DEVELOPMENT AND PRACTICE OF SCHOOL NURSING

XIII.

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INTRODUCTION

The health of the school child directly affects the everyday life of all the cities and towns and rural sections that people the world. With the great power that it holds for good over the present and the future, over the homely affairs and daily living and the large affairs of humankind, it becomes an issue of tremendous importance to our family, school, community, country, and our race.

There are so many various professional groups, directly connected with the school, playing a part in the health of the school child--school physicians, physical educators, health teachers, dentists, dental hygienists, nutritionists, visiting teachers, not to mention the most important trio of all--parent, child and classroom teacher--that there has been some confusion and much difference of opinion as to the place and function of the school nurse.

"The ultimate contribution of school nursing", said Katharine Tucker, "relates to the school child as an individual and member of a family, and its value is increased as it becomes integrated into the whole community health program. It reaches beyond the school, just as one segment of a child's life, and is much more than a part of the educational system as carried on by the schools. It projects into the home and community."

Chapter I

HISTORY OF SCHOOL NURSING

Both in Europe and in America, School Nursing was developed as an outgrowth of the District of Visiting Nursing movement. Modern Public Health Nursing had its beginning in Liverpool in 1859 with the establishment of the Visiting Nursing Association under the leadership of William Rathbone: but in a larger sense we may say that the modern public health nursing movement is a direct outcome of the work and teachings of Florence Nightingale. It was her constant hope that the word nurse might be associated with health rather than with disease. Her vision was of the health nurse going about in the homes of the community, not for the purpose of nursing the sick but for the larger purpose of teaching the principles of healthful living. It was for the fulfillment of this purpose that she felt the importance of adequate preparation of the nurse.

Miss Nightingale was not only interested but highly effective in raising the standards of living at an age when women did not participate in civic affairs to the degree that they do today. It was with high hopes that she awaited the development of the Visiting Nursing Association in Liverpool, which proved to be so successful that it soon spread to London. It was found that with the small number of qualified nurses available, more children in need of care could bereached by utilizing the public schools. Access to school children made possible not only the control of communicable disease but also a close correlation between the school and the home. It was natural, therefore, that school nursing should have become the first specialized type of public health nursing service.

Amy Hughes was the first nurse to attempt school nursing. She began her work in the District School in Drury Lane, London, in 1891, and was so successful that seven years later the London School Nurses' Society was founded. In 1904 the London County Council appointed a staff of school nurses and placed them under the direction of a superintendent of nurses. By 1918 there was created a Ministry of Health for England, Scotland and Wales. The scope of this work included bedside nursing, infant welfare, prenatal and school nursing.

In certain sections of the United States the public health movement was influnced largely by religious beliefs. On the one hand the New England Puritans regarded illness and disease as just punishment for sins. As a consequence all forms of medical and nursing care were discouraged, and vaccination against smallpox was bitterly opposed. On the other hand the Quakers entertained the highest ideals of community service, humane treatment and friendly visiting. They built the first city poorhouses, which were later transformed into the first hospitals. Catholic sisterhoods ministered to the poor in their homes, and rescue missions conducted some sort of visiting and bedside nursing.

Boston and Philadelphia started visiting nursing associations to meet the need for nursing service among all poor, regardless of their religious affiliation. These are followed by the work of Miss Lillian Wald, who had received two years of instruction in medical school, her sole purpose being to better prepare herself for service to the sick and needy. She with Miss Brewster took up living quarters in the House on Henry Street on the East Side of New York and there established the first public health nursing service for the city.

In 1902 the nurse was introduced into the public schools of New York because of the shockingly large number of children who were daily absent from school because of illness and neglect. As the Henry Street nurses went about their daily work, they kept a record of those school children who were not attending school, often excluded by the physician or teacher because of contagious disease, and found playing with other children; or who were suffering from some minor skin condition and were not under treatment. With actual records of such conditions at hand, Miss Wald was easily able to persuade the health commissioner of New York to permit the experiment of placing a nurse in the public schools for one month, the Visiting Nursing Association contributing the nurse and her salary. Medical inspectors had been working in the schools since 1897, but their function was merely to inspect children in classrooms and to exclude those suffering from communicable diseases. These children remained at home as long as they pleased and no attempt was made to discover whether or not they were under medical care. Many of them were neglected and those who were not very ill played about with otherchildren and continued to spread disease. It was decided to place a nurse in the school for two purposes: first, to treat, in school, children suffering from minor diseases such as impetigo, scabies, ringworm and pediculosis; second, to visit the homes to interest parents in better care of their children.

As a result of the work of the school nurse, Miss Lina Rogers states that school attendance increased fifty percent. The experiment conducted under her leadership, initiated on November 7,1902, proved, to be so successful that on December 12, 1902, twenty-five additional nurses were appointed by the Commissioner of Health.

As an outgrowth of the home visit the nurse began to perform many of the duties of the truant officer, for truancy was a great problem thirty years ago. As soon as it was found that a nurse could make routine morning inspection quite as effectively as the medical officer, this new responsibility was delegated to her. The medical officer then enlarged his program to include giving physical examinations to children. Under this new regime there was effected a marked increase not only in attendance but also in pupil efficiency. The nurse began to take on many of the duties delegated to social workers; for she found that many children were absent from school, not because of illness, but because of insufficient clothing and food. According to Miss Rogers, "the nurse must be the principal's first assistant, and the friend and advisor to the mothers; she must take children to dispensaries and clinics; she must conduct toothbrush drills; she must teach Little Mother's classes--all this with a pupil load of ten thousand. Most of the programs both in the United States and in Canada have been patterned after that initiated in the New York schools and school nursing has fast become a permanent specialized field of Public Health Nursing."

Chapter II

THE PRINCIPLES OF THE HEALTH EDUCATION PROGRAM AS APPLIED TO THE SCHOOL NURSE

Health is our most important resource of the Nation. The advances of medical science are checking illnesses and lowering death rate. "Health is that condition of the body and its organs necessary to the proper performance of their normal functions. It is that condition which is ordinarily spoken of as physical fitness. It includes mental, moral, and social fitness."

The aim of the school health program is to so instruct the children in habits of healthy living that the full appreciation of health as an asset may be realized. With health the capacities for accomplishment and economic freedom are multiplied many fold and results are possible which without health could not be attained. The normal child both physically and mentally is the ideal towards which we are striving.

The nurse must have a working knowledge of what the school is trying to accomplish, she must also know what methods the schools are using to accomplish these ends of education; for only through such an understanding can she set up a program which shall contribute to these aims. It so happens in ecucation that there is a gap between the ecucational principles declared by the school administration, and the practice which is actually in existence.

Educators seem to be agreed, in theory at least, that education concerns itself with the development of the whole individual in all phases of life, through progressive enlarging of experiences. Therefore the nurse must know to what degree the schools in her community are accepting and practicing modern educational theory; then she must be able to make her contribution to the nursing education.

The educational principles which determine what shall be taught in school apply to the nurse as well as to the teacher. Since children differ widely in capacity, interest and early training, the things to be taught should be chosen with reference to the factors of individual difference. Learning is believed to be an active process of growth through experiences: yet we need to repeat it again and again: if growth results through experience, these experiences will have been based on previous experience and will have created on the part of the learner a desire to learn, with satisfaction resulting from the experience. Dr. Lois Mossman, an able specialist in the field of teaching and learning, has defined and described classwork as group living, and has shown how it is possible for even first grade children participate with the teacher in setting up objectives. The classroom inspection is a good example. The primary purpose of the inspection is to control contagion. The activity rightly carried out will help the child to judge whether it is safe for him to mingle with other children, and whether he needs to consult the physician or nurse. By the time he has reached the sixth grade the average child should be able to report to the proper authority any abnormal conditions in both himself and in his environment.

The teacher is to make a daily morning inspection of every child and always be on the watch for any rash or symptom for a sick child. An Inspection for evidence of contagion is made of all children each fall immediately following the opening of school; this inspection is made by the health department. When a contagious disease breaks out in a school room, the nurse inspects all the children in that room. She starts the inspection with a short health talk and states the purpose of it. No pupil is to

be excused from inspection. The nurse stands with her back to a good source of light and is careful not to touch the pupils. The pupils are instructed to open shirt collars, roll sleeves above the elbow, and to keep about two feet apart when passing before the nurse. On reaching the nurse they are to extend their arms showing their palms, then back of hands with fingers spread to hold the waist open at the neck, to turn one side of head then the other toward the light, girls having long hair to lift their hair showing scalp behind ear. Others to part the hair so that the scalp is exposed. Each student opens his mouth for the nurse to inspect the throat. If suspicious cases are found during the inspection, the child is to report to nurse's room for further investigation. The classroom inspection rightly conducted gives promise of valuable life outcomes, gives fuller meaning to experience, contributes to the child's effectiveness.

There has been a definite change in emphasis in the program of the school nurse due to the changed concept of health education and to a more enlightened public. At first the nurse planned the program largely by herself; later she attempted to fit her program into that of the teacher; now the nurse and teacher plan for a health program which includes parent education. The nurse furnishes the teacher with a scientific basis for health teaching by calling attention to health shortages revealed by the health examinations and by vital statistics of the community. The nurse also contributed a wealth of source materials to help the teacher to place her health teaching on a more scientific basis.

