
This little pamphlet on industrial eye damage and its prevention forms one of a series on industrial hygiene. The subject is discussed in the following sections. (1) Damage without actual injury of the globe, from air, dust, chemical substances such as smoke and gas, liquids and solids, infection, and eye participation in bodily illness, such as caisson disease, head injury, etc. (2) Damage to the eye from injury, including the orbit, the adnexa, and the globe, without and with retention of an intraocular foreign body, contusions, purulent infection and sympathetic ophthalmitis. (3) Burns and cauterisations, from acids, alkalies, lime and ammonia. (4) Damage from radiation. (5) Myopia and miners' nystagmus. (6) General measures for prevention. (7) Statistics. The illustrations are good and explain the text; the various types of protective goggles are well shown, while the statistical page contains some interesting facts. A bibliography of recent references is included.


In this further instalment on the results obtained in the examination of the eyes of alien children in London, Pearson and Moul deal with the problem of the relationship between environmental factors and ocular defects. As in the previous instalment, the method used is statistical and the reputation of the authors is sufficient guarantee of reliability in this respect.

In their study the authors have considered ocular characteristics in their association with home conditions—mainly the association of refractive errors with bad surroundings. These environmental factors are studied separately, and the different sections of the paper follow very much the same method. Thus, when the material used is reviewed in relationship with personal cleanliness, the visual acuity is first noted in the different groups showing varying degrees of cleanliness; attention is then paid to the refraction class (i.e., whether hypermetropic, astigmatic, etc.), then to the numerical degree of ametropia: the relationship is then established between the different degrees of cleanliness with the general corneal refraction, the total astigma-

tism and the corneal astigmatism. The thoroughness of the method is further illustrated by the number of environmental factors utilised, in the light of which these studies were carried out. Thus, besides personal cleanliness, cleanliness of the home was considered, as also the lighting of rooms, ventilation of rooms, crowding in the home and the economic conditions of the parents as determined by rent and by familial income. In addition to these, there are less complete sections dealing with the inheritance of visual defects, the relationship of such defects to rickets, septic tonsils and enlarged cervical glands. An attempt is also made to correlate the number of hours spent on homework and the refractive condition of the eyes.

The conclusions to which the authors come are on the whole negative. Here and there, throughout the text, there are scattered observations, which taken by themselves would lead one to conclude that myopia is commoner in the cleanest homes, and that likewise more cases of astigmatism are found in homes that are clean and well ventilated. Boys coming from homes with the best lighted rooms "have on the average half a dioptre more myopia than boys from the general population," and further, there appears "to be an association of a somewhat complicated kind, which we have not succeeded in unridding, between corneal astigmatism and economic conditions." But taking everything into consideration the authors hold that "poor environment is not the source of defective vision in these Jewish boys, and the inference is that it will not be found to be so either in the case of Gentile children."

The final conclusion reached by the authors is important and is acceptable, as it agrees with the experience of ophthalmic surgeons and with the established observations of school medical officers. Larger series than those considered by Pearson and Moul have been published from time to time showing that the incidence of visual defect among children has no relationship to the social class from which they come—and though the series considered by the authors has been subjected to extremely refined mathematical processes, any conclusions which they would have advanced as differing radically from established opinion could hardly have been acceptable, for no mathematical refinement can compensate for the fact that on the whole the basis of their work is not unassailable. For some of the factors which they analysed with such care, a group of less than 300 children was utilised, whilst in no case does the figure reach 1,000. Furthermore, averages of refraction expressed to four decimal places, with probable errors calculated as finely, are not very impressive when it is remembered that these refractions in children were not done under atropine.
FUTURE ARRANGEMENTS

Whilst no one denies the value of statistical investigation the benefits obtained from this means of enquiry are very questionable, when, as in the section dealing with the correlation of the number of hours spent on homework with the refractive condition, the authors admit to a great uncertainty as to the reliability of their data, but, nevertheless, proceed to work out intricate mathematical values. A similar thing occurs in the section dealing with the inheritance of visual defect. Now both these questions happen to be fundamental problems, and the contribution made by the authors to their solution represents hardly more than a sterile mathematical exercise. In fairness to the authors it must be added that they themselves do not attach much importance to these sections.

On the whole, most ophthalmic surgeons will prefer to rely on large series worked out on general principles, than on relatively small series distilled in mathematical furnaces.

FUTURE ARRANGEMENTS

1928

November 9.—Section of Ophthalmology, Royal Society of Medicine.
December 14.—Section of Ophthalmology, Royal Society of Medicine. (Clinical Meeting).

1929

January 11.—Section of Ophthalmology, Royal Society of Medicine.
February 1.—North of England Ophthalmological Society, at Liverpool.
February 8.—Section of Ophthalmology, Royal Society of Medicine.
March 1.—North of England Ophthalmological Society, at Newcastle-on-Tyne.
March 8.—Section of Ophthalmology, Royal Society of Medicine. (Clinical Meeting).
March 22.—North of England Ophthalmological Society, at Sheffield.
June 14.—Section of Ophthalmology, Royal Society of Medicine. (Annual Meeting).