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PHYSICAL CARE OF DEPENDENT CHILDREN IN INSTITUTIONS

MONOGRAPH III
TO ACCOMPANY ROUND TABLE PLAN
FOR TRUSTEES OF INSTITUTIONS
FOR DEPENDENT CHILDREN

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The Round Table Plan has been prepared to assist boards of trustees of institutions caring for dependent children in their administrative duties. It comprises eight studies, or round tables, each of which is devoted to a vital problem of institutional management.

To discuss the questions raised, the Department of Child-Helping of the Russell Sage Foundation is preparing a series of eight monographs, one to accompany each of the Round Tables.

The following monograph upon the physical care of dependent children in institutions does not seek to be exhaustive but nevertheless aims to cover those matters which are vital to the health of the children. Only those items of physical care have been discussed which are generally approved by leaders in child welfare work, have been proven essential through actual experience, and can be used by any cottage or congregate institution with moderate funds.

The writer desires to acknowledge valuable assistance received in the preparation of the article from Dr. S. Josephine Baker, Director of the Bureau of Child Hygiene, Board of Health, New York, and Dr. Royal Storrs Haynes, Associate in Pediatrics, College of Physicians and Surgeons, New York.

Monographs I and II, "The Job of Being a Trustee" and "Admission and Discharge of Children," by Dr. Hastings H. Hart, are now available. The Round Table Plan and the Monographs can be obtained from the Department of Child-Helping at five cents a copy.

PHYSICAL CARE OF DEPENDENT CHILDREN IN INSTITUTIONS

BY C. SPENCER RICHARDSON

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What is a reasonable standard for the physical care of dependent children in institutions today?

First, it is one that comes within the means of the average institution. There are perhaps 1,000 orphanages, homes, and similar institutions throughout the country that care for dependent children from the ages of two to eighteen. These institutions are maintained by public funds, private funds, or both; but with nearly all of them a careful expenditure of limited moneys is an ever present and needful consideration. The heavy endowment, which provides an income large enough to free the directors from all solicitude is a marked exception. A practical standard of physical care, therefore, to be of general help must be capable of use at a moderate cost.

Second, a reasonable standard is one which keeps the children in such good health that they can profit to a maximum degree by the educational training which the institution provides.

Let us look at the matter from an economic standpoint. The trustees of an institution are to invest hundreds, it may be thousands, of dollars in the care of a boy who has come under their supervision. The superintendent will expend days and even weeks of his time upon the boy's needs; the teachers will instruct him; the matron will supervise his domestic life, the seamstress sew for him, the cook prepare his food, the laundress wash his clothes—every member of the staff will share in one way or another in promoting his welfare. Does not common sense suggest that if from \$500 to \$2,000 or more are to be invested in this boy, and if the combined care of the institution's staff is to be given him, it is worth while from a business standpoint to expend a sufficient additional amount so that he shall have bodily strength and mental vigor to fit him for his tasks and enable him to receive the full benefit of what the institution is doing for him?

Third, a reasonable standard of physical care is based upon the best methods. Some workers for children are reluctant to take up new methods of child caring. They feel that the old methods have been thoroughly tried out and that innovations are more or less faddish and untrustworthy and they are, upon general principles, opposed to the "new-fangled scientific charity." The writer sympathizes with a conservative view and believes that no method of child caring should be generally adopted until its value has been fully established by actual proof. The fact remains, however, that much can be safely added to the standards of child caring of fifty years ago, especially to that of the physical care of children. Medical science has improved. The retarding effects upon a child's mentality of physical handicaps, such as infected tonsils, adenoids, malnutrition, defective vision, hearing, and teeth, have been carefully studied and recognized. Within a decade tests have been devised for determining approximately the mental age of a child. The pupils in the public schools, especially in the larger cities and towns, are more and more receiving the benefits of this advance in medical science. Why should not children in institutions also profit?

Fourth, a reasonable standard of physical care is one that enables a child after leaving the institution to pursue his career with health and vigor. To properly prepare a child for citizenship the institution must give him academic, vocational, and economic instruction; and must assist in developing his initiative, will, and self-control: but back of all this essential training stands the primary need of building up a sound, healthy body. If the institution fails in this service its other training is largely in vain.