Through the radio, press, and various other methods of popular health instruction, much of this material has been accepted by the public. The primary aim which the nurse and all other

health workers must hold constantly before their attention is--"For every child continuous and satisfactory growth in control of conduct contributory to health."

School health work has tended toward fine discriminations in specialization. We find the dental hygienist, the nutritionist, the health education specialist, the visiting teacher, the dean of girls, the health coordinator, the nurse, the physician, the dentist and the classroom teacher, all carrying on some phase of health service or health education.

Nurses and physicians, as well asteachers, need to understand and appreciate the fundamental principles of child guidance, in order that they may make the fullest contribution to the all-round development of the child. Educational tests have shown that children develop at different rates of speed, even among those of the same intelligence quotient. Among the most common administrative devices for meeting individual needs are grade of children on the basis of mental age, and classification within the grade on the basis of intelligence quotient. It is a task for the nurse, teacher and parent to educate the growing generation for parenthood and citizenship. A clear understanding of the family as a human relationship is an essential factor in life, which "rightly used makes men and women of the best type, and wrongly used, wrongly thought of, brings an inevitable harvest of unwholesome minds and warped personalities, ill-fitted for happiness, ill-fitted for usefullness, and finally, ill-fitted for efficient parenthood." The parent, nurse and teacher should make special effort to understand the children and give them the wisest supervision and guidance. There is needed a thorough knowledge of the biological, psychological, and moral backgrounds

of human relationships. The history of the parent-teacher movement is one which challenges the attention of all those interested in the school child. The National Congress of Parents and Teachers holds a position in the program, and the influence which it is exerting on the better education of children through cooperation of the home with the school. School nurses have welcomed this coordination, and have used every opportunity for parents to learn more about the health of their children. Health committees are now a regularly-planned-for item in the parent-teacher associations.

The school, in the United States at least, is the universal, the officially accredited, and the strategic agency for leading in the educational program of health and for organizing and directing the health-care of children of school age. While much of the actual work in the health-care of children must be accomplished by the home, by health departments, and by other organizations both official and voluntary, it is the peculiar privilege and obligation of the school to standardize the principles and methods of child nurture and training.

The present day is one of change and new ideas. Nowhere is this more true than in the realm of the school, The many-sidedness of school health service is recognized. Complete realization of possibilities is only to be gained through a consideration of how the conservation and improvement of health are to be attained through the different phases of the school and its activities.

There are two types of school nursing that seem to be emerging; the health service type, which deals with the control of contagion and the correction of defects; and the health education type, which aims at the fullest development of the personality, through supervision of the emotional and social aspects of health

as well as of the physical; health service is solely a means to an end of health education.

The nurse cannot do effective work in a school even for one day unless she has a great deal of information about her community. She should find out about the area covered by the system and by her particular district; about the shortest and quickest methods of transportaion; about the density of the population and the make-up of its people; how many and of what economic and cultural status are the people who comprise the various races and nationalities; what are the predominating religious groups; how many are economically able to employ expert medical advice; what are the resources of the community by way of medical and dental service--pediatricians, eye specialists, psychiatrists, surgeons, general practitioners; and what type of medical practitioners contribute to the various clinical facilities set up by the community for those unable to pay for such service. She should find out if there are social agencies available when needed, the health status of the community as compared to other communities in the state and in the United States; what the status of health of the school child is; she should know the school population in elementary and secondary schools, in public and parochial schools, and know the facilities for safeguarding the health of all school children.

School health is sometimes administered by board of education, sometimes by boards of health and sometimes by a combined administrative scheme. Private organizations also may contribute to and participate in the administration of the school health service. In any case, there should be adequate health protection available to every child attending public, private and parochial schools. There are over five hundred county

health units in existence, through which the health work for the county, including school health service, is administered.

The nurse and school together set up standards of sanitation toward which to work. The important factors to be safeguarded in any school, no matter what its facilities may be are:

1. Ventilation.
2. Supply and distribution of heat.
3. Adequate amount of light, both natural and artificial.
4. Purity of water supply.
5. Drinking facilities.
6. Toilet facilities.
7. Hand washing facilities.
8. Seating arrangement.
9. Rest and recreation facilities.
10. Arrangements for lunch.
11. General cleanliness and cleaning methods.
12. Disposal of waste.

The nurses should bring unsatisfactory conditions found, together with suggestions for their improvement, to the attention of those responsible for them. It is well to remember that the way in which the approach is made may in a large measure determine the degree of success obtained.

Parent-Teacher Associations and other civic groups are vitally interested in school health programs. Nurses and other health workers should present to them the needs of the schools and the responsibility of the home and community in meeting these needs. Their assistance can be enlisted for many types of service such as making provisions for hot lunches at school, transportation to clinics and conferences, assistance at clinics, etc.

Such aid is needed especially in rural areas.

Talks and demonstrations before these groups usually are of two types: First they may show what the program of the schools now is and what changes are needed (comparison may be made with programs in other cities). Second, they may consider the health and development of the chidren from various aspects.

Chapter III

THE SCHOOL NURSE AND PARENT EDUCATION

Before the public schools had conceived the idea of working intelligently with the home, the nurse was already there, taking care of the sick and teaching better care of babies. She was nurse, teacher, and social worker combined. Settlement houses were first started by nurses, and day nurseries, in connection with them were established for the care of children whose mothers were forced to help earn the living. The day nursery was the forerunner of the kindergarten, for it was found advantageous to place well-trained workers in charge of the children in the settlement. Soon the kindergarten teacher became social worker, visiting the home to help parents have a better understanding of child care and development. After the kindergarten movement came the nursery school was to train for motherhood, research in child development, and in teacher training.

In 1897 the National Congress of Mothers came into being, its object being training of motherhood and better care and training of their children. This organization had no "father" for eleven years, but in 1908 it altered its name to National Congress of Mothers and Parent-Teachers Association. Not until 1924 was the father publicly admitted to share equal responsibility with the mother. The name was then changed to National Congress of Parents and Teachers.

The nurse has to establish a common basis of understanding in the home. There will be differences in language, in customs, in religion, in nationality and in maturity. How people think and learn involves psychology but how people feel involves mental hygiene.

Cooperation of the home in many things is needed, frequently

without suggestion from the educational authorities. Part of the home program should be arranged to form a correlation with the school health-work. In private and public school this is accomplished through frequent parents meetings, close contact between parents and school at all times, and the distribution of literature prepared as a guide for the homes.

DAILY HEALTH SCHEDULE

7:00 A.M.----------Rising hour. Duties include bathing, dressing setting-up exercises, cleaning the teeth, drinking one glass of water.

7:30----------Breakfast. Follow by bowel movement. Then wash the hands. Do necessary chores, allowing plenty of time.

8:30 to 9:00----------Arrive at school on time, after an unhurried journey from the home.

Mid-morning----------Recess--outdoors in good weather. Time for another drink of water.

10:30----------Mid-morning lunch.

12:00 to 1:00----------Noon meal at home or at school, depending on whether the school day is over: and if school is not over, the place where the meal is eaten depends on whether it is possible to go home for lunch or not. Wash the hands and face before lunch.

1:30 P.M.----------Rest for half an hour, if possible: if under seven years of age, rest one hour. Then a glass of water.

2:00 or 2:30----------Outdoor afternoon play. For older children, the afternoon play may come at

3:30 or 4:--, when school is over.

4:00 P.M.----------Mid-afternoon lunch, if needed. Fruit is best for this lunch. Another glass of water.

5:30 to 6:30--------Evening meal, the time depending on the age of the child. Precede by washing hands and face. Teeth should be cleaned after the evening meal.

After this meal-----Unexciting activities. Homework when required, but not till at least one-half hour has elapsed after the meal.

Bedtime------------Determined by the number of hours of sleep required as suggested in the table below. Brush the teeth. Bath. Toilet.

Sleep should always be with the windows open at top and bottom. The hours actually in bed are suggested in this table:

AGE	BEDTIME	HOURS
4 and 5 years	6:00 P.M. to 7 A.M.	13
6 " 7 "	7 " " 7 "	12
8 " 9 "	7:30 " " 7 "	11½
10 " 11 "	8 " " 7 "	11
12 " 13 "	8:30 " " 7 "	10½
14 " 15 "	9: " " 7 "	10
16 " 17 "	10 " " 7 "	9

The development of character is importantly influenced by the home. Hence the home atmosphere must be fundamentally one of happiness, although not of indulgence. Good work is the result of encouragement, not discouragement, nagging, and worry. The school child should attend the theater and moving pictures very

infrequently and then only when an entertainment has been selected which is educationally helpful or offers clean amusement.

The nervous child must be particularly restrained from exciting experiences becsuse it exhausts him much more than it does the normal person.

No phase in the education of the child or youth belongs more naturally, unquestionably to the home than the education toward parenthood, including sex education and the teaching of social hygiene. The fundamental responsibility for this vital part of the education should be assigned to the home. The schools should make sure that the homes recognize and accept this function, and the teachers and school nurse should be qualified and active to help the parents to exercise this privilege and to perform this duty. To the help of the home should be brought the cooperation of school, church, and family physician. Successful training in the home, aided by these supplementary services, may be of inestimable value in preparing pupils abundant and worthy lives in the interest of the race as well as for benefit to contemporary society.

