

C. Changes in the biochemical, biophysical, pathologic, pharmacologic, physiologic, and psychologic factors in the eye in aging and in all the various diseases of the eye or of the body as a whole.

D. Relationships of eye diseases to systemic diseases such as diabetes, hypertension, and arteriosclerosis.

E. Hereditary and congenital eye diseases such as retinitis pigmentosa.

F. Eye diseases typical of infancy and childhood such as retrolental fibroplasia which was so much in the news a few years ago and which caused so much blindness in premature infants.

G. Refractive errors and their correction by spectacles, contact lenses, drugs, surgery, et cetera.

H. Ocular motility problems and their correction.

I. Infectious agents such as bacteria, fungi, viruses, in causation of eye disease.

J. "Degenerative" eye diseases such as macular degeneration which we are so powerless to do anything about at the present time.

K. Eye injury from trauma, radiation, chemicals and drugs, which again is becoming more prevalent in our highly industrialized environment.

L. Neoplastic eye diseases such as retinoblastoma and malignant melanoma.

M. Corrective or palliative therapy of eye diseases or conditions by (a) medical measures, (b) surgical measures (c) physical measures, (d) refractive measures, (e) prosthetic measures.

N. Instrumentation used in ophthalmology and ophthalmological research.

O. Statistics gathering, processing, and interpretation regarding eye disorders, which is one of the weakest links. The statistics gathering in regard to blindness has been very poor in the past.

P. Sociologic and economic research in sight conservation in the community, in industry, and in military service.

Q. Rehabilitation of the blind: (a) Braille and other aids to communication; (b) reading machines; (c) aids to locomotion; and (d) low-vision aids.

PRESENT STATE OF EYE RESEARCH

The inadequacy of present eye research becomes evident when we contrast the less than \$10 million spent annually for research with the \$1,000 million dollars spent on the blind. We are investing in the pound of treatment—not cure—rather than the ounce of prevention.

In that regard I would like to read a statement which I noticed in one of the NINDB publications for 1967. The NINDB "Profile No. 3, Eye Disorders 1967."

I notice this statement on page 4 under "Training":

The research community working in the field of vision and its disorders is proud of its record of accomplishment. However, the responsibility and challenge are enormous when compared with the small number of clinical and basic science investigators in the field.

The task ahead must be contrasted with the small size of the research establishment.