

**IDENTIFICATION OF VISION IMPAIRMENT IN CONTEXT OF
RPWD ACT 2016****Dr. Jasmer Singh***Assistant Professor, NIEPVD, Dehradun (Uttarakhand)****Purnima Sharma,***Coordinator, NBER-NIEPVD Dehradun***Abstract**

You may have met children with visual impairment in the school, college or any other place where some of the use white cane or sighted guide or move independently. Seeing problems range from total blindness to minor visual problems or refractive errors. A number of terms are used in connection with loss of sight: blindness, partial sight, visual handicap, visual impairment low vision etc. Some people prefer to use the word blind to identify all people with visual impairments. On the other hand, there are those who believe that the word blind should be reserved to identify those with little or no usable vision. It is therefore necessary to understand the specialised terminology in order to define visually impaired who have sight problems.

In a survey conducted by an agency it was found that main problem is to identify the visually impaired on the basis of their functional vision assessment by collecting information about them. Children with visual impairment also have the right to education just as normal children do. Inclusive education strives to address the learning needs of children with visual impairment, with a particular focus on those who are subject to being isolated and excluded. The philosophy behind inclusive education is to promote opportunities for all children to participate, learn and have equal treatment, irrespective of their mental or physical abilities. The awareness on types of visual impairment in schools throughout the country is still at an infancy stage. As a result, the number of children with visual impairment is not included in inclusive education settings due to lack of identifications.

In India, a majority of children with visual impairment do not receive any formal education.



This is because children with visual impairment and learning deficiencies are segregated from mainstream schools and other regular routines and social activities of normal children.

This includes having a balanced curriculum that is appropriate for all categories of children, teachers who have the ability to handle the individual needs within the classroom and thereby promote an environment where personal development, social skills and student participation are strongly encouraged

Key words: *Children with Visual impairment, Blind, Inclusive Education*



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Introduction

Today, there are controversies over whether we can use the term blind or not. Originally, the term blind included all people with impaired eyesight who could not readily meet society's expectations of sighted abilities. With advances in medicine and improved access to rehabilitation and education, more people with various levels of impaired vision are able to equally participate in the mainstream of modern life. Some people prefer to use the word blind to identify all people with visual impairments. On the other hand, there are those who believe that the word blind should be reserved to identify those with little or no usable vision.

The term low vision should be used for people with some usable vision. Some might also suggest that the term visually impaired be designated to cover the entire group of people who are blind and/or having low vision.

Therefore, the term 'visual impairment' includes both blindness and low vision. The blindness and low vision are defined in many ways. They are also classified according to the extent of loss of vision. Based on the functional defect of the vision, some more terms like educationally blind have also emerged.

Meaning and Definition of Visual Impairment

Various terminologies like blindness, partially sighted, legally blind, residual vision, low vision, educationally blind etc., are being used in practice for indicating the visual defects of individuals. But, some of them are put aside in recent times based on some rationale.

Blindness

The American Medical Association (AMA) in 1934 defined the term ***blindness*** as:



“Central visual acuity of 20/200 or less in the better eye with corrective glasses or central visual acuity of more than 20/200 if there is a visual field defect in which the peripheral field is contracted to such an extent that the widest diameter of the visual field subtends an angular distance no greater than 20 degrees in the better eye.”

From the above definition, you can understand the visual acuity 20/200. A person with visual defect can see an object at the distance of 20 feet only whereas the same object can be seen by a person with normal eyesight at the distance of 200 feet. The visual field is restricted to 20 degrees. These measurements are taken only after complete correction of the eye with surgical and corrective glasses.

In India, the Persons with Disabilities Act, 1995 (PWD Act, 1995) includes the following definition for blindness:

Blindness refers to a condition where a person suffers from any of the following conditions, namely:

- Total absence of sight; or
- Visual acuity not exceeding 6/60 or 20/200 (Snellen) in the better eye even with correction lenses; or
- Limitation of the field of vision subtending an angle of 20 degree or worse.

Partially Sighted/Seeing

The National Society for the Prevention of Blindness Fact Book (1966), US, adopted the term partially seeing.

*The **partially seeing** is defined as person with a visual acuity greater than 20/200 but not greater than 20/70 in the better eye with correction.*

Bourgeault (1969), a US Special Educationist, defined “partially seeing” as follows.

For educational purposes, one who has visual acuity of 6/21 (20/70) or less in the better eye after the best possible correction, and who can use vision for most learning.

