# **Original Research Paper**



# **Ophthalomology**

# COMMUNITY HEALTH OFFICER (CHO) AS PRIMARY EYE CARE PROVIDER AT HEALTH AND WELLNESS CENTRE: A NEW INITIATIVE IN INDIA.

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**ABSTRACT** 

India has around 4.9 million blind people and 32.9 million people with visual impairment. Primary eye care (PEC) is an essential component of the primary health care (PHC) which is responsible for universal eye health coverage and helps in

the prevention of avoidable visual impairment and blindness. In India, Health and Wellness Centres (HWC) now provide an opportunity to provide primary eye care, and strengthen referral networks to eliminate avoidable blindness. At subcentre level (HWC-SC), Community Health Officers (CHO) would be responsible for providing eye care to the community. Sensitization and time to time training and retraining of Community Health Officers followed by monitoring and evaluation of their work by appropriate indicators may enhance the efficiency of HWC-SC in providing eye care in India.

**KEYWORDS:** Primary Eye Care, Health And Wellness Centre, Community Health Officer, Ophthalmic Ailments, Avoidable Blindness.

#### INTRODUCTION

India has around 4.9 million blind people and 32.9 million people with visual impairment (presuming population of India as 136 crores). Refractive error and Cataract are the most common causes of visual impairment in the country. India contributes to 20.5% and 21.9% of world's blind and visually impaired population/ patients respectively. The main causes of blindness are - Cataract (62.6%) Refractive Error (19.70%) Corneal Blindness (0.90%), Glaucoma (5.80%), Surgical Complication (1.20%) Posterior Capsular Opacification (0.90%) Posterior Segment Disorder (4.70%), Others (4.19%) Estimated National Prevalence of Childhood Blindness is 0.80 per thousand.

The National Programme for Control of Blindness (NPCB) was launched in 1976 as a 100% centrally sponsored scheme (now 60:40 in all states and 90:10 in NE States) with the goal of reducing the prevalence of blindness to 0.3% by 2020. The programme has been renamed in the year 2017 as National Programme for Control of Blindness and Visual Impairment (NPCB&VI). Rapid Survey on Avoidable Blindness conducted under NPCB during 2006-07 showed reduction in the prevalence of blindness from 1.1% (2001-02) to 1% (2006-07).

Primary eye care (PEC) is an essential component of the primary health care (PHC) which is responsible for universal eye health coverage and helps in the prevention of avoidable visual impairment and blindness. Integration of PHC into PEC is very important in terms of preventing avoidable visual impairment and increasing access to special education and rehabilitation services in low-middle-income countries. It is an essential building block for the prevention of blindness in all communities and regions of the world. (4) The success of PEC is contingent upon other elements of workforce development, including staff motivation, support and retention. (5)

Eye care professionals alone will never be able to reach everyone in a population, including marginalised groups such as those with disabilities. This means that the integration of eye health into primary health care is essential. In most countries, the majority of the population live within 10 kilometres of a primary care facility. If staff members working in, or attached to, these facilities were adequately trained, and provided with the equipment, medication, educational materials, and any other resources they need, then there is the potential for even the most remote communities to have access to primary eye health care. (6)

In India, Health and Wellness Centres (HWC) now provide an opportunity to provide primary eye care, and strengthen referral networks to eliminate avoidable blindness. At subcentre level (HWC-SC), Community Health Officers (CHO) would be responsible for providing eye care to community and the Medical Officer (MBBS) at the HWC-PHC/UPHC would be responsible for ensuring that eye care services are delivered through all HWCs in her/his area and through the PHC itself. Let us discuss the role of Community Health Officers

(CHO) in management of various ophthalmic ailments and facilitating eye donation at HWC-SC as per Training Manual on Eye Care for Community Health Officer. (7)

# Medicines And Diagnostics At HWC-SC<sup>(8)</sup>

**Essential:** Eye drops Methyl cellulose, Eye drops Sodium Cromoglycate 2%.

**Desirable:** (to be dispensed only on prescription of a registered Medical Practitioner) Eye drops Ciprofloxacin 0.3%, Eye drops Tropicamide 1%.

## Instruments And Equipments At HWC-SC®

**Instruments:** Covered stainless steel tray with sterile cottons/swabs/gloves.

#### **Equipments:**

Illuminated Vision chart (near & distance), Torch (with batteries), Data entry - mechanism (e.g. Registers/tablets/PCs), IEC materials (Flipcharts, Posters & Brochures for common eye conditions).

