vessels.
Laser treatments do not cure the retinopathy and are not intended to improve vision.
The goal of laser treatment is to prevent progression.

Importance of Prevention

- Type 1 should have a dilated eye exam every year starting five years after diabetes is diagnosed.
- Type II should have an exam at diagnosis and yearly.
- Limit sweet and fatty foods, and get exercise.
- Consider working with a nutritionist. Ask your family doctor for a referral.
Cataract
**What is the lens of the eye?**

- Clear structure of the eye that focuses incoming light onto the retina for a clear, sharp image.

**What is a cataract?**

- Cloudy or opaque lens due to deposits of protein.
- As the cataract grows, the clarity may affect only a small part of the lens.
- Over time, the cataract may grow and cloud more of the lens, making it harder to see.
- Less light reaches retina and causes vision to become dull and blurry.
- Cataracts can occur in one eye or both eyes and may develop in both eyes.

**What causes a cataract?**

- Commonly related to normal aging process.
- Most commonly seen in people age 65+.
- Exact cause is unknown.
- Possible causes include exposure to sunlight, smoking, diabetes.

**What are the symptoms?**

- Decreased or blurry vision.
- Circles or halos around lights.
- Foggy or hazy vision.
- Double vision is possible.
- Frequent changes in eyeglasses and contact lenses.
**Types of Cataract?**

- **Age-related cataract**: The most common type; starts in older people
- **Traumatic cataract**: Develops in people who have had eye injuries
- **Secondary cataract**: Develop in people who have had eye surgeries
- **Congenital cataract**: Present at birth, usually occur in both eyes and may need to be removed

**How is a cataract found?**

- The eye doctor tests your vision with an eye chart
- The eye doctor may use eye drops to widen the pupil to get a better view of the lens
- The eye doctor will look for any changes in the lens

**How is a cataract treated?**

- For an early stage cataract, the use of different eyeglasses, magnifying glasses, and stronger lighting may be sufficient
- If the cataract is interfering with daily activities, then the lens may be removed surgically
- Wearing appropriate eyeglasses will not harm your eye
- Decreased modifications or medications will not stop cataract formation
- Your eye doctor may refer you to a specialist if the cataract is compromising your safety or if you feel it is interfering with your daily living

**What is cataract surgery?**

- Most common operation performed in U.S.
- High success rate for improved vision
- The cloudy lens is removed and replaced with a clear plastic artificial lens
- Usually, eyeglasses are still used after the surgery for clear distance and near viewing
- Most people can go home the same day
Important things to remember

- It is very important that you see your eye doctor for a yearly routine eye exam.
- It is crucial that you comply with the doctor's treatment plan as advised.
- Continued care with your practitioner will likely ensure safer and healthier vision.
Glaucoma
What is Glaucoma?
- One of the leading causes of blindness
- Can occur at any age, but risk increases dramatically after age 35
- Glaucoma is a series of diseases which damage the eye's optic nerve and can lead to blindness without any symptoms
- Commonly characterized by an increase in fluid (aqueous) in the eye leading to vision loss

Who is at risk for Glaucoma?
- Anyone can get glaucoma, but the following people are at higher risk:
  - African Americans over age 40
  - Everyone over age 60
  - Those with a family history of glaucoma
  - People with Diabetes
  - Those who have had previous eye surgery or detached retina

What causes Glaucoma?
- Normally, a filtering fluid (aqueous) fills the front chamber of the eye, which is constantly drained through the eye's drainage system.
- The fluid leaves the eye through a drainage system and enters the blood stream.
- An overproduction of the fluid at the drainage system results in fluid buildup and pressure, leading to damage of the optic nerve.
- The increase in pressure causes damage to the optic nerve, resulting in permanent vision loss.

What are the symptoms?
- At first, there are no symptoms and vision remains relatively normal.
- As the disease progresses, the person will notice a decline in side vision with uncorrected vision remaining normal.
- As the disease progresses, the field of vision will shrink and blind spots may result.
- In the late stages, the central vision becomes affected, and moderate to severe difficulty with night vision may occur.
Types of Glaucoma?

- **Primary Open-Angle Glaucoma**
  - A slow, steady rise in eye pressure due to excess fluid in the eye.
  - Pressure rises due to increased resistance of the eye's drainage channels.
  - Most common type of glaucoma.
  - More common in people over 40.

- **Angle-Closed Angle Glaucoma**
  - An acute attack of pressure on the eye due to a severe blockage of the eye's drainage channels.
  - Can lead to severe damage to the eye quickly.
  - Blocks the outer drainage channels.

- **Secondary Glaucoma**
  - Pressure can be caused by eye inflammation, injury, or certain types of eye surgery.
  - Pressure can also be caused by other eye diseases.

- **Congenital Glaucoma**
  - Pressure can also be caused by abnormal development of the eye's drainage channels.
  - Pressure can also be caused by abnormal development of the eye's drainage channels.

How is Glaucoma detected?

- An evaluation for glaucoma is performed annually by an ophthalmologist.
  - Testing includes the measurement of the pressure inside the eye (intraocular pressure).
  - The optic nerve that carries light information from the eye to the brain is examined with an ophthalmoscope.
  - A small mirror is used to look into the eye and check the drainage system for proper flow.
  - Loss of side vision and blind spots are checked with a visual field analyzer.

How is Glaucoma treated?

- Treatments include:
  - Drugs to lower eye pressure.
  - Laser surgery to improve drainage.
  - Surgery to create new drainage channels.
  - A combination of the above treatments.

- Glaucoma is not curable, but it can be controlled with proper treatment.
What can you do to protect your vision?

- Have a dilated eye exam every year.

- Compliance with the proper drop instillation regimen along with routine eye exams are of utmost importance for preserving your vision.

Technique for proper eye drop instillation

- Tilt your head back when holding your chin and hold your eye open with the index finger of one hand.

- Hold the bottom eyelid open with the middle finger of your other hand and instill the drop between your index finger and lower lid.

- Next, look up and gently close your eyes. Gently squeeze the side of your lower lid where the drop was instilled, creating some friction to help the drop glide up.

- Avoid excessive pressure when squeezing the lid.