Therefore, a person with visual acuity of 6/21 (in meter) or 20/70 (in feet) is considered as partially seeing person.

Legally Blind

A person who has central visual acuity of 6/60 (20/200) in the better eye after correction is known as a legally blind person.



The formerly used classification of visually handicapped children had two categories, namely, 1) the *partially sighted* who has a vision of 20/70 to 20/200, and 2) the *legally blind* who has a vision of 20/200 and less.

These categories became less acceptable. A significantly larger percentage of the “legally blind” learned to use their residual vision and could read print.

Residual Vision

The classification of legal blindness helps a person to get certain services and financial benefits in India. However, a person who is legally blind can still have useful vision to do certain tasks. Around 80 per cent of children who are blind can see something, even though their vision is very much restricted (Webster & Roe, 1998). This refers to the fact that they still have functional vision, which is the use of vision for a particular purpose.

Therefore, Residual vision is defined as “*a small amount of vision remains after the incidence of blindness which would be useful for certain activities like identification of light and mobility.*”

The functional development of remaining vision is enforced for the optimum use of vision. The definition of residual vision has not quantified the amount of visual loss.

This term is generally used for a person who has limited vision. Thus, this residual vision is included in the broader term ‘Low Vision’.

What is low vision?

As indicated above Low vision is a term used to describe varying degrees of vision loss, but not total blindness. It may be caused by disease, trauma or a congenital disorder. Vision loss may be described in terms of:

- Decreased visual acuities - (can identify only larger sized objects at a specific distance).
- Visual field defects (contraction of the visual area seen, or defects within the normal span of vision).
- Decreased contrast sensitivity (reduced ability to discriminate an object against a similarly - coloured background).
- Loss of colour perception or commonly two or more of the above mentioned forms.

Vision assessment is an important part of the medical care of children. Severe visual abnormalities, for example, cataracts (a clouding that develops in the crystalline lens of the eye



obstructing the passage of light) strabismus (squinteyes preventing proper binocular vision) etc. that are not treated in the first few months or years of life can lead to the development of amblyopia or lazy eye. Let us review the development of the visual system in infants and children.

Low Vision

Various definitions of Low vision were given below for better understanding of the meaning of low vision.

The Persons with Disabilities Act, 1995 (PWD Act, 1995) has also included low vision as a separate category and defined it as follows:

“Person with Low Vision” means a person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is potentially capable of using vision for the planning or execution of a task with appropriate assistive devices.”

This definition doesn't provide quantification of the visual acuity and visual field. It is desirable to include the quantification in the definition of low vision as given below.

“Low vision are those who possess visual acuity between 20/200 and 70/200 (Snellen) or less than 6/18 to light perception in the better eye after the best possible correction or visual field between 10 and 20 degrees.”

The World Health Organisation (1992) defines 'Low Vision' as *“a person with low vision is one who has impairment of visual functioning even after treatment and/or standard refractive correction, and has a visual acuity of less than 6/18 to light perception or a visual field of less than 10 degrees from the point of fixation, but who uses, or is potentially able to use vision for the planning or execution of a task.”*

Jose (1992) describes low vision as: *“a vision loss that is severe enough to interfere with the ability to perform everyday tasks, or activities and that cannot be corrected to normal by conventional eyeglasses or corrective lenses.”*

Corn and Koenig (1996) define a person with low vision as *“a person who has difficulty accomplishing visual tasks, even with prescribed corrective lenses, but who can enhance his or her ability to accomplish these tasks with the use of compensatory visual strategies, low vision and other devices, and environmental modifications.”*



Educationally Blind

Individuals who are educationally blind have no functional vision for learning and primarily use Braille, audio and tactile aids in their learning.

“Educationally blind is defined as “a person who cannot make use of his/her vision for the educational purposes such as reading and writing.

This person relies mostly on the senses of hearing and touch. Braille, tactile materials and audio recorded materials are of use for the learning.

Most of the educationally blind have some residual vision which may be used for mobility.”

For educational purposes, children with visual impairment are categorized three ways as follows:

- *I category:* Visual defects of children can be corrected through medical treatment or optical aids. Such children are not regarded as exceptional or handicapped. They can be educated without modification of school practices.
- *II category:* Children have quite defective vision even after correction. They have difficulty in the regular classes. They need instructional compensations for their defects. They utilize their eyes in learning, but to a lesser degree than does the child with normal vision. They are referred to as “visually impaired children.” Since they can use their vision in learning, they are not considered blind.
- *III category:* Children have blindness. These children require instruction primarily through other senses.