## Teleconsultation At HWC-SC<sup>(8)</sup>

**Soft ware:** EMR (Electronic Medical Record) as suggested by the MOHFW.

Hardware: Server, Laptop, Webcam, Sound Box and Router.

**Internet connectivity:** In order to transmit a video: Availability of internet connection with minimum bandwidth of 2Mbps and range of 100-500 meters.

#### Role Of Cho In Management Of Various Ophthalmic Ailments<sup>(7)</sup> Cataract

- Screening all individuals suspected by ASHAs with any eye problem.
- Identify cataract in individuals during home visits (even in younger age group).
- Making a list of all Vision Centres/Eye Surgeons in the area.
- Inform the patients that MO at AB-HWC-PHC will provide medical fitness for cataract surgery.
- Linking patients with suspected cataract to the Eye doctor/Eye specialist at higher health centres for further testing and treatment.
- Inform the patients that the Intra Ocular Lens (IOL) insertion of cataract is done free in all Government Institutions.
- Follow up all post-operative cases to ensure that they follow proper eye care post cataract surgery and do not develop any complications.
- Long term follow-up of all cataract cases for vision acuity.
- Supervise the primary healthcare team for conducting health promotion activities and ensure screening of individuals for eye disorders and blindness.
- · Pay special attention to those with diabetes, hypertension or

individuals found at risk after filling Community Based Assessment Checklist (CBAC) by the ASHAs.

Maintenance of records and registers.

#### **Refractive Errors**

- If any adult or child is suspected to have refractive errors, squint or
  presbyopia, must inform the Medical Officer, for further referral of
  the person to nearby health facility where an Ophthalmic Assistant
  or an Eye specialist/Eye doctor is available. Inform and coordinate
  with the RBSK team for further management of the suspected
  child.
- Support the primary healthcare team in convincing resistant community members that require to wear spectacles for correcting their eye problem.
- Encourage the community members to wear spectacles as prescribed and make them understand the importance of wearing the spectacles regularly.
- Annual screening of all the adult community members for early identification of blindness and refractive errors and timely referral.
- Support the RBSK team in undertaking eye screening of children and adolescents 0-18 years of age.
- Inform the patients that free spectacles are available free in all Government Health Institutions.
- Follow- up with all individuals-those who have refractive errors and are given corrective glasses-to ensure that they use them properly.
- Counsel the individuals on the importance of consumption of Vitamin A rich foods and limit the use of television/mobile phones, computer and other electronic items that can cause strain to the eyes as much as possible (20-20-20 rule- Every 20 minutes, look away about 20 feet in front of you for 20 seconds).
- Refer any person in case of symptoms such as continued redness, watering, eye fatigue, diminished vision following the use of spectacles to the OA/Eye specialist/Eye doctor (in consultation with MO).
- Make a list of all Vision Centres/higher health facilities having OA/Eye specialist/Eye doctor in your service area.
- Linking patients with any suspected refractive errors to the OA at nearest Vision Centre/ Eye doctor/Eye specialist at higher health centres for further testing and treatment.
- Maintenance of records.

#### Conjunctivitis

- İdentification and diagnosis of conjunctivitis amongst the community members.
- Linking suspected patients with conjunctivitis to the Medical Officer at AB-HWC-PHC/Eye doctor/Eye specialist at higher health centres for further testing and treatment.
- Follow-up care of those diagnosed with conjunctivitis by referral centre.
- · Regular follow up of all treated cases.
- Health Promotion activities- informing all community members to maintain good personal hygiene, good eye hygiene, preventive measures and to report immediately for excessive watering and redness in the eye.
- Maintenance of records and registers.

## Stye

- Identification and diagnosis of stye formation amongst the community members.
- Screen for Diabetes Mellitus and/or Refractive Errors in patients with recurrent stye formation.
- Patient will be referred to Medical Officer at AB-HWC-PHC for further check-up, if required.
- Linking patients with styes to the Medical Officer at AB-HWC-PHC. Patients may also be referred to Eye doctor/Eye specialist at higher health centres for surgical removal of the pus.
- Regular follow up of all treated cases.
- Health Promotion activities-informing all community members to maintain good personal hygiene, good eye hygiene and take preventive measures.
- Maintenance of records and registers.

