



TASK FORCE MEETING ON PRIMARY EYE CARE,
Geneva, 20-23 October 1980

REPORT OF THE MEETING

INDEXED

INTRODUCTION

A Task Force on Primary Eye Care was held from 20 to 23 October 1980 at WHO Headquarters, Geneva. The meeting was opened by Dr I.D. Ladnyi, Assistant Director-General of WHO, on behalf of Dr H. Mahler, Director-General.

This report has been reviewed and adopted by the WHO Programme Advisory Group for the Prevention of Blindness, which met in New Delhi, 9-13 February 1981.

1. DEFINITION OF PRIMARY EYE CARE

The definition of Primary Health Care (PHC) implies "... essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process." (Declaration VI, Alma Ata, 1978).

Primary Eye Care (PEC) is a vital component of PHC and includes the promotion of eye health and the prevention and treatment of conditions that may lead to visual loss.

Primary Eye Care implies the first provision of promotive, preventive and therapeutic measures for eye health to an individual or a community. Such measures may be provided at different levels of sophistication depending on local conditions and resources. However, attention is being focussed on PEC as an integral part of PHC, in view of the existing situation in most developing countries, where avoidable blindness constitutes a major public health problem. In this context, priority should be given to the determination of the essential eye care that needs to be delivered at the most peripheral level. The implementation of PEC must also be adapted as far as possible to locally available personnel and existing training programmes. In areas without any PHC system, PEC services should be developed, and could eventually evolve into a PHC system.

PEC needs to be sustained and supported by higher levels of competence in the health delivery system.

2. PRIMARY EYE CARE ACTIVITIES

Primary Eye Care can be divided into (1) Clinical, and (2) Promotive and Preventive Activities. With regard to Clinical Activities, distinction should also be made between conditions that ought to be :

- recognized and treated by the PHC Worker;
- recognized and referred after treatment has been initiated;
- recognized and referred for treatment.

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2.1 Clinical Activities

2.1.1 Conditions to be recognized and treated by a trained PHC Worker

(i) Conjunctivitis

(a) Acute conjunctivitis

A red eye with discharge, of recent onset, would be a common condition requiring the attention of the PHC Worker. This should be treated with frequent applications of topical antibiotics, but if there is no improvement within 3 days, the patient should be referred.

(b) Ophthalmia neonatorum (red eye with discharge in the newborn)

This condition, occurring in the first few days after birth, is generally caused by gonococcal infection, and is serious and potentially blinding. It requires immediate and intensive topical and systemic antibiotic treatment.

Treatment should be carried out immediately at the village level. It may be necessary to continue the topical treatment for 2 weeks.

Ophthalmia neonatorum can be prevented by the use of silver nitrate 1% drops in both eyes immediately after delivery (Crede's prophylaxis), or alternatively by a single application of tetracycline 1% eye ointment. Birth attendants and midwives should be instructed accordingly.

(c) Trachoma

In trachoma endemic areas, attention should be paid to the recognition of the major clinical signs of trachoma, with a view to treatment at the village level, either individually or in a mass campaign.

At the PHC level, trachoma should only be treated by means of tetracycline ointment or other suitable topical applications. Patients requiring further attention should be referred.

(d) Irritative conjunctivitis

This condition is sometimes of an allergic nature, with little or no discharge. It is often chronic and recurrent. Zinc sulphate eye drops may be used for short-term treatment.

(ii) Trauma

(a) Subconjunctival haemorrhage

The PHC Worker should understand that simple subconjunctival haemorrhage, although frightening, is not serious and would be absorbed within 10 to 20 days. He should reassure the patient. However, subconjunctival haemorrhage associated with pain or visual loss could indicate a serious condition and should be referred.

(b) Superficial foreign bodies

- Conjunctival: Foreign bodies under the eyelids, especially the upper eyelid, should be investigated by proper eversion of the lids. These foreign bodies can be removed with twisted cotton wool or a clean piece of cloth.

- Cornical: These foreign bodies can generally be seen with the naked eye, but the use of a loupe is an advantage. A blunt instrument or a folded piece of paper may be used for the removal of superficial foreign bodies. After removal, antibiotic ointment should be applied.

(c) Corneal Abrasion

Although generally this may be considered a simple condition, the consequences could be quite damaging to sight if it becomes infected. Early treatment with topical antibiotics and eye pads is indicated.

(d) Contusions

- Bruised eyelids: If there is no visual loss, no treatment is indicated.
- Hypphaema (blood behind the cornea): The ordinary treatment for these cases is rest for 5 days; the use of salicylates, such as aspirin, should be avoided. However, if there is increasing pain or further loss of vision, the patient should immediately be referred.