As the teacher evaluates her work in the classroom, so the nurse must evaluate her home teaching. She should not only evaluate but also record the results of her work, and plan her next home lesson on the basis of what has been accomplished in the preceding lesson. The nurse must know who is the best person in the home to whom to delegate responsibility. There is often need for a series of visits to accomolish the bit of education desired.

The object of the nurses home visits is the education of parents in healthful living and securing adequate medical care

for untreated physical defects. The approach into the home should be courteous andtactful, keeping the family's viewpoint in mind. To know the names, ages, and grades of children to be seen makes a more ready response from parents. If economic conditions stand in the way you may suggest securing assistance but tact must be used in doing this and definite information as to family income secured before referring the case. Always advise the family physician. Where they have no physician or dentist and ask whom you advise, ask them to consult the phone book or friends. Do not advise as to hospitals. The nurse should explain to the parent the nature of the defects and the need of seeking medical advice. At no time should she suggest the kind of treatment; The nurse's success is her ability not only to make her message clear but also to do it so persuasively that the desired measure will not only be understood but also will be put into practice.

The aim of the nurse is to teach the family to attain independence from her. The health activities of the family must be increasingly self-initiated.

Advisory conferences with pupils, teachers and parents are an invaluable aid in the nurse's plans for the health of the child. The parent-nurse conference in the school offers much of educational value, familiarizing parents with the health program of the school and stimulating them to a greater interest in the school environment and to a better understanding of the school problems. Conferences may be held at the request of the nurse, the parent or the pupil. In certain cases, it is important that the teacher be present at such interviews.

When pupils come to the nurse for advice, she must try to

discover the underlying difficulty and to fulfill her obligation as a preventive health worker. It is here that she must be careful not to assume responsibility beyond the scope of her nursing profession but to refer to the physician or other health specialist such pupils as need their advice.

Chapter IV

THE CONTROL OF COMMUNICABLE DISEASE AMONG SCHOOL CHILDREN

Each year parents are coming to realize that getting the child ready for school means more than a new wardrobe. It means having the child in as perfect condition physically, as possible to start this new and strenuous work. The Parent-Teacher organizations have conducted a "summer round up" clinic early each spring and hundreds of children are examined by the doctors and dentists. These clinics are conducted the same as the regular school examination. If any condition if found deviating from the normal, the parent is advised to have a correction made. A re-check on the physical condition is made in the fall when the child has entered school.

Since this is a Parent*Teacher activity, they assume the responsibility. However, the school nurse helps in every way possible so the clinic may be carried on in the same manner as the regular school clinics.

The parent must be familiar with the various positive methods of disease prevention and control, such as vaccination, the Schick and Dick Tests, immunization against diphtheria and scarlet fever, typhoid inoculations, as well as the protein tests in cases of asthma and hay-fever, and any other special measures which are peculiarly needed by individual children. The progressive school will be particularly interested in the control of smallpox, diphtheria, and scarlet fever, and the parent, even if vaccination were not usually a legal requirement, should have his child vaccinated and the Schick and Dick tests given at an early age.

Successful control of contagious disease in schools requires effective cooperation of parents. The school-health authorities can discover trouble only after definite signs are noted, although the parent may have found somewhat earlier that there was room for suspicion of ill-health. The ambition to have the child make a high record of attendance; ignorance of the significance of suspicious physical signs, or simply the desire to be rid of the child during certain hours, often leads parents to "take the chance" which later results in the exposure of an entire school group and often the occurrence of the disease in other pupils.

To do justice to one's own child and to be fair to the other parentschildren, it is not enough that the child go to school properly and cleanly clad; the parent should make a definite and thorough examination before permitting him to leave the home. He should always be kept at home, at least for the day, when there is nausea, vomiting, chills, convulsion, dizziness, faintness, unusual pallor, rash of any kind, rise of temperature or suggestion of it through unusual warmth of skin, a discharge from the nose, redness or secretion from the eyes, a sore or inflamed throat, swollen glands in the neck or elsewhere, a new cough, failure to eat breakfast, a seriously disturbed night's rest, or any unexplained or indefinite change from the usual appearance or conduct. If the disturbing sign does not promptly disappear, of course the family physician should be called and only his assurance that no disease exists or is likely to occur in the very near future, may the child be permitted to go to school or come into contact with other children.

Toxoid is offered to all children whose parents wish to have them immunized against diphtheria. "Consent Cards" accompanied with instructions are given out previous to date of first dose. These are to be signed by the parents and returned. The signed cards are kept on file by health teacher and given to teachers on the morning the treatment is to be given. No child is given immunization who does not carry a signed slip. These cards are kept on file in schools.

No vaccination takes place without written permission of parents or guardian. Vaccination is encouraged in communities where a case or a number of cases occur, or where the community asks for it.

At the beginning of the year, nurse gathers all information available at the Health department concerning the prevalance of disease. The principals of the schools should plan each semester for the nurse to discuss with the teachers, the health status of the schools. The teacher makes careful survey of her group each morning and watches them all during day. Parents should be informed of danger to the child and to others when the child is sent to school not feeling well. Communicable disease may be controlled only through careful watching for symptoms by parents, teachers, and nurses. The symptoms that are noted are eruptions, sore throat, headache, fever, malaise, and other symptoms of a cold. When a child needs to go home, arrangements should be made to have him taken home and someone should be home to care for him. The parent should be informed as soon as the school is exposed to a disease so the parent may watch for the symptoms. Diphtheria may be positively eradicated by the use of protective treatment--Toxin antitoxin.

Scabies, impetigo, and ringworm cause considerable concern in certain localities, especially early in the fall semester. State laws differ as to whether these children are allowed to stay in school, if these infections are under treatment.

Conjunctivitis or pink eye is contagious, therefore the child should see the physician and stay out of school until it clears up. All foreign particles should be removed from the eye by the doctor or experienced people.

Communicable diseases continue to cause many days of absence from school. The Health Department is the official agency directly responsible for the control of communicable diseases. The schools can give more assistance than any other organization in helping to control diseases by keeping in close touch with the Health Department, knowing its plans and purposes and helping children in the school to contribute to community health through their ability to assume their share of personal and community responsibility.

READMISSION AND EXCLUSION

On returning after an exclusion or after having been absent three or more days, each child, before being allowed to return to the class room, should present to the principal a permit stating that he is in condition to remain in school. Permits are issued by the nurse at the school or may be obtained from a private physician and should give the name and reason for absence. All cases of suspicious contagion or children complaining of being ill should be sent to the nurse or the principal early in the morning. This decreases absences by eliminating from the class room early the cases of contagion before

they can infect others. Incase the nurse finds evidence whereby she is led to believethat the child is sufferin from a communicable disease, she excludes the child giving him a note to take to the parent, which states the reason for his exclusion. The nurse does not diagnose but excludes stating "rash", "eruption", cough, etc., and advises the parent to consult the family physician or health office. All such children must have a permit to return. A routine inspection in the school by the nurse consists of looking in the throat, looking at the face, hands, arms, and neck for suspicious rash, eruption and peeling of the skin. When some particular disease is more prevalent than usual in the school, special stress is laid upon looking for early symptoms indicative of this infection. The nurse takes a culture and temperature when indicated. Under no circumstances should a very ill child be sent home if no one is there.

Children are excluded for the following diseases: acute anterior poliomyelitis, chickenpox, chancroid, diphtheria, german measles, gonorrhea, impetigo, meningitis, measles, mumps, pediculosis, ringworm, scabies, scarlet fever, smallpox, syphilis, tonsilitis (septic sore throat), trachoma, tuberculosis, whooping cough, inflamed eye, and trench mouth.

Chapter V

PHYSICAL EXAMINATIONS IN THE SCHOOLS

There are various ways of gathering necessary information in regard to a child's health by physical examination, psychiatric examination, psychological tests ofvarious kinds, inventory of health practices, and the record of child's illnesses. The problem lies in the failure of the parents to consult a physician for a child who they think is well.

The school, through its health examination program is attempting to meet two needs: first to point out the need of the systematic, thorough, periodic health examination, made by the family physician; second, the detection and early correction of defects which retard school work.

The health examination, accurately set up and conducted, affords an opportunity to secure on the part of parent and child valuable information about better health practice, and a more hygienic regimen of living. It gives the child an opportunity to learn that the physician is his friend, and develop in him a confidence in the scientific attitude of the physician and nurse which should be of service to him all through life.

Early in the year each nurse should be notified of the number of examinations allotted the school according to her school population. She should be notified regarding the date of the physical examinations at least two weeks previous to the time of the examination. A written notice should be left with the principal regarding the date of each physical examination. Invitions should be sent to the parents of all children who are to be examined, at least a week before time of examinations

stating the date and the hour of the examination. The superintendent or principal of the school may sign the invitation if he so desires. In addition to this, principals, nurses, and teachers may give a special invitation by means of a friendly note or telephone call. Announcement should be made at the Parent-Teacher Association meeting.