Persons with Deaf blindness

Deaf blindness is a condition presenting other difficulties than those caused by deafness and blindness. It is an “umbrella” term which can include children and adults who may suffer from varying degrees of visual and hearing impairment, perhaps combined with learning difficulties and physical disabilities, which can cause:

- severe communication
- developmental, and
- educational problems.

Major Causes of Visual Impairment

These are the conditions which contribute to the impairments of the eye structures and tissue.



Whether such impairment leads to limitations in visual functioning, however, depends upon such factors as: etiology and severity of tissue damage, Age of individual at the time the problem occurred etc.

NSSO Survey : The NSSO Survey (1992) establishes that the old-age and cataract are the major causes of visual impairment:

(Distribution per 1,000)

S.N.	Cause of Visual Impairment	Distribution per 1,000	
		(Rural)	(Urban)
1.	Old age	273	214
2.	Cataract	236	280
3.	Other eye diseases	130	107
4.	Injuring other than burns	32	35
5.	Glaucoma	34	42
6.	Smallpox	29	35
7.	Severe diarrhoea	11	13
8.	Not known	161	130
9.	Others	94	144

Classification of Causes of Visual Impairment

The simplest classification of causes of visual impairment is:

Ocular Diseases and Anomalies

Diabetes Mellitus: It is a hereditary disorder and affects retina. Also known as diabetic retinopathy and it is common after the diabetes has lasted for 10 years. Due to this, senile cataract develops at an earlier age and more rapidly than usual. It leads to fluctuating vision, loss of colour vision, or visual field, refractive error, decreased visual acuity. It is treated medically, along with dietary control, spectacle correction and laser therapy for retinopathy.

Trachoma: It is a chronic contagious disease of the conjunctiva and cornea caused by an organism chlamydia. The primary infection affects conjunctiva and follicles and corneal involvement causes ulcers. As lid deformities cause misdirected eyelashes, further



complications take place. It can be treated with medication & surgical correction of deformed lids.

Glaucoma: It is caused by an obstruction in aqueous outflow channels at angle of anterior chamber. It also results in the rise in intraocular pressure which is detrimental to the eye. It is usually a hereditary, symptomatic condition.

Cataract: In Latin, word 'cataract' means waterfall that explains appearance of the eye when lens becomes cloudy and opaque. It refers to loss of transparency of the lens due altered physio-chemical processes within tissues. It is usually associated with advanced age. If present at birth, it is referred as congenital cataract.

General and Systemic Diseases, Injuries and Accidents

General and Systemic Diseases: Many general and systemic diseases that effect the vascular and metabolic systems put the eyes at risk. Major diseases which may result into visual impairment are:

Hypertension: Vascular retinopathy is associated with raised blood pressure along with pronounced degenerative changes in the retinal vessels. The circulatory changes lead to development of retinal edema.

Vitamin A Deficiency: Vitamin A is essential for the build up of the surface tissues in our body, including eye. Vitamin A deficiency may lead to corneal damage, ulceration and blindness, particularly in combination with measles or malnutrition.

It is also known as:

Blinding malnutrition

Disease of darkness.

Injuries and Accidents : Injuries, accidents and poisonings account for many known instances of visual impairment among school age groups. Actually, injuries and accidents are not considered a major cause of blindness since technically both eyes would have to be severally affected. The injuries are a major cause of preventable, curable and monocular visual impairment.

Conclusion

The Constitution of India and the Right to Education Act, 2009 & Amendment Act 2012, guarantee the right to education to all children. No child can be denied admission on the



grounds of disability to any school, but the reality of children with disabilities being included in mainstream schools is often challenging. However, it can be done — with the right kind of resources, support and most importantly, the right attitude and climate in the schools. The school should be able to access rehabilitation professionals or special educators. Teachers and special educators must collaborate.

Therefore, the enjoyment of human rights for persons with visual impairment depends not only on the individual abilities but also on the degree of accessibility in the environment of the person. **The inclusion of persons with visual impairment in the mainstream education system should start by adapting and changing the system itself** with the involvement of teachers, persons with disabilities, families, support services and policy-makers. Article 24 of the CRPD challenges not only the schools systems but also refers to all levels of education, including vocational education, training and lifelong learning programmes for young people and adults.

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