VI.

THE SCHOOL HEALTH PROGRAM WITH EMPHASIS ON SCHOOL NURSING

Patricia Geiser

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SCHOOL HEALTH SUPERVISION

European Development

School health supervision was first started in Framce in 1837 through a royal ordinance. This early order charged the school authorities with supervision of the health of school children and sanitation of school houses. These early beginnings were not followed immediately by other developments. In 1894 in Brussels, Belgium, a regular school physician was appointed. This was really the beginning of a system of school inspection in the modern sense.

School nursing was later in starting, of course. The first school nursing was done in London in 1894. Miss Amy Hughes was the first school nurse in Europe. She was at that time, the Superintendent of Queen's Nurses in Bloomsbury Square. Miss Hughes' efforts were followed by the placing of Queen's nurses in a number of London schools in 1898, and by the establishment of the London School Nurses Society.

American Development

Prior to 1880, there was no health education of health service in the schools of the United States. At that date, some states passed laws for the instruction of children in schools about the evils of alcoholic liquors. This was due to the growing feeling for prohibition. In 1890, gymnatics were first introduced into the colleges of America, then later, into the high schools and grammar schools. As a result of this, there were some physical examinations done on college and high school athletes. Occasionally corrective

exercises were prescribed.

In 1900, with the growing knowledge of diseases and their communicability, health inspections for the purpose of discovering these diseases in schools were inaugurated.

About 1910, there was started a movement to teach health in the schools from a positive point of view. This was for the purpose of maintaining health rather than curing disease. From this beginning all school health measures in this country have begun.

PRINCIPLES OF HEALTH EDUCATION

Health education in the school should be taught by well-prepared teachers. The instruction should be a carefully graded method of teaching good health habits, conditions, and attitudes.

The curriculum of health education for the entire public school program should cover a simple course in personal hygiene and develop a sense of responsibility for the community hygiene also. An outline for the content of this course is well described by Adolph Weinzirl, Health Officer of the city of Portland:

"I-Personal Hygiene

A- Develop habitual recourse to:

1- Competent and prompt medical advice and care for:

a- Illness, manifest or suspect

b- Periodic examinations, the period being more frequent in
(1)- Childhood
(2)- Adolescence
(3)- Pregnancy
(4)- Late Middle Age
(5)- Times of unusual stress

2- All available artificial immunization procedures, such as:

a- Smallpox vaccination

b- Diphtheria immunization

c- Typhoid immunization when necessary

d- Rabies immunization when necessary

e- Others if and when developed and found valuable.

B- Develop:

1- Desirable health habits such as:

a- "Balanced diet"

b- Proper elimination

c- Proper balance of rest, exercise and play

d- Personal cleanliness

e- Wholesome mental attitudes

2- Ability to descriminate between good and poor health advice

II- Community hygiene

A- Develop comprehension and appreciation of at least the fundamentals of:

1- Environmental sanitation

a- Water

b- Food

c- Milk

d- Waste disposal

2- Environmental safety

a- Safe roads, streets, homes, schools, playgrounds

b- Safe working and living conditions

(1)- Light, ventilation, temperature

(2)- Freedom from hazards, harmful dusts, fumes, gases

3- Community disease control

a- Finding and isolating the case or carrier

b- Finding and isolating the contact

c- Control of animal and parasite resevoirs of infection in certain regions

(1)- Rats and other rodents

(2)- Mosquitoes, lice, ticks, fleas

(3)- Animals bearing diseasessuch as Rabies, Trichinosis

4- Adequate health facilities

a- Health departments

b- Competent medical care

c- Hospitals, sanatoria, clinics."

All this is primarily the responsibility of the health teacher. But there are many other opportunities for dramatizing and impressing these points on the minds of the children, both in groups and individually. The teachers of other subjects, if they are on the alert for opportunities, may correlate the subject matter of the health course to other courses. The nurse, during inspections, admittances, examinations, and other contacts with the children, may make practical applications of what has been taught and point it up. The physician, during health examinations, has a wonderful chance for education both with the child and the parnet.