The nurse tests the vision and hearing a few days before the examination. Girls and boys are examined in seperate groups. The room chosen for the examination should be screened in such a way that the parent and physician may confer together as they might in the private office of a physician. Any feeling of hurry should be avoided in order that the parents will feel free to ask questions and to discuss the health problems. The doctor examines eyes, ears, nose, throat, teeth, lungs, heart, thyroid, lymph nodes, skin, posture, feet, speech, muscle tone and nervous signs.

No discussions of lengthy details should be indulged in the presence of the child. Special care should be taken with a nervous, apprehensive child. All children should be reassured before leaving the physician, and not left to worry about what the doctor found. In so far as possible a child should be permitted to enjoy the knowledge that on certain points at least he has passed a satisfactory test.

It is necessary to keep the room as quiet as possible during the examination so that the parent may converse with the doctor, and that the doctor can hear when using the stethoscope. It is important to always have a few children ready, and not delay the doctor in his examining. The doctor or nurse make the notations on the record card. The nurse should always be

present even though she does not make the notations on the record card, because she will know exactly the advice which has been given and will be more intelligent about the child and follow-up work to be done.

In Portland schools, a systematic complete examination is made of all school children in the first B, third B, and sixth B grades, (whose parents give permission).

If neither of the parents are present at the time of the physical examination a home call is made to explain the doctor's findings. Arrangements should be made for the parents to have correction provided. Children referred by the teacher as problem cases or indicate need of physical examination, as children underweight, or losing weight or other reasons, are given physical examination whenever permission is granted by the parent.

The physical examination card follows the child throughout his school career. They should be filed alphabetically and kept in school. If the child is transferred the health card should be transferred also. Nurses should see that records are kept up to date. Many health record cards have been devised for the purpose of meeting individual needs of specific school situations.

In recent years a great deal of attention has been focussed upon the teeth of school children, fifty per cent to ninty per cent of school children have defective teeth, and ten per cent to twenty-five per cent of elementary school children have abscessed teeth. It is believed that much damage can be done to other organs of the body by drainage into the blood stream of pus from these diseased mouths. Tonsils may early become infec-

ted through the avenue of decayed and abscessed teeth.

For the past ten years there has been a tremendous amount of emphasisplaced on diet during the prenatal period, for it is assumed that poor tooth structure is only one indication of poor nutrition.

It is estimated that five percent of the total population has a mental level of intelligence not to exceed that of a normal twelve-year-old child. Of these, five children out of every hundred, two belong to the lower level of mentality, characterized as idiots or imbeciles, who under any circumstances will always be a social liability, or to the moron or borderline group, who under certain conditions of inadequate home control or poor social adjustment fail to become an asset to society.

Some schools ask for the teacher to present a physicians certificate. The nurse should keep a record and cause of her absence; she should be on the lookout for signs of undue worry and fatigue among the teachers and offer consultation service to them. The health of the teacher reflects upon the success of the school, for no one can give her best unless in proper condition of mind and body to do so. Proper rest-rooms with a convenient toilet, should be provided in every school building for teachers.

Chapter VI

THE CORRECTION OF DEFECTS AND THE CONSIDERATION OF INDIVIDUAL NEEDS IN THE SCHOOLS

There are approximately forty-five million school children in the United States, of whom probably thirty-five million are reasonably normal; that leaves ten million children in need of remedial care. Examinations of children show large numbers suffering from poor nutrition, diseases of heart and lungs, impaired hearing and vision and diseases of the boney framework. Many more have speech defects, behavior difficulties, etc. Among the less grave defects are defective teeth and tonsils.

Defective vision is a "health defect". The definition of a "health defect" is a condition actually or potentially detrimental to a child's health or efficiency, the type should be recognized and corrected if remediable. This definition as applied to "defective vision" constitutes an education handicap. Schools should discover defective vision and should make the defect known to the parent or guardian so that through the family physician or school clinic the child will be referred to specialist for treatment or correctionof the existing defect.

The kinds of defective vision are nearsightedness, farsightedness, and astigmatism. If a person is nearsighted, they can see best at the near point thus losing distant objects; if farsighted a person can see best at the far point with the eye strain when looking at the near point. In astigmatism (take the dial on the clock; the lines of the Roman numbers will not run parallel to one another.

The Snellen Chart plus symptoms of eye strain are used as an indicator of defective vision and a more complete examination

may be made by an eye specialist. The letters on the chart are so formed as to subtend a one degree angle in the eye at the distance indicated on the various lines. This is the accepted standard of the normal eye, at twenty feet from the chart.

The teacher should see that the reading page is from twelve to fourteen inches from the eyes and that the child is sitting erect with good light falling over the left shoulder. The teacher should watch the children to observe symptoms of eye strain: the principal symptoms are headache, red or inflamed eyes, blurred vision, and granulated eye lids. If any of these symptoms are present, the teacher should notify the school nurse or school physician, and have the child especially examined. This examination should be made promptly so as to isolate the condition whenever it is thought to be present.

It has often been stated that the most important measures for the conservation of vision are the detection and correction of defects, the treatment of eye disease, and the establishment of adequate educational facilities for those needing individual attention. She helps the schools and homes to provide that physical environment which shall best conserve sight.

Various methods have been devised for finding the hard-of-hearing child in school. For all practical purposes it is important to know how well the child can hear the spoken word; yet tests have been made by the use of the tuning fork, the watch and other devices producing mechanical sounds rather than the voice tones. The voice test is a whispered test

rather than a spoken voice test.

When we consider the fact that about nine-tenths of life's activities are carried on, in conjunction with other people and that for this mutual relationship our communication is dependent upon the ears, we realize how important it is that these organs function normally. However, hearing test conducted in various cities, over the country at large, show us that practically seven per-cent of our school children are troubled with ear difficulties of varying degrees, about twenty-five per cent finding it necessary to attend schools for the Deaf. The audiometer is the latest and most accurate device for testing hearing in a school. It resembles an old fashioned phonograph and plays records. Attached to the machine are three trays containing eight ear phones each, making it possible to test twenty-four pupils at one time. There is a special ear phone for the instructor, which she uses to assure herself that the machine is operating correctly.

Children should be weighed every month as part of the program to improve their health practices. Growth is a sign of health.. Sick children do not grow well. Children wish to grow and they will therefore do the things which make them grow. Growth is a sign of success in healthful living and therefore a measure of accomplishment.

The teacher should weigh her pupils once a month and use the child's interest in growing as an incentive toward the

development of health behavior. It may be desirable for the teacher to look into the cases of children who have lost weight or who have failed to gain over a period of three months or more, and, unless a reason is obvious, to refer those children to the nurse or doctor.

Underweight should not be used in the classroom either as a teaching device or as a measure of the success of the health education program. The school physician or pediatrician will use the underweight tables if he finds the data helpful as an addition to other diagnostic indices of health status. He is able to judge the skeletal type of the child as a basis for interpreting the underweight data.

In any school situation there will be found those children who are in need of special consideration; those who need to have rest periods at home or at school in order to go on with their school work; or the school day may need to be shortened for others. There should be close interchange of information between the teacher and medical advisor relative to all children returning to school after acute or protracted periods of illness, to be assured that the daily program is not too strenuous. Special problems to be considered are nail-biting, left-handedness, speech disorders, impaired vision and hearing and underweight.

Despite the best arrangements which can be made there will be found those children who cannot profit by the offerings of education unless they are cared for in special classes.

The nurse is likely to be confronted with the question

as to whether the school should provide for between meal feedings. A milk lunch is the one most commonly used although experiments have been made by Morgan of California and others with the use of orange juice and other foods. These studies seem to indicate that the milk lunch gives the better results among children from homes of lower financial status, while orange juice gives the better results among children from the better home.

Where ever the pupils, teachers and nurses must remain at the school for the noon meal, a warm lunch should be provided. A fund should provide lunch for those who are unable to pay for it. The food should be of good quality and well cooked, and shouldbe suitable for the children. Religious preferences and racial customs should receive due consideration in the choice of food. The menu should offer good variety from day to day. Milk should always be served. The school lunch is just as much a part of the teaching program of the school as any other portion of the day's exercises, and the nurse should see that the cafeteria is run in proper manner. She should check up on the menus and cleanliness of the employees and food. The teacher should report to the nurse if some children are getting insufficient food or omiting their meals altogether.

Chapter VII

FIRST AID AND ACCIDENT PREVENTION IN SCHOOL

First Aid is the immediate, temporary treatment given in case of accident or sudden illness before the ~~the~~ services of a physician can be secured. In some cases this immediate action saves a life. In all cases, proper first aid measures reduce suffering and place the student in the physician's hands in a better condition to receive treatment..

As prevention of accidents is far better than care after the damage is done, it should be each student's concern to recognize conditions that may cause an accident and then to conduct himself upon meeting these conditions so that the accident will not occur. It is well known that accidents occur less frequently, and as a rule are less severe, among students trained in first aid. This can be readily understood when it is realized that pupils so trained better understand the seriousness of all injuries and naturally have in mind at all times their possible causes and what should be done to prevent them.

