

OPTOMETRIC VISION CARE OF THE PARTIALLY SEEING CHILD

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For the past 40 years or so, society has become increasingly aware of its obligation to the partially seeing child. One recent estimate indicates that there are about 50,000 such children in the United States.

It is part of the American tradition in education that these children be given every possible opportunity to develop their abilities to enable them to make a maximum contribution to society, and to draw from it the richest possible life.

The methods utilized in achieving this goal for the partially seeing are in the process of change. When it was first realized that the visual handicap impeded learning in the normal classroom environment, special visual environments were created. These included the special classes for the partially sighted, utilizing large print books, large writing and typing, and the like. At best, visual care consisted of the use of a distance correction — to be used for all purposes — and whatever medical aid could be found to help.

However, more recently, it has been recognized that there are many desirable aspects to minimizing the time spent in the special classroom, provided the partially sighted child can adjust to the demands of the normal classroom. The more recent developments in the care and education of the partially sighted lean in this direction.

Visually too, there is much more that can be done to aid the child in meeting a normal environment successfully, than the traditional care previously indicated. This type of care is the optometric vision care that we are to discuss here today. It consists of three phases:

The first — an understanding of the child, his problems, and his way of meeting these problems.

The second — improvement of the situation by visual care NOW — and

The third — continued supervision of the visual situation to insure the ability to meet the continually increasing visual demands of maturation in our culture.

The improvement in visual care has been made possible through the development by optometrists, of many new types of magnification devices, known as telescopic and microscopic spectacles. These spectacles were developed originally, at the German School for Optometrists at Jena, and were used to aid the partially sighted. They were cumbersome and not especially attractive. About 25 years ago, Dr. William Feinbloom, an optometrist, developed an improved telescope which was easier to use while walking about, than those already available at that time. These are now obsolete — but they aroused the original interest in subnormal vision aids in the United States. Since then and especially in the past 10 years, optometrists have continually improved the efficiency and cosmetic acceptability of these devices.

Today, in general visual care, optometrists are stressing the importance of vision at near, and the concept of special glasses of bifocals for reading in certain school situations, is obtaining wider acceptance. This use of special near work glasses applies with even greater emphasis to the partially seeing. These students often attempt to hold material closer than the average to that the object appears larger. However, this close working distance, tends to place additional demand on the focus mechanism, so that sustained close work becomes either uncomfortable or reduced to a minimum. With adequate visual care, clear and comfortable vision can be achieved at the reading distance.

In addition, we should consider the concept of training and developing the facility of seeing. There is much that can be accomplished along the lines of developing visual functions in the partially seeing.

Through training, focus and fusion ability can be improved to that clear single binocular vision is obtained at a reading distance of say 8 inches. If a device is used, control of head movement, eye movement and book position must be learned. In some instances where perception is erroneous, so that E's and A's and the like are confused, this type of education is helpful.

The use of enlarged print results in a shorter eye span for each fixation, and consequently a larger number of fixations must be summated to create the perception of a phrase or sentence. Methods of application of optical aids to specific tasks are better learned under guidance.

And lastly, there are among the partially sighted those who do not wish to use the vision they have — and who should be taught or tutored for this reason.

Changes in these factors make programmed vision care rather necessary for the maximum educability of the developing partially seeing child.

What then should be done to provide visual care? The answer is obvious where the cooperation of the optometrist and educator works to the advantage of a youngster in their care. But what should the practitioner do with a partially sighted child?

He can first determine the patient's present status. A questionnaire for the non-achieving child has been covered very amply in a booklet prepared by Dr. Bing's American Optometric Association Committee, and applies very well in the present problem. Interviews with the parents alone, and with the child alone, may be necessary. The past history is helpful. Where does the child have a problem? When does he utilize vision, when not? What is his educational placement? How does he manage to see the board, to read his assignments at what distance? What are his play activities, his social side? This information is not intended merely to fill up space on a form in a filing cabinet. It has great significance — and its purpose is to permit the optometrist to visualize the daily life of the child as completely as possible. However, we stress problems of acuity, of field of vision and the like. Previous care recommendations are also bits of useful information.

Also a part of the visual status is an investigation of the patient's vision. The refractive state, the acuity, an idea of the cause of lowered acuity, the field of vision. It may be advisable to investigate the status of accommodation and of convergence. Of course, we should note the presence of active pathological processes and see that they are cared for.

After a complete examination, we must decide on a course of action. What can be done for the patient? What would be a tentative visual solution in view of his total situation? This solution should be tried and its effects noted. Is it used effectively on school books. Can the patient adapt to its limitations? Does he need education — does he need a partial correction for temporary use at first. Must he be guided on the basis of office control — or can he be given an aid to take home to try?

On the basis of several visits the effectiveness of the tentative solution can be observed and modified until the optometrist is ready to embark on a relatively long range program. The necessary visual aids are then prescribed and training or motivational program set up. The child should be under constant care by means of short progress study visits to insure maximum utilization of vision and visual aids. This type of program tends to eliminate loss of control of the situation, which does occur occasionally, and permits changes in prescribed aids or advice as needed.

As the ability of the child to utilize normal materials increases, his dependence on the resources room or sight conservation class will diminish. But still the child should remain under care in that he always has a future appointment — preferably but not necessarily specific.

Instruction may be necessary for methods of meeting specific visual situations. Personality and viewpoints often change, so that conferences can be necessary. Also as the child matures, especially in the lower grades, the size of type in normal school books gradually decreases, and the white space decreases as well, so that optical aids may be needed.

A last word on what type of optical aids may be needed. Although there is no strict relationship between Snellen acuity and legibility of running type because of other visual factors, the Snellen acuity can be used as a first approximation. For acuities down to 20/100 as an upper limit, high adds that permit comfortable reading at distances varying from 13 inches to 4 inches may be useful. From 20/80 down, either microscopic or telescopic spectacles may be used. A microscope is an efficiently designed magnifier for near, as its name implies.

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