Included with this curriculum should be brought in the care of sanitary equipment about the school or other public

places. This is a part of community hygiene. Proper care of public toilets, lavatories, and drinking facilities should be made the responsibility of everyone.

The place of sex education in the schools is controversial now. It is the responsibility of everyone who has the rearing and education of children as his job. The school should, I believe take the responsibility of imparting the scientific data normally and naturally in biology and other science courses. The home, which is the practical demonstration of an institution built on sex, has the responsibility of inculcating good habitual mental and emotional attitudes toward sex, or, in other words, character conditioning. In most lives, the church, no matter what demomination or religion, takes the responsibility of moulding ethical and moral attitudes. This is as it should be. All three of these institutions take part in forming a child's character and mind in such a way that the lines of demarcation between the fields of responsibility are neither clear nor seperate. The problem of who should teach what is not solved yet and perhaps will take a long time more for an agreement to be reached between the school, the home, and the church as to the comtent and scope of the field of responsibility of each.

ADMINISTRATION OF A SCHOOL HEALTH PROGRAM

In most places, the administering of the school health program is under the control of either the Board of Health or the Board of Education. Which board does the administering is not so important as the efficiency and thoroughness

of the program. In either case, these boards must cooperate somehow. The Board of Education must prescribe a course of study and outline the preparation required for teachers in such a way that it does not conflict with the way in which the Board of Health works or with the law of the district. The Board of Health must work in a way that does no antagonize the Board of Education so that the two boards may cooperate in harmony and with the same goal of interest in the education and the health of the public.

The success of a school health program depends on the abilities of the personnel. A good organization working in harmony with the school and with the public health officials and other organizations with whom they may have relations, can do an excellent piece of education that will benefit the entire population through contacts with the children, parents, and teachers.

School, which is the one public institution that influences everyone in the nation, is the logical place to start health education. Even though the results may not be obvious in this generation, the next generation should show great gains from the knowledge absorbed by the children of today.

Personnel

The personnel of a school health program should include:

Physicians	Dental Hygienists
Nurses	Oculists
Dentists	Psychologists

Deans and social advisors

Visiting teachers

Nutritionists

Health counselors (these may be teachers or nurses)

Teachers of health and specially related subjects

These people are not necessarily persons employed by one organization. The services of dentists, oculists, psychologists, and physicians may be contracted for separately or through other organizations. The teachers, nutritionists, and deans are part of the regular school personnel. The visiting teachers may be part of a child guidance clinic or other program. But through cooperation and good relations, these people are available in most thickly populated districts, and are availble to some rural districts with state and county help.

The cost of such a program is, of course, not definitely set. The Administration of the School Health Program, Report of the sub-committee on the administration of the school health program, White House Conference on Child Health and Protection , 1932, says that about $2-$3 per year per pupil covers the cost of a good service at present.. This excludes the cost of health education by the regular teaching staff and such services as lunch rooms and cafeterias.

School Environment

The arrangement of the school program has a great deal to do with the health of school children. Careful attention

must be given to the length of recitation periods, periods of unbroken study, recesses, the sequence of studies, the amount of homework, and the alternation of different types of work. Arrangement for school lunches, the number of pupils per room, discipline and punishment, the nature and conduct of examinations, extracurricular activities, the proper selection of textbooks and source materials all affect the mental and physical condition of the pupils. The teacher-pupil relationship should be kept on an even and harmonious keel.

For the teachers, there should be opportunity for relaxation and lunch, limitation of extracurricular requirements, provision for and undisturbed work place after school, and adequate sick leave.

All these things are the responsibility of the school board. They are intangibles and can be tailored to fit the school situation.

On the other hand, the sanitary arrangements of the school plant must be planned ahead as it costs money and time to reconstruct the buildings themselves. Bad conditions are apt to remain unchanged when there is tax money at stake.