First Aid should be taught in the secondary schools as it is for the student's own good and the good of his associates that he have a thorough knowledge of first aid.

Accident prevention should be taught in all schools. Swings cause many accidents and should be eliminated along with other dangerous apparatus. All emergencies should be refered to the nurse or school physician. Every child should learn to cross the street carefully and safely, and know how to use the bus or street car with caution. Each

child should know the dangers of catching on to vehicles. Children should know how to use matches properly and extinguish them completely before throwing them away. They should know how to recognize and avoid poison ivy. Poisonous medicines and disinfectants should be placed in a safe place away from children. Bandages and gauze should be always available for use when necessary so children may use it if the parents are not home.

Chapter VIII

SCHOOL NURSING IN SECONDARY SCHOOLS

It is a difficult matter to trace any definite trend in nursing in high schools. Some high schools employ full time nurses; while others have no school nursing.

The nurse must be very closely allied to the dean of girls and boys. She must know thoroughly what the purposes are of the particular secondary school in which she is working. Schools differ markedly in their purposes and functions. A health examination should be given each year and it should give the student an appreciation of what constitutes physical fitness. In addition to the individual work with students, the nurse, whether she be the health coordinator or merely a member of the health committee, will urge intelligent consideration of the big units of instructional material contributory to health, which should be included in the high school curriculum.

Each student should keep a record of his own growth. He should present himself for a health examination to discover whether he is fit for certain physical activities. He is placed in his physical education class on the basis of his health examination. Special activities are planned for him, or rest periods may be indicated and prescribed. The nurse bears the larger degree of responsibility for preparation and follow-up of the initial health examination of these students.

Each year more and more nurses are being employed in high schools for the purpose of giving instructions to girls in the home care of the sick and injured and in the care of the well child. There is a recent growth in teaching Home Nursing in schools largely since 1920. Present school organization quite generally places the teaching of Home Nursing in the Department of Home Economics. One fifth of the number reporting placed it in Health or Physical Education. The aims of the course are health promotion, prevention of illness, care of the sick, and care of emergencies.

Chapter IX

SUPPLIES, EQUIPMENT AND MATERIALS OF INSTRUCTION FOR THE SCHOOL NURSE

The nurse's office should be easily accessible to the principal's office and also to the physical education department, and should have a telephone if possible. The room should be large enough so that one end of it may be screened off from the rest when the physician comes to make his examination and so that privacy may be secured when necessary. The office should be at least twenty feet long in order to test vision. It should be as attractive as possible by the use of pictures and a few well-chosen and artistic posters, frequently changed. The room should be lighted and ventilated.

A full-length mirror is very good because the child can be given a standard for good posture and see how long he can bring himself up to the best standard. There should be running water in the office.

The nurse's office should contain at least one cot, strong scales equipped with a stadiometer for measuring height, and a supply cabinet containing glass jars of tongue blades, applicators, tooth picks, sterile gauze, absorbent cotton, adhesive tape, scissors and forceps, thermometers, medicine dropers, culture tubes, sterile swabs, etc.

The nurse should keep a supply of printed material which are used in her work; health record cards, teacher health habit records, classroom weight charts, individual weight report forms to send to the parents, absence record

blanks, daily work sheets; daily, weekly or monthly report forms, health examination letters to parents in reference to exposure to communicable diseases, admittance and exclusion pads etc. She should also keep educational pamphlets on all phases of health to distribute to parents, teachers, and students. The materials should have a scientific basis of fact.

The rest room should be adjacent to the nurse's office so that it may be supervised. One cot, paper towels, cotton blankets, and a few chairs should be in it.

In some states the school nurse uses a bag. It may contain a few first aid articles for demonstration of simple dressings, scissors, forceps, tongue blades, culture tubes, a thermometer and a bottle of alcohol or bichloride for cleansing it, a cake of soap, paper towels, printed slips and letters which might be needed; also communicable disease regulations and a list of clinic and dispensary hours, in case it is necessary to refer the family for service.

Uniforms are not required in all the states but there are good reasons why a uniform is desirable. The uniform is a quick identification in case of emergency. Once it has become familiar any child can tell whether the nurse was seen in his room or in the corridor. The uniform is suitable dress to wear when doing dressings, taking care of child in the school, and visiting the child and parents in the home. Caps are not used except in a very few schools, because they suggest illness rather than health.

Chapter X

THE PREPARATION OF THE SCHOOL NURSE AND HER RELATIONSHIPS WITH OTHER PEOPLE

According to the N.O.P.H.N., all public health nurses coming into the field today should have the following fundamental preparation:

1. Four years high school.
2. Graduation from an accredited school of nursing connected with a general hospital having a daily average of fifty or more patients.
3. State registration.
4. A public health nursing course approved by the N.O.P.H.N., or several years' experience under adequate supervision.

If a school nurse is expected to do classroom teaching as a member of the school faculty she should in addition meet the qualifications set by the school for its teachers. If she wishes to be a director of health education, a highly specialized position, she should meet the requirements for such a position drawn up by the health educators.

Certification of school nurses by state departments of public instruction or state boards of education, is not a universal practice at the present time. Some states require certification of school nurses, a few provide for it under certain conditions, the remainder make no provisions for it at all. Some states issue permanent certificates only, some issue temporary ones only, others issue both temporary and permanent certificates. Standards for certification vary from the approval of a supervisor, or school administrator,

to definitely defined requirements for both permanent and temporary certificates. Registration within the states is the most frequently mentioned requirement for certification of school nurses, and may be referred to as the one uniform requirement. Seventy five per cent of the states requiring certification make specific general educational requirements for certification of school nurses.

School nursing requires an enlargement of experiences. The nurse needs to have an enlarged concept of nursing. In addition to the knowledge of the child who is ill, she needs to recognize signs of normal and healthy growth and development of the child, through the infancy and pre-school to the school period.

There are many in school nursing today who went into this field long before requirements were made, who had no opportunity to prepare themselves according to present-day qualifications. In spite of this many have learned much from their long years of experience and are making a valuable contribution to the field. While they cannot be expected to go back and make up high school, perhaps, or training school deficiencies, there is not one who cannot carry on her education in some way, and every school nurse in the field today, no matter how little or extensive her preparation has been, is expected to carry on such activities as will help her to grow and develop on her job. This is particulary necessary for school nurses because they are in contact with

two fields, the public health nursing and the teaching fields, and each is changing so rapidly from day to day, that one must make every effort to keep up.

The primary aim of every school nurse is to help in securing maximum health for every school child through his own intelligent cooperation and that of all others who influence his environment. The general objectives of a school nurse are:

1. To assist in communicable disease control by the recognition of early symptoms and by securing immunization.
2. To assist the physician in medical inspection and in the routine periodic physical examination of every school child.
3. To assist in securing the correction of defects and in promoting health.
4. To assist in securing special examination and such follow-up as is necessary.
5. To participate in the promotion of hygiene and sanitation of the school plant.
6. To assist in securing proper instruction of pupils and parents in the principles of healthful living.
7. To provide or supervise adequate nursing care to all sick children.

Personal qualifications play as important a part in school nursing as in other branches of public health nursing.

In addition to knowing the best techniques of nursing in contagious diseases, she needs to know how to avoid and control communicable diseases among large groups of children. In addition to her knowledge of diet in disease she needs to know signs of good nutrition and dietary requirements of the well child at different ages.

Most important of all the nurse in school needs to know how to work with school children of all ages; with parents of all ages, nationality, and cultural background; with the well prepared and the poorly prepared teacher. She must know how the community cares for its people. Knowledge of the community organization and the organization of its agencies involves a knowledge of the social sciences and family social case work.

The school nurse is a Public Health Nurse who works with school children. She is a nurse, teacher, and social worker combined, and her work involves a very lengthy preparation. In addition to these professional courses she must be familiar with general and educational psychology, principles of teaching. Appreciation courses in parent-child relationships will also be of help.

The principles guiding the school nurse in giving such a service are the same as the general principles of the Public Health Nurse except that they are adapted to a special age group--the school-age child--and hence to a special environment--the school--in which the child spends a large part of his day. The nurse thus serves as a connecting link between the home, the school and the community and can utilize

the interest of all groups to help in the promotion of the health of the child.

The nurse has her closest relationships with the school and the local department of health: yet every day she has potential relationships with local physicians and dentists, hospitals, clinics and the outpatient departments, and with the public health nursing organizations and social workers of the community.

The school program is run on schedule, therefore the nurse should make a schedule and keep it. Only a rare emergency should hinder her from keeping her schedule. It is not the business of the nurse to suggest to the teacher the methods of teaching. If however she visits a classroom and finds the discussion centered around some topic about which the nurse has some material in her files, she may suggest her material would be of interest to the teacher.

The personal physician chosen by the family is admittedly the health advisor for the family. The school nurse should welcome every opportunity to increase the confidence of the family in their medical advisor.

The scope of the program of the health department varies in different localities: but a well organized health department has divisions or bureaus dealing with vital statistics, food and dairy inspection, sanitation, laboratory work, child hygiene and public health nursing. The school nurse should avail herself of all of these facilities and the proper working relationships should be maintained with reference to them. The nurse will have one of the closest

contacts with the health department.

