

Problem of Blindness in India —

Its Causes and Methods of Prevention

By

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THE world of the blind is difficult to imagine. Of the various physical handicaps loss of vision is perhaps the most dreaded. Not only does the afflicted person fail to realise himself, he is often a burden to the family and the community at large. Gone are the days when blindness was considered a visitation of forces beyond our control. Scientific methods have been applied to understanding the factors which cause eye diseases leading to blindness. The prevalence of many of these diseases has been studied in various population groups, and methods have been developed to tackle the problem early, effectively and on a community-wide basis.

Two Million Blind

In 1944, the Government of India's Central Advisory Board of Health and Education, reporting on the problem of blindness in India, justifiably concluded that "250 per 100,000 represents the probable ratio of the totally blind, with a similar ratio of partially blind in need of welfare services, giving a total figure of 500 per 100,000; and this proportion, applied to a gross population of 400,000,000 people, gives a blind population of 2,000,000."

This figure, of course, was not easy to get at because allowance had to be made for the fact that the definition of blindness differed in different regions of the country, and that census figures had their own limitations. However, the figure was supported by more intensive surveys carried out in smaller areas of the country later.

Trachoma and its Associates

Among the various causes of preventable blindness, trachoma or granular conjunctivitis (familiar to the Indian villager as 'Rohe', 'Kukre' or 'Dane') tops the list. This is a communicable disease caused by a large sized virus and leads to serious blinding complications, especially in populations having poor personal hygiene and environmental sanitation.

In the northern and north-western States (Rajasthan, Punjab, Uttar Pradesh, Gujarat, Bihar and Madhya Pradesh), the prevalence rate of trachoma is very high, ranging between 35 and 78 per cent. There is no doubt that in these States the disease is a major public health problem. In the remaining States, though the overall prevalence rate is 25% only, pockets of high endemicity

have been found, particularly in Mysore, Assam and Jammu and Kashmir.

Children and Women Victims

The intensive epidemiological studies, though confined to a relatively small area of western Uttar Pradesh, brought to light certain important findings. The disease was usually either moderate or severe in intensity, the latter being more common in women. The age of onset was between 1 and 3 years and the main victims of active trachoma were children under 10 years of age. Sub-acute bacterial conjunctivitis complicating trachoma was encountered frequently among children, especially those under two years of age.

The incidence of active trachoma as well as bacterial conjunctivitis increased markedly during March-April and again during July-September. The higher temperature, rainfall and the increase in the fly population in these periods, were perhaps partly responsible for the high incidence.

An observation of particular importance is that these diseases were more widely prevalent in communities with low standards of personal and environmental hygiene. These studies have been of great value in indicating the lines along which control measures should be developed.

Lack of Vitamins

Smallpox complications of the eyes and gross malnutrition especially in infants and children are other important causes of preventable blindness. Lack of vitamins, especially vitamin A, and proteins over long periods grossly affect general health leading to irreversible changes in the eyes and, in many cases, permanent loss of vision. Unfortunately, treatment is usually sought very late when it is impossible to save the eyes.

In middle age and the years beyond, cataractous changes in the lenses are an important cause of blindness. Though the various factors causing this disease are not fully known to medical science, it may be considered a type of aging process. Unfortunately, compared to many Western countries the age of onset of cataract in India is early, especially in rural populations. Though with the help of modern optical aids and surgical operations every cataract case can look forward to an almost full productive life not many seek early treat-

ment and are instead content to live in a dim world and risk serious visual complications.

Among the many other ocular diseases leading to impairment of vision, squint and injuries are more frequently encountered. Early diagnosis and efficient treatment, which is often time-consuming, can correct the squint in a large number of cases, but it unfortunately continues to cause blindness often because advice is sought very late. It is also a fact that the number of medical centres capable of giving efficient treatment is much too small to meet the needs of this vast country.

Living Standards

As infections and malnutrition, singly or combined, are the chief causes leading to blindness or impairment of vision in this country, it is obvious that our long-term aim should be to improve the standard of living, hygiene and education of the people. While this is a slow process which may take years to complete, work in this direction has already started.

A country-wide smallpox eradication campaign is on and we can look forward hopefully to almost complete prevention of smallpox blindness.

Early Treatment

We are all familiar with prevention at various levels. Certain eye diseases like cataract, squint and glaucoma etc. are not preventable but their early recognition and efficient treatment and follow-up often prevent loss of eye-sight. Unfortunately, facilities for prevention at this level are limited, especially in the rural areas. To complicate the situation further, communities to whom these facilities are available are often not aware of them and not uncommonly medical advice is sought at a very late stage when irreparable damage to the eye has occurred. Intensive health education is called for in such situations, but most of the therapeutic centres are overworked and they have no separate wing to educate and assist the population which they are supposed to serve.

The existing network of medical and public health organizations in the various States will have to be gradually involved in planned programmes to prevent blindness and, where feasible, active collaboration with the various voluntary organizations obtained. As in other public health programmes, health education of the people is vital to the success of blindness prevention programmes and efforts in this direction are being made in various States.

Considering the serious problem of blindness in India and with full faith in the maxim 'prevention is better than cure' efforts are being made to start a national institute for the prevention of blindness, wherein the science of ophthalmology and public health will be yoked together for research, training and advice in the field of preventive ophthalmology.

In recent years, a trend towards the formation of voluntary societies for the prevention of blindness has been noticed in various States. A National Society for the Prevention of Blindness has been in existence for the last two years. A heavy responsibility rests on the leadership of these organizations. Through continuous service and education, it is hoped, they will succeed in making the people understand that blindness is a tragedy which is largely preventable and in spreading knowledge of the ways to prevent it.

Important Meeting

A meeting of Nurses is being convened by the Union Ministry of Health to review the present position of Nursing Services in India. The recommendations on Nursing of the Mudaliar Committee will also be discussed.

The meeting is to be held in Vigyan Bhavan, New Delhi, on April 5, 1962.

Among those invited to attend are the President of the TNAI, Miss E.H. Paull, and the General Secretary.



POLSON'S COFFEE