The lighting, ventilation, heating, lavatory accommodations, fire and safety provisions, playgrounds, and buildings are what comprise physical environment in the school. If these items are well arranged and cared for, it is easier

to maintain good health.

Communicable Disease Control

The responsibility for communicable disease control in the schools rests with the Board of Health with the cooperation of the school. The suspected cases should be reported by the nurses or teachers to the health department in order that in case they are not diagnosed and reported by a private physician, the health department can attend to it. Suspected cases should be isolated from the other children until sent home, or else promptly excluded from school. Parents should be encouraged to inspect their children before they go to school rather than depending upon the school to discover it after children have already been in contact with many others.

Teachers should conduct an early morning inspection of their pupils for sickness and cleanliness. The health service should provide written instructions for the teachers to follow in inspections and procedures in case of illnesses found. Children sent home must be done so methodically giving parents notification and reasons.

One of the finest ways of combatting communicable diseases is to promote an immunization program in the school. In order to do this effectively, free Smallpox vaccination and Diphtheria immunization should be offered in the early school years of the children. By making immunization easy, more parents will take advantage of the offer for their child-

ren.

The responsibility of communicable disease control rests first of all with the home, then the school, and lastly, the health department. The public should be conditioned to feel this responsibility and cooperate. The health department is the policeman of disease control, but should not exercise the full extent of its powers without first trying education.

The communicable diseases which are usually considered candidates for exclusion from school are:

Tuberculosis	Mumps
Diphtheria	Whooping Cough
Smallpox	Infantile Paralysis
Typhoid Fever	Impetigo
Scarlet Fever	Scabies
Measles	Dysentery
Chickenpox	Influenza
Sore Throat	

First Aid and Accident Prevention

The prime factor in first aid and accident prevention is providing safety instructions to pupils. The elimination of dangerous or imperfect equipment and other hazards in the school or on the playgrounds adds greatly to the prevention of accidents. No school playground should be left unsupervised. Constant and alert supervision will save many accidents, because children at play are irresponsible and over-daring.

The responsibility of the school in case of accidents

and sudden illness has fairly well-defined limits. It is responsible for children at school and playing on the grounds during school hours. Children hurt close to the school grounds may come under the school's responsibility if the school is the quickest and most easily reached place for first aid and for telephoning. The school responsibility also covers persons attending school-sponsored programs at the school.

For emergency care of illness or injury, the administration of the school health service should formulate a written set of directions or standing orders for this care, for the use and convenience of the school personnel. This includes the school nurse, teachers, and principals. These orders should include directions such as this:

1- Do not open or dress "boils".

2- Scratches and cuts are to cleansed with green soap and water, then apply mercurochrome.

If a child falls ill or is seriously injured at school, he should be sent home accompanied by a responsible person. The nurse or teacher, if she is not the person taking the child home, should write a fully explanatory note to the parants. In extreme emergencies, the patient should be sent to the nearest hospital and word sent by phone or messenger to the parent.

The school personnel must avoid prescribing for ill or injured children. That is the doctor's business. In cases

in which the parents do not know what to do, the nurse or teachers hould recommend medical care. This does not mean recommending a specific person. The parent may be told to call their family physician, or, if they are strangers, a list of physician's names may be given them from which to choose. The medical society of any county or city is also glad to do this.

The Health Examination

The health examination in school clinica is primarily and educational procedure--both for the child and the parent. The point of the whole thing is to impress on the minds of children and parents the value and need for regular periodic physical check-ups. The fact that the school and the physician employed by the school for these clinics cannot and do not offer corrective facilities, is part of this plan of education. They try to point the way to the private physician whose job is correction. When everyone starts going to his own physician for health service, then there will no longer be any necessity for school health examinations.