All the school nurses of the community should come together in frequent staff meetings. If there is only one school nurse in the community then she should see that public health nurses of that community come together in frequent staff meetings where programs and individual problems may be informally discussed. An opportunity should be given for nurses and social workers to discuss problems on a coming basis of community need.

Chapter XI

EXAMPLES OF WORK AND ACCOMPLISHMENTS MADE IN SCHOOL NURSING IN CERTAIN CITY SCHOOLS

PORTLAND, OREGON SCHOOLS

Twenty-one years ago medical inspection in the schools of Portland was undertaken for the first time. For period of six months money was appropriated providing for one part-time medical inspector and one nurse. The following year six doctors became members of the Health Staff and, with the one nurse, began systematic health inspection of the schools. One can realize the discouragement which the school nurse confronted during this time. A inspection in the school room was done and all pronounced defects were found, and were referred to the medical inspector. The nurse soon found duties increasing and her responsibility extending to the home of the school child where she became consultant as well as counselor to the parents.

The school population was increasing and therefore a larger staff was needed. Dental clinics were established. Contagion appeared to be growing less. Home calls were made and social agencies were called upon to help. Corrective rather than preventive aspects were being encouraged but people were realizing the value of health service. It was suggested that the principal and teachers should know more of sanitation, hygiene, physiology, also something of communicable diseases, and should assume some responsibility for a large percentage of health of school children.

The Board of Education announced the opening of Mills Open Air School in 1920, which was to become part of the

educational system in order to give special care to children who needed it. The adequate personnel was made possible with the cooperation of a private agency, the Tuberculosis Association, and the Visiting Nurses Association.

The same year, physical examinations were discussed and through the assistance of Dr. Parrish, Health Officer, Dr. Edna Sherrill, School health Physician secured the assistance of Dr. Guy Talbot to examine the boys, Dr. Hendershot to examine the eyes, and Dr. Schneider to examine the teeth.

Six nurses were then engaged in school nursing, one of the group doing special work under supervision of the Department of Social Work, of the University of Oregon. Nutritional programs and goitre prevention programs were organized during the same year.

In 1924, principals from six of the largest schools asked for an intensive program in their schools. This visit results in placing of three school nurses in the field to serve the six schools. The results of this intensive program were so effective that the Board of Education cooperated with the school division of the Bureau of Health to finance the employment of eleven nurses. At this time a supervisor of nurses and one assistant supervisor became part of the staff.

The parochial schools too have had an interesting development. With the aid of private agencies and much volunteer service, and adequate health service was started.

The Oregon Tuberculosis Association has played a very active part in the organization of the work. This work was financed wholly by seal sales money, the activities supervised by the City Health Bureau.

At the present time the staff consists of a Medical Advisor, Supervisor of Nurses, two Assistant Supervisors, twenty-one nurses, an Eye, Ear, Nose, and Throat Consultant, and four examining physicians.

Portland, with a school population of fifteen thousand in 1908, has grown to forty-five thousand in 1935. Health service is administered by the Department of Health in cooperation with the Board of Education and the Parochial school Organization. The Department of Health is responsible for examining of children for physical defects, diagnosis and control of communicable disease and follow up for correction of defects. The Board of Education is directly responsible for the routine health of education work.

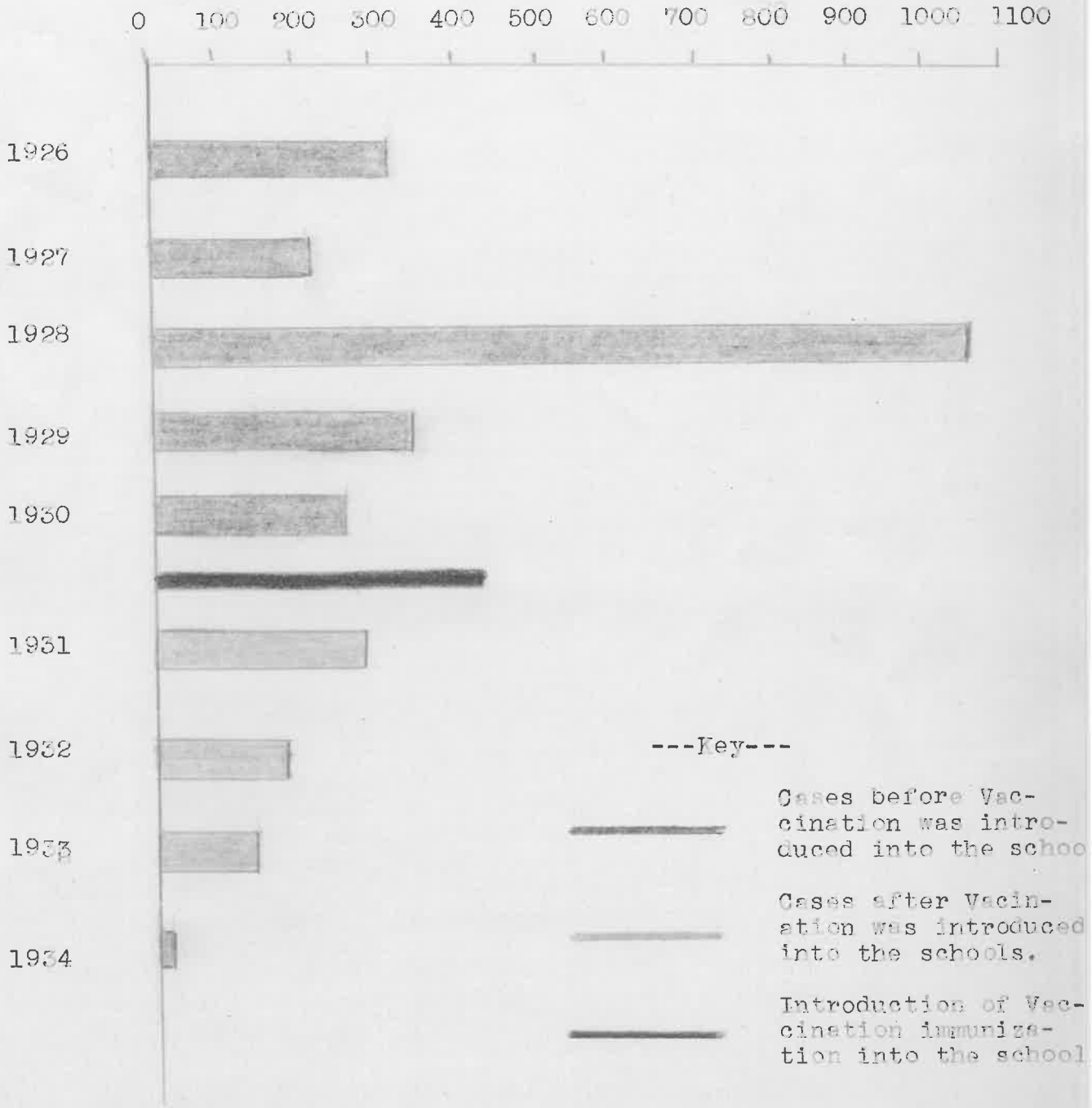
Dr. Helen A. Cory, Medical Director of Schools in Portland, Oregon, said, "The past year has required more intensive work on the part of the staff to carry on the program than ever before. There have been more problems, and a greater need for health service to maintain a health standard for the school child. The school year was shortened to nine months instead of the usual ten, and the time of the examining physicians was cut

from ten months to eight months. In order to compare the actual work performed this year, with that of last year, it is necessary to compare the two reports on a percentage basis, as for instance in the case of the number of children vaccinated, the number of dressings and the actual number of sick children cared for in the schools. A definite actual increase has been noted in practically all corrections made. In spite of the increased corrections made, there has been also an actual increase in the number of defects found. The malnutrition as found by the examining physician has increased to fourteen per cent, while the number free from defect is twenty-two per cent.

An intensive program has been carried on in an effort to see that vision tests are given to as many children as possible, with a follow-up program for those who have given evidence of poor vision. A greater number were tested, and a decided decrease in the number of defective vision was found. We also had many more vision corrections made this year than previously. It is a decided satisfaction to see the increased number of corrections being made annually in spite of the economic situation."