(iii) Vitamin A deficiency

Attention should be paid to night blindness, Bitot's spots, and/or dryness or cloudiness of the cornea in children as indicators of Vitamin A deficiency. Prompt treatment should be carried out by giving 110mg (200 000 I.U.) of Vitamin A orally.

2.1.2 Conditions that should be recognized and referred after treatment has been initiated

It is envisaged that a secondary or tertiary level centre would be available for referral. However, in some areas, access to such centres may be limited, difficult or delayed; under such circumstances the initial treatment given should be continued.

- (i) Corneal ulcers (a whitish spot on the cornea, associated with a red eye)
These potentially blinding conditions require urgent and expert attention. It is important that the PHC worker should recognize the condition, initiate treatment by cleansing and topical application of antibiotics; the patient should then be immediately referred to secondary level centre.
- (ii) Corneal or scleral lacerations and/or penetrations
The eye should be protected with a shield and systemic antibiotic treatment administered if available. Eye ointment should be avoided.
- (iii) Lid lacerations
Large lid lacerations and those involving the lid margin should be referred, after initial gentle cleansing and padding. Systemic antibiotics may be administered, if available, before referral.
- (iv) Entropion/Trichiasis
These cases should normally be referred after initiating antibiotic ointment treatment. Epilation of the offending lashes may be a temporary relief measure.
- (v) Burns
 - Chemical: prolonged irrigation with the eyelids held wide open should be carried out immediately, and antibiotic ointment, if available, applied before referral.
 - Thermal : if there is serious skin damage, antibiotic ointment should be applied and the patient referred.

2.1.3 Conditions that should be recognized and referred for treatment

- (i) Painful red eye with visual loss : These patients should be referred immediately.

- (ii) Cataract : Refer cases with significant visual loss.
- (iii) Pterygium : Advanced pterygium, threatening vision, should be referred.
- (iv) Visual loss : Patients with vision worse than 0.3 (6/18) in either eye should be referred.

2.2 Promotive and Preventive Activities

In order to promote eye health and prevent loss of sight, the PHC Worker should disseminate appropriate information to as many people in his community as possible. Much of this education could be imparted to specific target groups, such as village leaders, community councils, administrative authorities, school teachers and pupils, as well as individual households.

The PHC Worker must be a simple educator, capable of making the community aware that the majority of blinding diseases are either preventable or curable. He should also educate on personal and environmental hygiene, nutrition, sanitation, and protection of the eye.

The PHC Worker should stimulate individual and community participation in activities to prevent blindness, and become actively involved in community-based treatment programmes, for example against trachoma and xerophthalmia. The PHC Worker should also follow up local activities initiated by higher levels of eye care services or mobile units. Such activities may include the supervision of treatment schemes and reassessment of certain results, e.g. trichiasis operations.

3. PERSONNEL AND TRAINING

The PHC Worker should be responsible for the delivery of Primary Eye Care, and this should be an integral component of his/her duties.

3.1 Qualifications for Selection

- (a) Ability to read and write;
- (b) Acceptable to, and preferably selected by, the community.

3.2 Training

The training should be simple, practical and task-oriented.

It should be carried out, as far as possible, in or close to the community to be served and should preferably be imparted by the supervisor, who would also be responsible for evaluation.

Wherever feasible, existing health facilities may be utilized for group training.

3.3 Supervision

The PHC Worker should be supervised through regular visits of the secondary level personnel, e.g. ophthalmologist, ophthalmic medical assistant, or other competent health personnel.

3.4 Records and Lay Reporting

Records should preferably be kept in a notebook indicating the following details : name, age, sex, tribe (where applicable), locality, complaint/symptoms, provisional diagnosis, and the treatment given.

Reporting should be done by the supervisor during visits to the PHC Worker, extracting relevant information from the record book.

3.5 Refresher Courses

These should be provided periodically by the supervisor or other suitable personnel, either at the community level, or, if possible, at a training centre.

3.6 Evaluation of Training

Evaluation of the training and the performance of the PHC Worker should be carried out by the supervisor, utilizing the record book and personally assessing the field work.

An overall evaluation of the prevalence of the blinding conditions in the community concerned and the effectiveness of the role played by the PHC Worker should be the responsibility of suitably qualified personnel.

4. SUPPLIES AND EQUIPMENT FOR PRIMARY EYE CARE

4.1 Drugs

- (a) Tetracycline 1% eye ointment.
 - (b) Chloramphenicol 1% eye ointment.
 - (c) Zinc sulphate 0.25% eye drops.
 - (d) Vitamin A capsules - 110mg (200 000 I.U.).
 - (e) Silver nitrate 1% eye drops - for use in the newborn as a prophylactic.
- Alternatively, a single application of tetracycline 1% eye ointment can be given.