The school health examination checks on the state of the health of the child examined, in a gross way. It helps to discover potential and actual defects. The physician in the c;omoc consults with the parent or guardian accompanying the child as to the best way to maintain health or to plan for treatment of defects. Any defects found are pointed out to the parent, and, if necessary, they are advised to take the

child to a private physician, dentist, or oculist for correction. In case the child is alone, the physician writes out his findings and recommendations,and the nurse makes a call at the child's home to interpret these recommendations and to answer any questions the parents may ask regarding the examination.

Health examinations are, as a rule, planned for each child at least three times during his grammar school career. In those places where the service is extended to junior high and high schools, the plan is to try to give each student at least two examinations after entering these higher institutions.

As the nurse plans her program for the year, she tries to arrange her routine school examinations, which are usually the first, the fifth, and the eighth grades, for as early in the school year as possible. Other health examination clinics during the year would take in new pupils in the school, special cases, such as children who have had debilitating diseases, and handicapped children.

The results of each examination is recorded by or dictated by the examining physician, to be put on the child's permanent school health record. These records differ greatly in the different districts as to appearance and method of filing, but they all include about the same essential features. In some districts, all the records for each school are kept in the nurses office. The disadvantage of this is that the teachers never see them unless they or the nurse makes a definite effort for a consultation together. The method of having the teacher keep the records for her class is, I be-

lieve, a little more satisfactory. Both methods have the disadvantage of being forgotten in the rush when a child is transferred to a new school or school district.

The only thing I can think of to reasonably assure the transference of the health record along with the scholastic record, is to have a reminder clipped to the scholastic record in such a way that it could not be overlooked.

The health record is just as important a record as a child's grades. In it, one may find the explanation for apparent or real inability to read, hear, or generally carry out a normal school program. The longer and more fully a record is kept, the more valuable it becomes. Each new discovery found or examination done which is entered on it increases its value to the child and to the future nurses, physicians, and teachers. The better one knows a child and his background, the easier it is to help and to integrate him.

Dental Hygiene and Nutrition

The trend of public health people in dental hygiene now is to educate the public to the idea of preventing dental defects rather than waiting until correction is necessary. Dr. DeCamp says there are almost as many ideas on the subject as there are dentists, but that the results of scientific studies are showing in more and more cases thatdental disease can be avoided through proper preventive measures. These measures are for the most part based on nutrition. In the dental program in schools, it has been the policy to exam-

ine children for carious teeth and malocclusion, and refer those that need correction to either private dentists or free clinics. This has come to be taken for granted as the school dental program. The public health aspect of this and all other health matters is prevention. But we are going to have a hard row to hoe to change the public idea away from a corrective program to a preventive one. The fact that all dentists are not agreed on the matter of prevention is a huge barrier. We must have the dentists at large of one opinion and that opinion must coincide with that of the public health workers before the school can discard the corrective dental program and take up the preventive one.

A preventive dental hygiene program would call for intensive instruction in foods and nutrition by the health teachers, dental hygienists and nurses. Not only would the child be taught to see dental hygiene in that light, but the parents would have to be reached and instructed. Their mature minds would have to be disabused of their old and up to now apparently sound ideas of care of the teeth. For instance, the old saw about a clean tooth never decaying would need quite a bit of bad publicity before it could be ruled out of the lay mind. It is a logical sounding statement and therefore all the harder to disprove.

Teeth which are diseased must be corrected, however, and the present school dental program goes at it something like this:

The health administrators hire dentists to examine the teeth of the school children in clinics which are managed in much the same way as health examination clinics. All defects are recorded and the dentist's recommendations are sent home to the parents. In many places, some agencies have provided for varying amounts of corrective dentistry to be offered to school children who cannot afford to have care done privately. For instance, in Portland, Oregon, the dentists themselves have provided a portable dental outfit to go around to the grammar schools, stopping at each for perhaps a few days or a week. Some of the dentists donate their time to this work, and this clinic has done much fine and necessary work in the corrective line.

In some systems, the school health service provides for a dental hygienist to go to the schools giving dental hygiene instruction and encouraging the school children to care for their teeth. These hygienists are not dentists but are persons trained in dental hygiene. Some are also trained to do cleaning.