WHAT SMALL POX PREVENTION HAS ACCOMPLISHED FOR PORTLAND SCHOOL CHILDREN

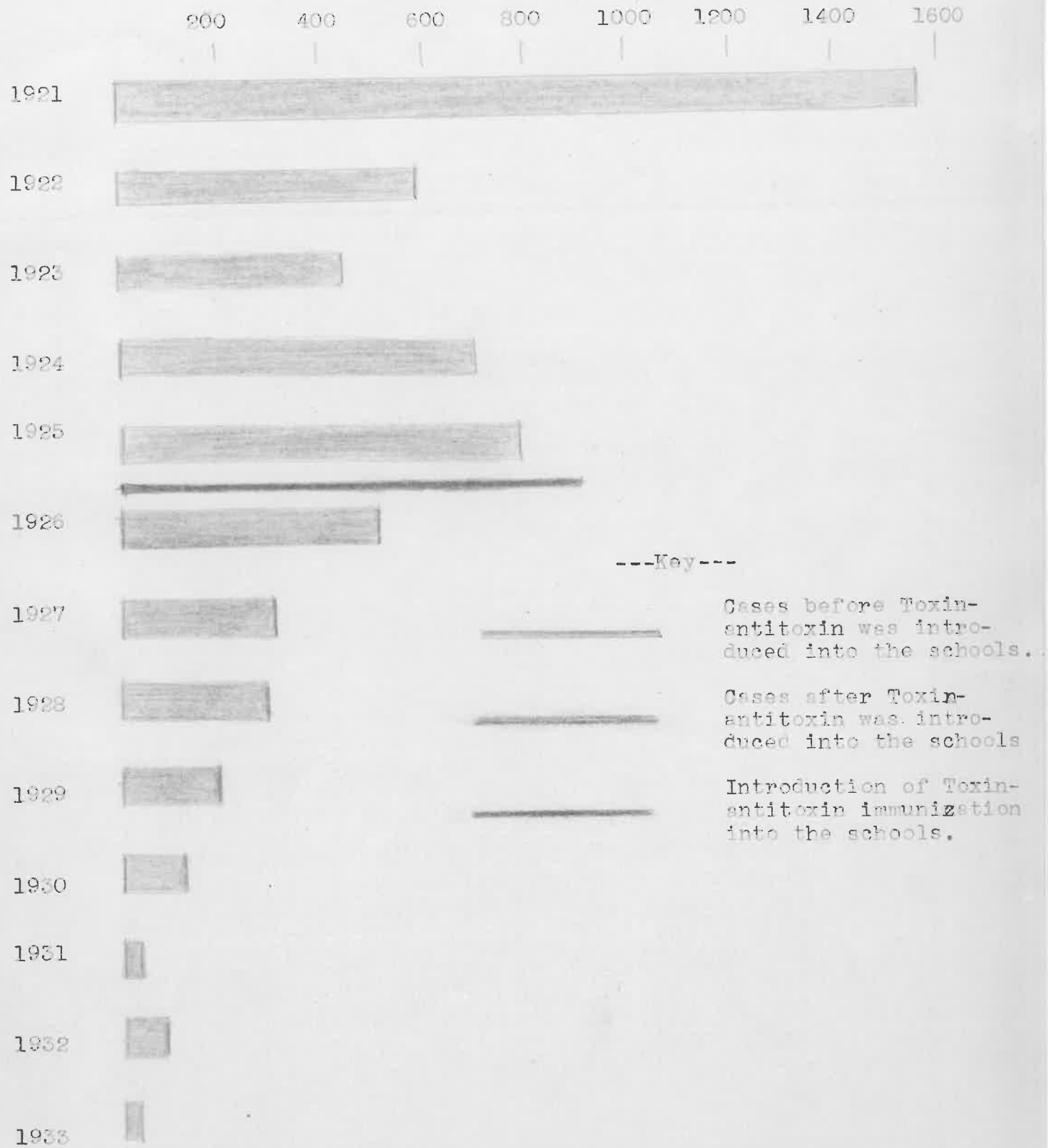
Number of cases of Small pox from 1926 to 1935, and the introduction of Vaccination in the schools in 1931.



WHAT DIPHTHERIA PREVENTION HAS ACCOMPLISHED FOR

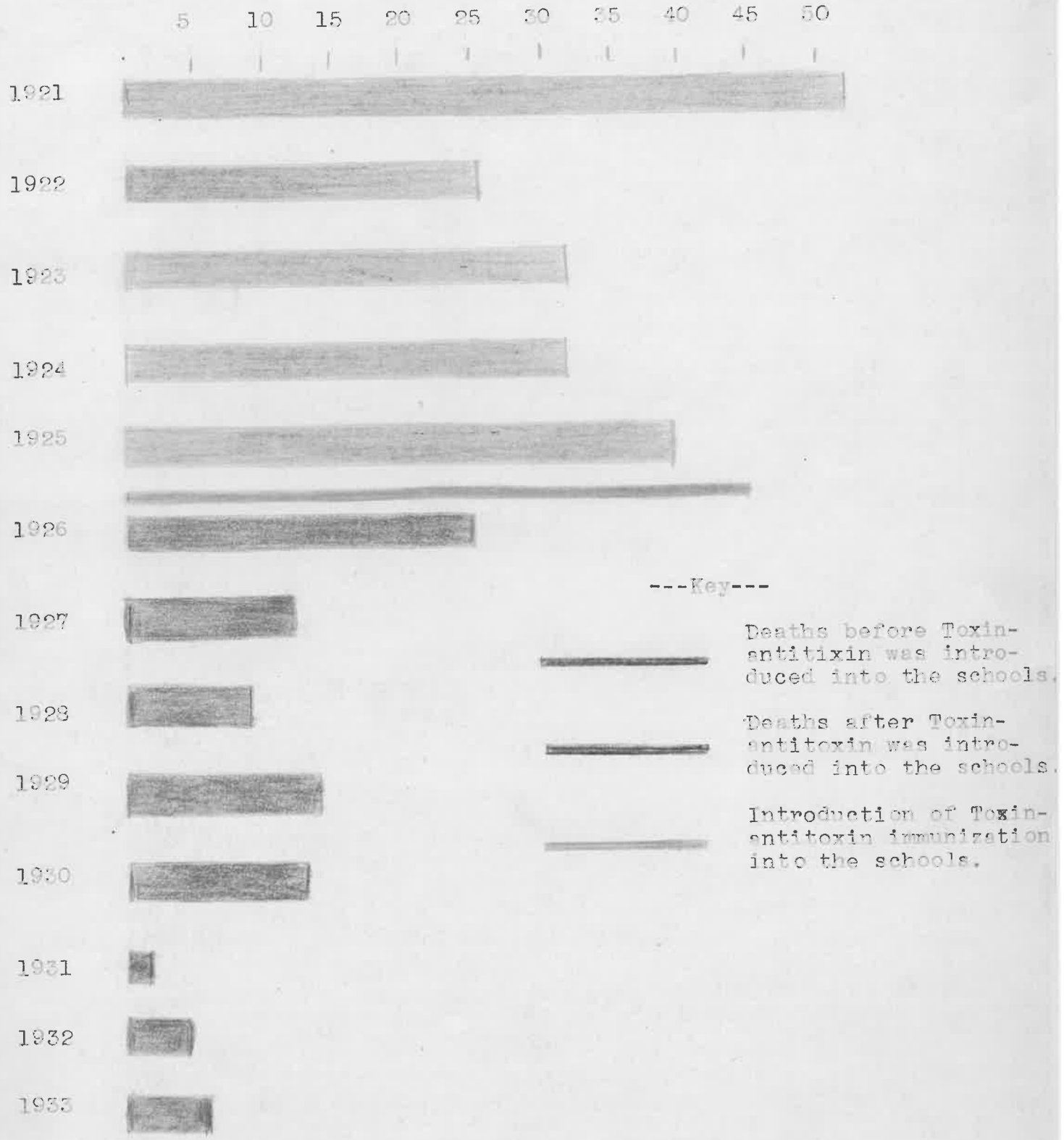
PORTLAND SCHOOL CHILDREN

Number of cases of Diphtheria from 1921 to 1934, and the introduction of Toxin-antitoxin in the schools in 1926.



WHAT DIPHTHERIA PREVENTION HAS ACCOMPLISHED FOR PORTLAND SCHOOL CHILDREN

Number of deaths from Diphtheria from 1921 to 1934, and the introduction of Toxin-antitoxin in the schools in 1926.



ANNUAL REPORT OF PORTLAND SCHOOLS***1933

Schools visited---5558

EXCLUSIONS AND RE-ADMISSIONS

	Admissions	Exclusions
Colds and sore throats	11,671	2,428
Gripoe	2,539	57
Pneumonia	39	
Miscellaneous	7,173	2,721
Dermatitis	475	678
Impetigo	716	484
Scabies	679	570
Ring worm	145	100
Poison oak	409	57
Pediculosis	7	8
Inflamed eye	519	449
Chickenpox	958	164
Measles	65	14
Mumps	31	5
Whooping cough	76	15
Smallpox	20	4
Diphtheria	5	20
Scarlet fever	123	60
Contacts	337	277
Total	25,987	8,111

Class inspections	86,824
Cultures	3,448
Vaccinations	3,796
Goiter tablets	332,666

