

Developmental Disorders in Children

Visual Impairment (VI)



Child Assessment Service

Department of Health

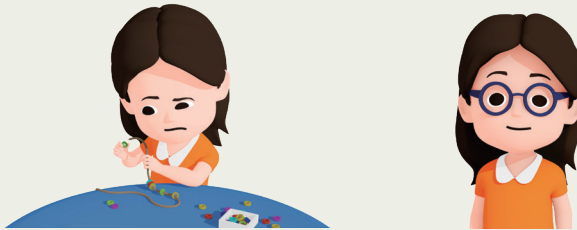
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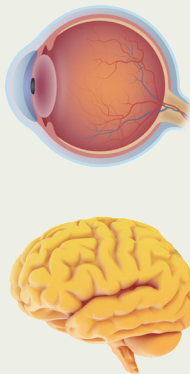
01 What is VI?

Visual Impairment refers to considerable functional loss of vision. Reduced visual acuity and / or visual field constriction make children with VI unable to encompass normal vision, and hence impose impact on their daily life functioning.



02 What causes VI?

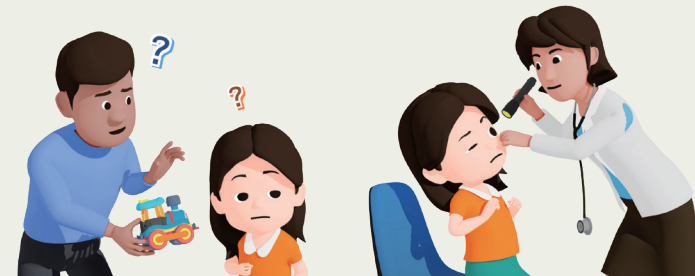
Different causes of VI can be classified into two main categories: Conditions that affect the structure of the eye, such as cataract, glaucoma, retinopathy and albinism; Brain damage, such as injury caused by hypoxia, trauma, bacterial or viral infection, which insulted brain regions responsible for processing and interpreting visual information.

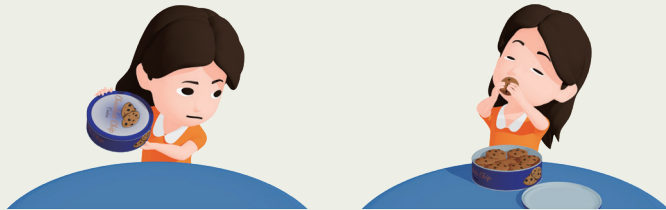


03 How does VI affect children?

Children with VI find objects blurred and they had difficulty distinguishing body parts and facial expressions of others. Therefore, they usually demonstrate inadequate eye contact and may not seem interested even in toys that are relatively large or moving in front of them.

Children with total blindness do not react to bright light by blinking. They may frequently press their eyeballs with their fingers to seek sensory stimulations. Owing to their VI, these children cannot see clearly or even unable to see the surrounding environment. Hence, they tended to be late walkers. In unfamiliar settings, they would worry about running into things or tumble and moved with hesitation. VI imposes direct impact on eye-hand coordination, which causes delay in their fine motor development.





These children often have to rely on other sensory input, including hearing, tactile, olfactory, gustatory, vestibular and proprioceptive senses for information and learning. They usually do not find it comfortable to feel different textures or move around freely, which hamper their daily activities, ability to move around, as well as their future gross and fine motor development.

It is also more difficult for parents to get the attention of children with VI when describing the surroundings. Hence, they are more likely to have language delay. In terms of social development, children with VI are more prone to impaired early interaction with their parents due to their visual problem. In turn, their later establishment of attachment and sense of security would be adversely affected.



04 How to help children with VI?

Early identification and intervention are of utmost importance for children with VI.

For some eye conditions and diseases, vision can be improved by surgical treatment, such as cataract surgery, laser therapy for retinal pathologies, etc.



Moreover, corrective lens and optical assistive devices can also help those with VI to fully utilize their remaining vision.

Apart from medical regimens, the development of children with VI can also be enhanced through training, as well as mastering the body movements that they need. These may enhance their confidence in independent mobility and subsequently equip themselves with “Orientation and Mobility” to cope with everyday life.