The dental hygiene programs are now beginning to undergo the change from stressing correction to stressing prevention in the care of teeth.

The place of nutrition in the prevention of dental disease is becoming generally agreed as a most important one. The experiments of Bunting and Jay carried on in a group of children has proved to the satisfaction of many people, the disastrous effect of too much sugar and starch in the diet

on the teeth. Bunting and Jay say they can control the development of caries in children's teeth in about 93% of cases provided that they can control the children's diet. These two men also say that the diet of the expectant mother also has much to do with the development of her child's teeth. This last statement is not conclusive because there has not been enough research on the subject to prove it.

The generally conceded opinion on dental health is, however, that the emphasis should be placed on infant and preschool children rather than on older children.

Mental Hygiene and Social Guidance

The school nurse and the teachers need to have an understanding of mental health and ill health in children. The knowledge of the emotional and social development of children at different age levels is important in school health work. The practice of mental hygiene or sane living by the nurse and teachers gives them the background and understanding they need to help children to adjust themselves happily to life.

The teachers, more than the nurses or physicians, are in a position to pick up "problem" or unadjusted children in school. With the help of the nurses and agencies available, every effort can be made to help these children to adjust and becoming useful, happy adults.

The Oregon schools, particularly those of Portland, have access to the Child Guidance Clinic, Visiting Teachers, and special classes and schools. All of these conveniences take

will come from education of children. It is not the easiest thing in the world to educate an adult.

In order to carry out a school health program, it is necessary to have well-prepared public health nurses in the schools. They are the right hand of the administrators and physicians in spreading the gospel of public health to the teachers, children, and into the homes. They must carry on the routine of admitting children who have been out, excusing and excluding those children from school who are ill, and carrying out first aid procedures as they become necessary. They must be ready to speak when asked to groups of children, mothers, teachers, and other people. They should be prepared to teach classes in first aid, care of infants, care of the sick, and others if they are wanted. They must know what to say and when to say it when asked for advice on any subject from who to go to for glasses, to what to have for dinner.

The school nurse, whether she is part of a generalized or specialized program, is a public health nurse. Her preparation is the same as for any public health nurse. She is a graduate, registered nurse who has taken an accredited public health course.

The duties and extent of services of the school nurse differ according to the sort of service of which she is a part. In many large cities, school nursing is a specialized service which is under the administration of either the Board of Education of the Board of Health. The nurse in

this set-up has quite a different and more intensive piece of school work to do than the nurse in a generalized service.

The nurse in the specialized service spends about three-fourths of her working time in the school, and the other fourth is used for making home calls in the interests of the school children. In the Portland, Oregon school nursing service, each staff nurse has approximately two thousand children in her service. This means four grammar schools or two high schools. This is considered to be about the best arrangement that can be made with the amount of money and the number of nurses available.

The city school nurse's day goes something like this on a clinic day:

8:20 - 9:00 a.m.	Admittance of children who have been absent for (usually 3-5)days.
9:00 - 9:30 a.m.	Prepare rooms for clinic.
9:30 - 11:30a.m.	Health Examination Clinic.
11:30 - 12:00	Clean up after clinic.
12:00 - 1:00p.m.	Lunch.
1:00 - 2:00 p.m.	Work on records.
2:00 - 3:00 p.m.	Test eyes on about 18 children.
3:00 - 5:00 p.m.	Home calls