4.2 Equipment

- (a) Optotypes. These should be adapted to local needs and could include:- Landolt ring; Snellen chart; E Types; Sjögren's Hand Chart; either as single optotypes or a simplified multiple optotype chart.

The definition of impaired vision and of blindness should conform to the established standards (WHO, 9th International Classification of Diseases, 1978).

- (b) Torch and batteries.
- (c) Hand magnifying lens.
- (d) Epilation forceps in trachoma endemic areas.
- (e) Dressings:- eye pads; bandages; sticking plaster; eye shields.

Wherever feasible, local production of items, such as bandages, shields and epilation forceps, should be encouraged.

Eyedrops and ointments containing pilocarpine, atropine or steroids should not be provided at the primary level.

It is highly desirable that the supply of ophthalmic drugs to the PHC Centres be as standardized and as uniform as possible, in order to enhance availability and reduce costs.

To avoid the loss of supplies and drugs, it is recommended that there should be regular supervision and audition, which would also ensure the adequate and regular supply of medicaments.

5. TRAINING AIDS

The training of a PHC Worker in the field of eye care would require teaching aids, such as manuals and posters. Such aids should be simple, of durable material and obtainable at a relatively low cost.

5.1 Outline for Primary Eye Care Manuals/Posters

Primary Eye Care is an essential part of Primary Health Care and the importance of promoting eye health at the community level should be stressed.

5.1.1 Methods of Examination (to be illustrated by diagrams and/or photographs)

- (a) Taking and assessing the patient's history.
- (b) Assessment of visual acuity and recording.
- (c) Inspection of the eye and the lids.
- (d) Exposure of the conjunctiva of the lower lid.
- (e) Eversion of the conjunctiva of the upper lid.
- (f) Inspection of the globe in different directions of gaze.
- (g) Examination of infants.

5.1.2 Clinical Conditions

The manual should outline the conditions to be recognized and treated by the PHC Worker and those needing referral, as listed under section 2.1.

Suitable illustrations, together with brief and clear descriptions, should be used.

5.1.3 Methods of Treatment

- (a) Cleansing and irrigating the eye.
- (b) Applying eye drops and ointment.
- (c) Application of eye pads, shields and strapping and bandaging.

5.1.4 Community Participation in the Prevention of Blindness

The preventive and promotive aspects listed in Section 2.2 should be included.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. The promotion of eye health and the prevention of avoidable blindness could be achieved through community-oriented action.

Simple but essential eye care can be delegated to auxiliary health personnel, and such Primary Eye Care should constitute an integral part of Primary Health Care.

2. The prevention of blindness is a multidisciplinary activity, and PEC should include promotive, preventive and therapeutic measures to counter any needless visual loss in the community. The PHC Worker cannot function effectively in isolation and should therefore be supported by an effective referral system.

Recommendations

1. It is recommended that the eye care component in the training of the PHC Worker should be strengthened. In areas where blinding diseases are prevalent and in which there are no existing PHC infrastructures, persons from those communities should be selected and trained to deliver Primary Eye Care. It is envisaged that the functions of these workers could eventually be expanded to include general Primary Health Care.
2. The training in eye care of auxiliary health personnel at various levels should be promoted and accelerated within the framework of the national health delivery system in order to provide necessary supervisory and referral facilities.
3. There is a serious lack of suitable training aids in eye care, and the preparation of manuals, posters and other aids in PEC training is needed. Such aids should make use of suitable illustrations, and the format and quality should be convenient for field use.
4. The training of auxiliary health personnel in PEC should be promoted through workshops, seminars or other meetings at a national or intercountry level. Possibilities for technical cooperation among developing countries (TCDC) should be explored in this field.

BACKGROUND DOCUMENTS

- Blindness prevention: training auxiliary personnel in eye care
WHO Chronicle, 1980, 34, 332-335
- Guidelines for Programmes for the Prevention of Blindness
World Health Organization, Geneva (1979)
- Field Guide to the Detection and Control of Xerophthalmia, by Dr A. Sommer
World Health Organization, Geneva (1978)
- Field Methods for the Control of Trachoma (M.L. Tarizzo, ed.)
World Health Organization, Geneva (1973)
- Methods of Assessment of Avoidable Blindness
World Health Organization, Geneva (1980) - Offset Publication No. 54
- The Primary Health Worker (Revised Edition)
World Health Organization, Geneva (1980)

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