In a word, then, a reasonable standard of physical care in an institution is one that is available at a moderate cost; that enables a child to assimilate the education offered; that includes the best methods, old and new; and that develops a sound physique to meet the requirements of later life. These requisites have been carefully considered in the preparation of the following outline.

QUARANTINE, MEDICAL EXAMINATION AND CARE

QUARANTINE FACILITIES

Every child, upon entrance to an institution, should be isolated long enough to protect the other children and the adults from danger of contagious and infectious diseases. The new arrival may come from a dirty, insanitary home. He may bear in his clothing or upon his person malignant germs. He may be about to "come down" himself with measles, mumps, diphtheria, or some other "catching" disease. Upon arrival at the institution he should receive a hot bath, his clothing should be removed and be either burnt or disinfected as its condition warrants, and after clean clothing has been substituted he should be taken at once to the quarantine quarters to await the physician's examination. He should remain in quarantine at least two weeks and leave it only upon the order of the physician.

The provision for quarantine and hospital quarters depends upon the size, kind, and location of the institution. An institution receiving half a dozen children a month does not need as extensive facilities as one receiving twenty or thirty. The cottage institution which can provide medical care in separate buildings has conditions different from the congregate institution which perhaps must house the quarantined and the sick, along with the well, under the same roof. The country institution that must usually care for its sick children in its own plant is not so fortunate as the city institution which can often send them out to near-by hospitals.

It is possible to arrange for the care of quarantined, contagious, and non-contagious cases and also well children in the same building, but the problem requires careful study and expert advice. A better plan is to have a reception cottage, somewhat apart from the other buildings, for the quarantine of new children; and a separate hospital in which contagious and non-contagious cases can be treated in isolated wards.

A number of institutions have worked out the problem satisfactorily and persons who wish information upon it can not do better than to visit them.*

*The Department of Child-Helping of the Russell Sage Foundation, upon request, will furnish a list of such institutions.

PHYSICAL AND PSYCHOLOGICAL EXAMINATIONS

Medical care should begin as soon as the child enters the institution. Many of the children have been victims of poverty, ignorance, or indifference; and bodily defects which might easily have been corrected by prompt attention have been allowed to develop unchecked. The first obligation of those to whom the guardianship of a child has been transferred is to remedy the harm which home neglect has caused.

A few weeks ago the writer visited a county home for dependent children. Upon entering the institution he was struck by the poor physical condition of the children. They looked pale, anemic, and lifeless. Upon inquiry he was informed by the matron that no child received medical examination upon entrance. "We watch the children," she said, "and if any of them begin to look sick we send for the doctor—but we had to have him only five times last year." No quarantine of entering children was maintained and it was not surprising to learn that an epidemic of measles had recently swept the institution. Further observation found long, bare tables where meals were eaten in dispiriting silence, an ill-balanced dietary, unorganized play devoid of zest, a superabundance of floor-scrubbing, and no stimulating vocational work. In the school room the matron remarked: "Our children seem so backward. I believe over half of them are below normal." The teachers were doubtless efficient for each held a diploma from the State Board of Education, but they were handicapped by the dullness of the pupils, a condition due in many cases to lack of medical attention, nutritious food, and fresh air.

The City of New York, through the Bureau of Child Hygiene of the Health Department, gives to each child as soon as it enters one of eighty-four institutions under its supervision a complete medical examination. The examination covers not only contagious and infectious diseases, as the New York state law prescribes, but also non-contagious affections such as heart troubles, enlarged tonsils, adenoids, malnutrition, and defective eyesight, hearing, and teeth. Treatment of defects thus revealed is begun as soon as possible.

The pressing need for this medical care is shown by the fact that out of 46,285 children who entered eighty-four institutions in New

York City during the last three years and were examined by physicians, an average of 63 per cent a year were found to have defects requiring medical treatment. Similar figures upon the physical defects of children admitted to institutions in other cities and in rural districts throughout the United States may or may not be equally high, but it is certain that they are sufficiently large to prove the need of immediate medical care of all children upon entrance to institutions.