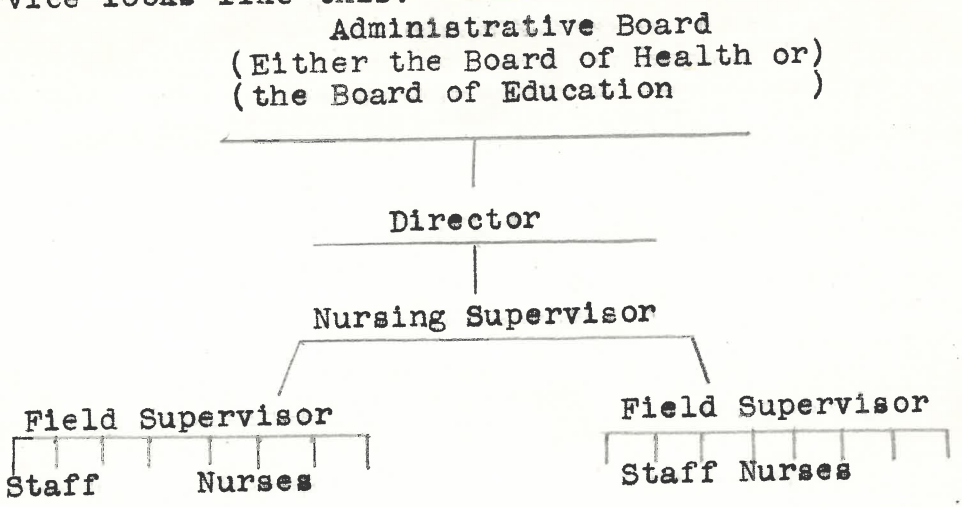
On other days there are inspections for communicable diseases or announcements to be made in the class rooms and many other duties. All through the day, children are sent to the nurse's office for care of illness and injuries.

The nurse's schedule of attendance at her various schools is arranged according to the needs of each school. The five days of the week of work in the schools would be divided among four grammar schools. Each would get a full day of the nurse's time and the extra day would be given half to the largest school and half to the school with the most problems. These problems might be a large low income group, or special classes for handicapped children, etc. The Saturday half-day is spent in staff conference. These conferences are used for conferences with supervisors, records, and staff education.

The school nursing duties of the nurse in the generalized rural service are practically the same as those of the city school nurse except that the school population is not so large nor concentrated as it is in the city. For this reason, not nearly the amount of the rural nurse's time is spent in the schools as the city school nurse spends. Statistics show that about 40% of the raral nurse's time is spent in the schools. I often hear the complaint that 40% is too much time to be spent in schools. My opinion is that it is not too much. My reason for this is the quotation on page 18 from Miss Chayer's book. The keynote of public health work is prevention and education. Where else in all public health work can this be done better and with a larger group with which to work than in the schools?

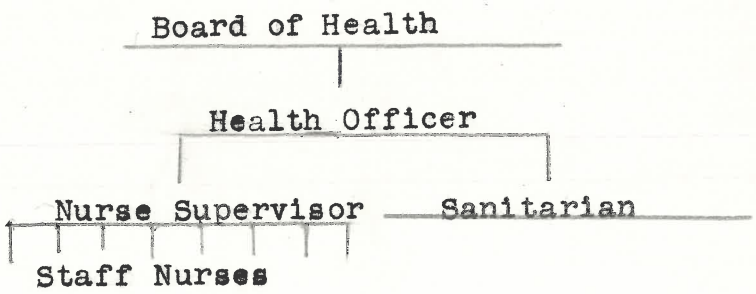
The organization of a specialized school health

service looks like this:



The consensus of opinion is that there should be one supervisor to every eight staff nurses. The staff nurse is considered of the same rank as a school teacher in the school system.

The organization of a generalized county health service looks like this:



The salaries of the various members of these organizations varies with the amount of the budget and the rank of the personnel.

A staff nurse in either case does not receive a standardized salary. It may vary from about $1200 to $1700 a

year. In many places the salaries are on a sliding scale, the nurse receiving an increase in salary every year until the maximum is reached in about three years.

A nursing supervisor receives a salary from approximately $1800 to $2000 or $3000 a year or more depending upon the amount of money available, her preparation, responsibility , and experience.

The scale of salaries is extremely varied in different parts of the country, and the figures I have stated are those given in Public Health Nursing by Mary S. Gardner, 1936 edition. These figures are approximately the same as those for some parts of Oregon at the present time.