#### Xerophthalmia

- Early detection of night blindness in children and treatment with Vitamin A prophylaxis.
- Early identification of signs, symptoms of Vitamin A deficiency in children and also in pregnant women.
- Assure Vitamin A prophylaxis in children between 9 months to 5

- years of age as per National Immunization Schedule.
- Monitoring all measles cases in children and ensuring that they receive vitamin A supplementation.
- Linking patients with any signs of Vitamin A deficiency to the MO at AB-HWC-PHC/Eye doctor/eye specialist at higher health centres for further testing and treatment.
- Follow up of all treated cases with regular eye check-up and Vitamin A prophylaxis.
- Health education on importance of Vitamin A Prophylaxis and Vitamin A rich diet.
- Encouraging breastfeeding focusing on colostrum feeding.
- Ensure regular screening of all children in Anganwadis and schools for early signs of Vitamin A Deficiency by RBSK team.
- · Maintenance of records and registers.

#### Glaucoma

- Making a list of all Vision Centres/Eye surgeons in the service area
- Regular screening of all cases with hypertension, diabetes, heart disease, high lipids/ cholesterol for any symptoms suggestive of glaucoma. Such individuals and their family members should get their eye pressure checked and eye examination at least once in a year.
- Linking suspected glaucoma patients to the Medical Officer at AB-HWC-PHC/OA at Vision Centres for screening for glaucoma (eye pressure test).
- Confirmed/High-risk cases for glaucoma will be referred by MO/OA for medical treatment and further management to higher facilities by Eye surgeon/Eye doctor.
- Educate the community members that eye drops prescribed by a medical doctor for glaucoma need to be continued life-long similar to taking medications for life in conditions like Diabetes and Hypertension.
- Regular follow-up of all diagnosed glaucoma cases to monitor that
  they are putting their eye drops regularly and also ensure that they
  are visiting the eye doctor as and when advised.
- Health promotion activities for proper eye care, signs and symptoms of glaucoma and prevention of glaucoma.
- · Maintenance of records and registers.

#### Trachoma

- Linking suspected patients with Trachoma/Trichiasis to the Medical Officer at AB-HWC-PHC/OA at Vision Centres/Eye doctor/Eye specialist at higher health centres for testing and treatment
- Follow-up care of those diagnosed by referral centre.
- Health promotion for good personal hygiene, facial cleanliness and environmental hygiene and to report immediately for any symptoms.
- Regular follow up of all treated cases.
- · Maintenance of records and registers.

#### Eye Injuries

- Take brief history of incident and cause of eye injury.
- Examine eye to note extent and depth of injury.
- Give first aid for foreign body, eye injuries, provide stabilization and then referral. Washing the eyes in case of chemical burns and keeping them covered with a clean cloth till the patient reaches the treating doctor.
- Linking individuals with eye injuries to the Medical Officer at AB-HWC-PHC/Eye doctor/ Eye specialist at higher health centres for treatment.
- Follow-up on all cases after treatment.
- Raise awareness among community members about prevention of eye injuries at home, in the community and during festivals.
- Supervise special festivals where eye injuries are common such as Holi and Diwali.
- Promote use of protective eye glasses for farmers, those doing mechanical or welding work, use of helmets covered with front glass for those driving two-wheelers, educating community members to not look directly at the sun during Solar Eclipse, etc.
- If any foul play is suspected and probable medico-legal case in any patient with eye injury, inform the Medical Officer at AB-HWC-PHC immediately.
- Maintenance of records and registers.

#### **Eye Donation**

 Along with ASHA, ASHA Facilitators, VHSNC members, support groups, etc. help motivating community members for Eye donation.

- Organize community meetings to educate people about Eye
- Organize pledge ceremonies on important village days/festivals about Eye donation. Every year, August 25th to September 8th is observed as National eye donation fortnight all over our country.
- Facilitate whenever required, for willing family to donate eyes of the deceased persons.
- Inform the MO at AB-HWC-PHC regarding such families and assist them in making necessary arrangements.

Cases are referred to the MO at AB-HWC-PHC after consultation with his/her. MO is also to be informed regarding any visits to health facility by the community members. ANM/MPW will assist in maintaining the records and reports, as required. Medical Officer (MO) will monitor, support and supervise CHO in delivery of Eye Care services to the community in the area.

#### **CONCLUSION**

Health and Wellness Centres (HWC) now provide an opportunity to provide primary eye care and strengthen referral networks to eliminate avoidable blindness. Key roles and responsibilities of Community Health Officer (CHO) in Eye Care is screening, early detection of common eye disorders, referral, follow up, dispense medications, ensure access to free spectacles, health promotion activities and maintenance of records and registers. Sensitization and time to time training and retraining of CHO followed by monitoring and evaluation of their work by appropriate indicators may enhance the efficiency of HWC-SC in providing eye care in India.

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