# HEALTH WORK IN THE SCHOOLS

BY

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### EDITOR'S INTRODUCTION

EDUCATIONAL HYGIENE has four chief divisions: (1) The Hygiene of Physical and Mental Growth; (2) Health Supervision in the Schools, including methods of health observation and teaching; (3) the Hygiene of Instruction; and (4) the Hygiene of the School Plant.

The first of these divisions has been treated by one of the authors of this book in *The Hygiene of the School Child*, which has appeared as an earlier number of this Series, and the third, by the same author, is in preparation. The fourth division is to be covered by another author, and is also in preparation.

The present volume deals with the problems involved in health supervision, health examination, and hygiene teaching, — in other words, with the second of the above divisions; and it is hoped that it will contribute materially to the standardization of health supervision and to the broadening of its scope. Every one must realize that a great amount of what goes by the name of "medical inspection of schools" can be called health work only by courtesy. All along the line, among superintendents, teachers, school nurses, school boards, and even school doctors, education is needed which will lend a broader vision to the purpose and possibilities of genuine health supervision.

Special emphasis has been given by the authors to

the part played by the teacher in school health work. To this end, two chapters have been prepared (v and VI) for the purpose of assisting teachers in the observation of general health conditions among children, and three others (IX, X, and XI) for the purpose of acquainting them with the most important facts regarding those transmissible diseases which concern the school. Three additional chapters (xiv, xv, and xvi) are devoted to suggestions for the teaching of hygiene in the grades, and another chapter (xvII) discusses health conditions among teachers. It will be seen, therefore, that the book has been planned primarily for the use of the grade teacher, and with her needs especially in view, though it is hoped that it may also serve as a handbook for the guidance of superintendents, school nurses, and boards of education.

It is seldom that we have presented, by authors of such extended practical experience and large technical knowledge, a book on such a technical subject written in such simple language and presented in so attractive a manner.

ELLWOOD P. CUBBERLEY.

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# HEALTH WORK IN THE SCHOOLS

### CHAPTER I

SOCIAL RESPONSIBILITY FOR THE HEALTH OF SCHOOL CHILDREN

The spread of school medical work

The health supervision of schools is not a passing fad. The conservation of the child is a problem which, like that of world peace, is bound to take possession of the minds of all humanitarian people. To the ethical principle of humanitarianism is added the stern counsel of biological laws, which teach us that an elaborate scheme of mental culture which proceeds without regard to the needs of the body is but a house built upon the sands.

It is significant for the future of the movement that with minor exceptions all civilized countries have almost simultaneously taken it up. Its universal development is inevitable. Progress has been remarkably uniform in different countries, though naturally there are some differences in the details of procedure and in the points of emphasis. Germany has forged ahead with her dental clinics and open-air schools; France, with her school lunches and vacation colonies; while England has set the whole world an example in the

earnest way in which she has undertaken to ameliorate the evils which medical inspection of schools has revealed. Our own country, on the whole, is behind most of the nations of Europe in the practice of school hygiene, but is making progress rapidly. But the doctor has not been brought into the school without opposition, and it is therefore desirable to inquire further into the justification for this new assumption of responsibility on the part of organized society.

### Physical defects among school children

Serious defects of eyes, ears, nose, throat, lungs, teeth, glands, nutrition, heart action, nervous coordination, and mentality have been discovered with surprising frequency wherever they have been looked for. Statistics on these matters have been so indefinitely extended and (when we make allowance for certain differences in procedure) have given such uniform results, that we can safely say that in any school system, no matter where it may be located or to what social classes its patrons belong, from 50 to 75 per cent of its pupils are suffering from one or more physical defects serious enough to require skilled attention.<sup>1</sup>

While it is not claimed that all this defectiveness is produced by the school, some of it undoubtedly is, and in the case of still other pupils the school is at least a partial cause. At any rate, it is well known that defective pupils are present in the schools in large numbers,

<sup>&</sup>lt;sup>1</sup> Lewis M. Terman, The Hygiene of the School Child, chapter 1. Houghton Mifflin Co., 1914.

and that the defects are often unfavorable to a normal physical and mental development. Although many of the defects are curable or preventable, as a rule even intelligent parents and teachers either do not observe them or else they underestimate their seriousness.

# Parental guardianship of children's health not sufficient

If all parents were wise in regard to health matters, it would not be so necessary for schools to make a special study of the physical conditions of the children entrusted to their care. All that could then be fairly required would be the guaranty of a healthful school environment, including such things as good ventilation, correct methods of lighting and heating, sanitary plumbing, the control of contagious diseases, frequent recesses, sufficient physical training, and the proper sort of health instruction. But it is a fact and not a theory that not all parents possess the special knowledge which is necessary for the hygienic supervision of physical and mental development. Even intelligent parents may be unable to detect the early symptoms of physical disorder, just as they may be unable to decide upon the best methods or texts for teaching history or geography. They do not see the defects in their own children because they are used to them. Many are so superstitious as to prefer to treat adenoids by suggestion, others so ignorant as to interpret pediculosis capitis as a sign of good health. Plainly, therefore, it becomes the duty of the school department to furnish not only a healthful school environment, but also a health guardianship over its pupils.