Dressings----------12,936

Emergencies---------- 708

Sick children cared for---------- 2,511

CONSULTATIONS

Phone calls----------20,373

Parents----------13,252

Teachers and principals----------26,789

Individual child----------54,739

Health and social agencies---------- 2,403

Home calls---------- 6,302

Notes to parents----------19,653

Doctors---------- 1,143

HEALTH EDUCATION

First Aid classes---------- 113

Home making classes---------- 41

Children seeing films---------- 2,607

Foot exercise---------- 73

Special activities---------- 134

NURSES ASSISTED WITH

Schick tests---------- 984

Goiter examinations---------- 6,073

Toxin-antitoxin---------- 3,646

Vision tests---------- 20,352

Defective vision---------- 1,367

Hearing tests---------- 11,966

Defective hearing---------- 162

TALKS

P.T.A. meetings---------- 65

Teachers---------- 65

Class room---------- 4,674

Miscellaneous group---------- 205

PHYSICAL EXAMINATIONS

Parents present---------- 4,592

Examined---------- 9,367

Free from defects---------- 2,094

Skin condition---------- 680

Poor nutrition---------- 1,335

Def. eye muscles---------- 374

Ear abnormalities---------- 71

Def. nose---------- 478

Naso pharynx---------- 711

Def. tonsils---------- 2,229

Def. thyroid---------- 701

Lymph glands---------- 1,289

Heart---------- 357

Lungs---------- 81

Operation scars---------- 158

Orthopedic---------- 323

Posture---------- 1,835

Feet	1,002
Speech	76
Def. teeth	2,859

CORRECTIONS AND IMPROVEMENTS

Skin	35
Nutrition	427
Eye muscles	2
Ear	19
Nose	220
Tonsils	1,831
Mouth	16
Thyroid	40
Lymph glands	45
Heart	47
Lungs	7
Orthopedic	21
Posture	117
Feet	35
Speech	4
Teeth	4,179
Vision	957
Hearing	19

NUTRITION

Weighed and measured	70,350
Gaining	20,024
Losing	2,947

REFERRED TO

Clinic	2,638
Private physician	4,479
Visiting Nurses Association	191
Public Welfare Bureau	484
Other	895
Dentist	3,845

CLERICAL

Weight charts	34,177

NEW YORK CITY SCHOOLS

A study has been conducted in the New York City schools for the past two years, for the purpose of finding out the reasons why extreme physical defects in school children remain uncorrected. The study has been made by the Research Division of the American Child Health Association in co-operation with the City Department of Health and the Department of Education and with the guidance of an Advisory Committee representing the active participating, and certain other agencies. The committee was under the chairmanship of Dr. Philip Van Ingen and the plan and research direction of the study was the work of Dr. Raymond Franzen. The inquiry was made possible by the financial support of the Metropolitan Life Insurance Company.

The plan of the study concentrated on a limited phase of school health program--the reasons for failure in securing corrections. This angle of the subject would provide new points of view as to the effectiveness of the examination and follow-up efforts as a whole. The first study was to identify children with extremely severe physical defects which had not been corrected. The next step was to make an intensive investigation of these cases to determine the cause for the continued existence of the defect. The school records were inspected, the teacher and school nurse were questioned and a home visit was made to complete the information.

The first step on the pathway toward correction usually is an examination the recording of the defect. Next, through

a pooling of information by the teacher, nurse, and physician, selected cases are placed on the nurse list for follow-up. Once the personnel areaggreed on the need for follow-up, appointment for examination or treatment, and finally correction is made.

Four types of defects were studied: vision, teeth, nutritional status, and hearing. In addition somewhat different types of investigation were made for tonsils, pediculosis, and awareness of health facts.

Many times the parents are blamed for their indifference to information supplied to them. Actually, when the facts are closely examined, parents are less to blame then the school health program and the personnel involved in that program. In nearly nine-tenths of the cases with severe hearing defects, no notice had ever been transmitted to the parents. The same was true for two-thirds of the vision and nutrition cases, and for half of the severe dental cases.

In the cases of hearing, the trouble lies almost wholly in the failure to detect the condition. It was either that no hearing test was ever made, or if made was never recorded, or wrongly recorded as disclosing no handicap.

Dental defects are usually known. The loss comes in the second stage, in deciding which children to follow up. All the severe cases are noted, but cases of lesser severity are also noted on the records, and there is no distinc-

tion as to the degree of severity. The defects become so numerous that it makes the follow-up very difficult.

With vision and with nutrition, there is a loss at the outset in labelling cases normal when they actually have an extreme defect. Mistakes aremade among the school health personnel in selecting cases for follow-up, and the follow-up itself is only too frequently superficial and ineffectual. Little or no information was conveyed to the parents in regard to the children's defects and this is one very good reason for so many uncorrected defects.

In the case of pediculosis, the reason for the failure to correct the defect was the lack of a definite policy concerning the responsibilities of the nurse and teacher. They each thought it the other one's responsibility.

The investigation of the reason for failure to correct serious tonsillar defects could not be carried out in the same manner because there was no definite objective criteria of what constituted a serious tonsil defect. A preliminary examination of a thousand eleven year olds showed that sixty-one percent of the cases had already had a tonsillectomy. The study was changed to methods of examination, recording, and follow-up that resulted in so many tonsillectomies. The need in the New York City with reference to tonsils is not more corrective work, as it was in the case of the other conditions, but rather more standardization and discrimination in the selection and follow-up that is carried on.

In the study of these several defects gave rise to several recommendations for overcoming the difficulties that are revealed. The first was a proposal that the volume of the preliminary service--that is, the examination and the selection of defects--should be guided, if not determined, by the corrective services available. If there is no possibility of securing corrective service, then there is no point in continuing to swell the number who need such service.

In the past they have been too concerned in getting children examined--quickly and frequently, and too little concerned with the character of the examination and how to make use of the facts gained.

The second proposal was that they should be more accurate, and at the same time, more economical in identifying defects.

Success in the correction of defects does not depend upon the doctor, the nurse, or the teacher alone but is distinctly a cooperative job. The parents must be given substantial and convincing evidence.

Records should show the progress of any child on the pathway to correction. This was a plea for records and filing methods better adapted to the needs.

The school medical program as now conducted is, in general, one of the least efficient of their public health procedures. It is developed in a diversity of patterns, practically all of which represent different

adaptations of the clinical or individual method to large school groups.

This study has not only pointed out the inefficiencies, but it has also suggested new points of view applicable to large groups, and has indicated new lines of approach which should prove useful in the reconstruction of effective school medical programs.

OTHER CITY SCHOOLS IN THE UNITED STATES

A health survey of eighty-six cities in the United States was made in 1925 and found that the supervision of health work for the school child is a divided responsibility for the board of education, the department of health and other agencies each being identified with it either independently or jointly. The teaching of health is almost always within the board of education, although some of this work is done by nurses of the health department. The inspection or examination of school children is conducted by the board of education in fifty-five cities, by the department of health in twenty-two, by the department of health and the board of education jointly in two cities, by the board of education and the local branch of the Red Cross jointly in one city, by the Red Cross alone in one city, and by the county health unit in one city.

In addition to the teachers, the personnel dealing with the health of the school child includes physicians, nurses, dentists, dental hygienists, nutrition workers, directors of health education and directors of physical education.

Physicians in school work are for the most part on a part-time basis. There are but eleven cities with full-time physicians, in six instances on the staff of the Department of Education and in five with the Department of Health.

Nurses are employed for full-time, but frequently a nurse's work is divided among several activities such as Tuberculosis and communicable disease, in addition to school work. Seventy-five cities have nurses devoting full-time to school work. They are wholly under the supervision of the department of education in fifty-six cities and under the health department in fourteen. In three cities there are nurses from two different agencies, and in two cities the nurses represent private agencies.

The number of cities with special personnel engaged in health supervision, whether in the department of health, the department of education or elsewhere, is shown in the following table:

	Dep't of Health		Dep't of Educ.		Other	
	Full-time	Part	F.	P	F.	P.
Physicians	5	15	8	45	0	1
Nurses	16	9	59	7	3	1
Dentists	4	12	7	22	2	1
Dental Hygienists	2	1	8	4	0	2
Nutrition Specialists	0	0	12	2	1	0
Supervisors of Health Educ.	2	0	11	1	1	0
Supervisors of Phys. Educs.	0	0	69	0	0	0

More than one organization takes part in this work in some cities, and there are instances of both full-time and part-time personnel in the same city.

There is no city in the eighty-six without representation in at least one branch of school health work. There

are sixty-nine with school physicians either full or part-time, eighty-four with school nurses, fourty-five with school dentists, seventeen with school dental hygienists, fifteen with supervisors of health education and sixty-nine with supervisors of physical education.

Full-time nurses on school work vary from one to seven, the cities having the latter number being Binghamton and Wheeling.

The proportion of school children for each nurse employed on school health work is as follows:

	No. of Cities	Average	Maximum	Minimum
Upper Third------	28	1,795	2,205	996
Middle Third-----	27	2,752	3,304	2,208
Lower Third------	27	5,430	19,918	3,396
Entire Group-----	82	3,285	19,918	996

Two cities have no school nurses and two cities could give no estimate of the time spent on school work.

This survey was made in 1925 and several changes have been made in school nursing since then, but it gives an idea of comparison as to how school health is carried on in several cities.

Chapter XII

CONCLUSION

With this widened conception of health work among school children, the school nurse's sphere of influence has also necessarily widened. Persuasion of parents to have remedial work done is no longer enough. Home visits now must include consideration of all the factors that affect the child's life.

> "Matters of home ventilation, cleanliness, conditions of toilets, proper disposal of refuse, and all environmental matters likely to affect the health of the child should receive careful attention. In addition, the home routine and hygiene of the child should be outlined carefully so that the mother may follow it out in detail."

Thus the work of the school nurse, first enlisted to demonstrate one aspect of school nursing, has logically expanded into a program in which the home shares equally with the school.

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