05 What is the prognosis of children with VI?

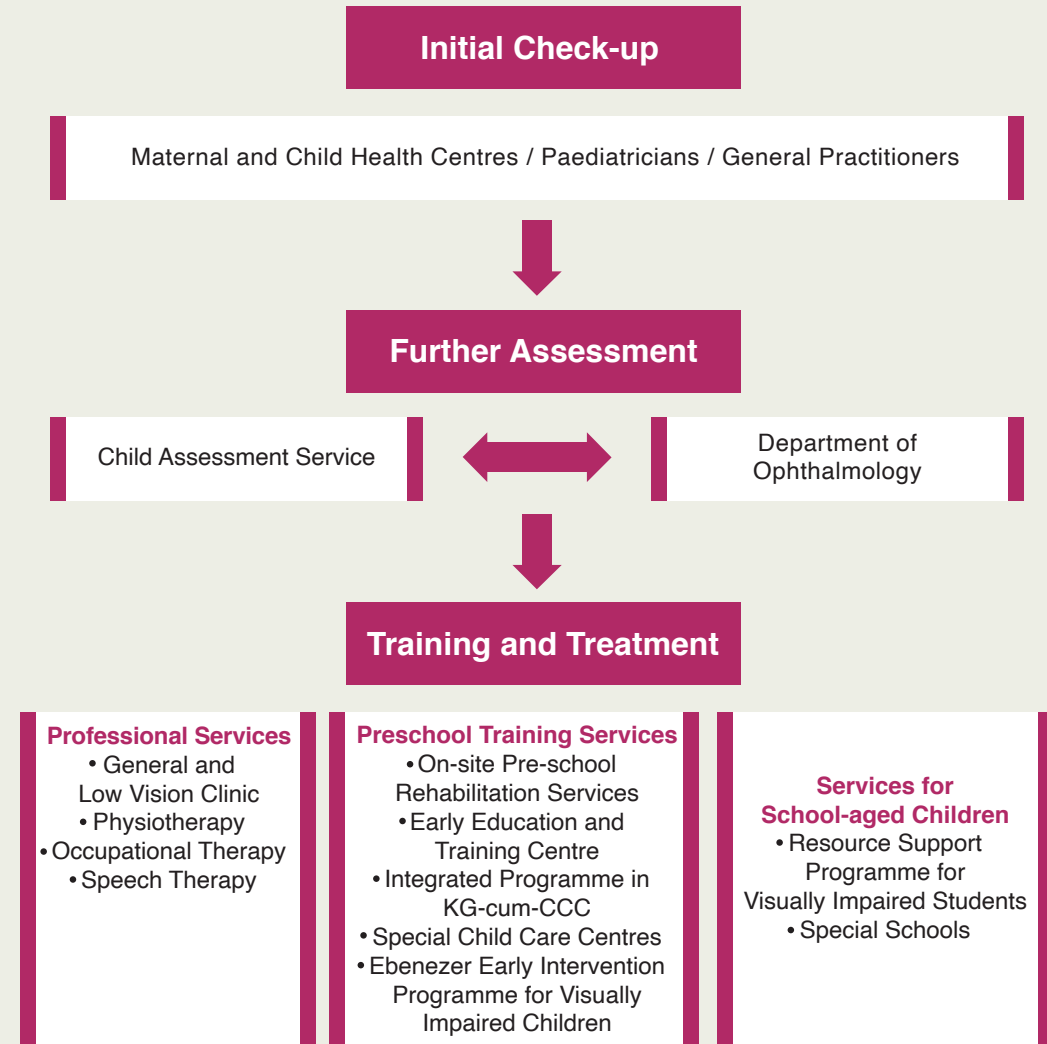
Future vision of children with VI depends on the underlying cause of vision loss and the degree of damage in the visual system. Vision of children with VI caused by degenerative diseases may deteriorate gradually. For instance, Retinitis Pigmentosa would cause continuous constriction of the visual field.



On the contrary, VI due to ocular diseases such as cataract and glaucoma can be improved with early intervention. If VI is caused by brain injury, their visual function may improve with time and regular training.



Referral and Management





Related **Websites**

Education Bureau: Integrated Education and Special Education Information Online

<https://sense.edb.gov.hk/en/index.html>

Ebenezer Early Intervention Programme for Visually Impaired Children

www.ebenezer.org.hk

Hong Kong Blind Union

www.hkbu.org.hk

The Hong Kong Society for the Blind

www.hksb.org.hk

Hong Kong Education City : Inclusion Pavilion

www.hkedcity.net/sen

American Foundation for the Blind

www.afb.org

Canadian National Institute for the Blind

www.cnib.ca/en?region=on

Royal National Institute of Blind People

www.rnib.org.uk

Vision Australia

www.visionaustralia.org.au



FOR more
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