### The responsibility of society

The children of to-day must be viewed as the raw material of a new State; the schools as the nursery of the Nation. To conserve this raw material is as logical a function of the State as to conserve the natural resources of coal, iron, and water power. To investigate exhaustively the evils which exist and to remedy all that may be remedied without transgressing unduly upon the jealous precincts of parental responsibility is a plain matter of duty. Theoretically, it matters little how the State performs this duty, whether by a houseto-house census of the children, or in some other way. Practically, however, there is no effective or convenient way except to do the work in connection with the public schools. In many of our best towns and cities the people themselves are demanding such supervision on the principle that it is one of the important functions of the public school system.

The argument that the health supervision of schools invades the rights of the home has exactly the same value as the corresponding argument against compulsory school attendance and prescribed courses of study. The school does not claim anything more than the right to make an examination of the child's physical and mental condition in order that the work of the school may be properly adjusted to his health and growth needs, and, further, to notify and advise

parents regarding such defects as are found to exist. This is not an unwarranted assumption of power. The responsibility for remedial action is left entirely with parents. The school has not undertaken forcibly to subject children to surgical operations, nor is there at present any legal method of compelling parents to perform their duty in this respect. We can invoke the law for wanton neglect of a broken bone, but there is no way to punish the neglect of discharging ears, adenoids, or astigmatism, any one of which may prove more serious in the long run than a fractured bone.

It is interesting to conjecture how far present practice in this respect is likely to be modified. Compulsory public education itself is so recent that only a few decades ago it was considered by a majority of people as a species of meddlesome paternalism. According to the old conception the child was the parents' child; if they questioned the value of an education there was no recourse in the child's behalf. There are a million or more illiterate adults in the United States to-day who are victims of this mistaken social theory. The theory, happily, has been discarded. We now know that the interests of society demand an elaborate scheme of educational processes under social control Some time we shall understand, just as clearly, that the child's physical growth also stands in need of more expert supervision than the average parent is capable of exercising.

The relation of the school medical service to private medical practice

It is sometimes contended that all medical work should be left in the hands of the family doctor, and that the employment of school physicians is both an impertinence and a needless expense. The practicing physician himself often takes this stand, just as formerly private teachers resented the intrusion into their domain of teachers who were paid at public expense. The two situations are strikingly similar. There were private schools which afforded excellent educational opportunities, but unfortunately they did not reach all the people and they were excessively expensive. Similarly there are families who know enough about health and the causes which are likely to undermine it to seek the frequent advice of high-priced, skillful physicians. On the other hand, a large majority of families can hardly be said to have a family physician, and when they do his function seldom goes beyond the treatment of acute disease or physical injury. Under present conditions the family doctor institution hardly touches the rich field of preventive medicine with which it is the business of the school physician to deal. In the vast majority of cases, if the child's physical needs receive no expert oversight in the school, they will receive no expert attention at all.

It is, therefore, not at all a question of relieving the family physician of any of the functions he has been accustomed to exercise, but of doing the work he has left undone. The practicing physician is not always present when needed. As a rule he does not appear on the scene until an emergency occurs. He has no commission to go out in quest of disease. He has little opportunity so to order the lives of his clients that they will escape emergencies. We refuse to pay him except to cure our diseases; it is unfair as well as absurd, therefore, to expect that his chief interest will be in the prevention of disease. The wonder is that the disparity between the physician's interest in disease and his interest in health is not greater. It is to the credit of the profession that the better class of practicing physicians almost unanimously indorse the work the schools have undertaken in child hygiene.

### Other functions of school health departments

Apart from its contribution to national vitality, the health supervision of schools is entirely justified by its influence upon the efficiency of the school itself. For one thing, it appreciably affects regularity of attendance, which, as Ayres has shown, is one of the important factors in retardation. It does this by eliminating some of the causes of illness, and by treating in the school certain parasitic diseases and other slight ailments which otherwise would require exclusion. Ringworm and pediculosis, especially, have in the past caused a great deal of needless irregularity of attendance. Chronic physical defects, particularly of breathing and of nutrition, have a retarding effect on school progress, even when they are not of such a nature as to

cause absence. To the extent that health supervision of schools is successful in securing the medical or surgical treatment of defects, or in ameliorating environmental conditions in the home, it cannot fail to contribute to the solution of the retardation question.

In the prevention of epidemics the school department of health renders invaluable assistance to the local non-educational board of health. The latter is usually given authoritative control in such matters as closing the schools, granting permits to return after illness, etc., but the closer contact of the school health officer with the pupils often enables him to sound the alarm and in many ways to become a necessary ally in preventing the spread of infectious diseases.

Not the least important function of the school health department is that of coöperation with the school architect and sanitary engineers. Of the millions of dollars expended annually in the United States for school buildings, a large part, from the point of view of school hygiene, must be considered as almost wasted. School buildings erected earlier than twenty years ago belong usually to discredited types of architecture, and are being replaced rapidly by new and still more expensive plants. Unless these embody the very best ideas in sanitation and hygiene, they, too, will soon have to be replaced. There is no reason why the better class of school buildings erected to-day should not be well preserved and for the most part hygienic in the year 2000. It would be hard to overestimate the injury that may be wrought in three