After the physical defects of a child have been revealed treatment of them should begin at the earliest possible hour. Since the defects have usually existed for some time and have either seriously retarded the development of the child or threatened to do so, and since the ability of the child to profit by the training of the institution depends so much upon his physical condition, no time should be lost. Dental, optical, and surgical care can be more quickly secured if an institution is located in a city than if it is twenty or thirty miles out in the country, but the appreciation by directors and superintendents of the urgent need of quick action and their earnest determination to get it are more important factors than location and distance.

Equally important, both from the standpoint of the institution and of the child, is the psychological examination, which reveals the mental age of a child—shows whether he has a normal mind or, as is often the case, is subnormal, and approximately to what extent. If a child is found to be mentally subnormal, it is necessary to determine whether his mental progress has been retarded by some physical defect, the removal of which will soon restore him to a normal condition; or whether, through heredity or some other cause, the brain structure has been radically affected. Medical authorities today agree that the latter type of a child can not be cured and that he should be separated from his fellows and placed in a special institution where, with others like him, he may receive kindly care and training suited to his needs.

The most difficult cases to diagnose are the high-grade feeble-minded or "border-line" cases. These require observation for a considerable time.

The psychological examination is of the utmost importance to institution authorities because by its aid they can detect at once the

lower grades of feeble-minded children and by declining to receive them, avoid the expense of their care, the excessive amount of time required by teachers and others for their training, and the retarding effect upon school room classes attendant upon their presence.

It has been a common experience of institutions which have not employed preliminary mental tests that they have admitted a certain number of children who eventually proved to be feeble-minded and were unable to profit by the training provided, and constantly hindered the progress of other children; yet, having been surrendered to the guardianship of the institution, they could not be removed and remained for years as millstones upon the necks of the superintendent and his staff.

A feeble-minded child is spared the unhappiness resulting from his failure to keep up with his fellows, from their ridicule and from the pressure put upon him by adults to accomplish that which his defectiveness makes impossible, and may be placed in a special institution where he can be happy and, to a certain extent, self-supporting.

Again, the psychological examination enables superintendents to place entering children at once in their proper school grades and thus to save time and observation. Also, by serving to group children of like mental development it helps the teachers to instruct with much greater effectiveness.

The psychological examination is important from the child's standpoint because it enables him at the very start to enter the academic and vocational classes to which he belongs and thus to receive without delay the full benefit of the educational training offered. Also, it saves him from the discouragement or the indifference which are apt to result when, through wrong classification, too much or too little is required of him in the class room and in the rest of the institutional life.

The number of persons throughout the country who are competent to give reliable psychological examinations of children is increasing rapidly. Institutions can obtain information as to the nearest available expert by communicating with the heads of hospitals, boards of charities, and institutions for the feeble-minded in their own states. The writer knows of one institution that made arrangements with the psychological department of a university in a neighboring town whereby the new children were tested without charge on the condition

that the university was free to publish a report of the cases examined if it withheld the names of the children. Institutions which are unable to arrange for the test of all children can often secure it for at least a few who seem to be abnormal. Special care should always be taken, however, that only trained psychologists are intrusted with this important matter for the results are too far reaching to risk unnecessarily a mistake in diagnosis.

The expense of physical and psychological examinations varies with different institutions. Often this service is secured free, while in other cases a charge is made; but even though an institution has to pay well for it the results will amply justify the cost. No item of physical care is more worthy of generous expenditure.

RE-EXAMINATION AFTER ADMISSION

The medical examination of entering children serves to divide them into two groups: the normal, and those requiring special treatment of some kind.

For normal children the practice of leading institutions is to provide a thorough medical inspection once a year. However, the Health Department of New York City which has heretofore followed this custom now proposes to examine the children every six months, and Dr. Royal Storrs Haynes of New York, an authority upon children's diseases, believes that every three months is none too often. For most institutions an annual physician's examination of all their wards will be as much as can be provided. This should be supplemented by taking the weight and height of each child every three months. Institutions can obtain from their state board of health tables showing the relative weight and height of normal boys and girls at successive years and by this aid can check up the development of their wards.* The failure of a child to equal the standard for his age, especially that of weight, and to gain steadily, gives warning that he needs special attention.

For defective children the frequency of re-examination will depend upon the particular needs of each case. The important point is to see to it that each child continues to receive treatment as long as his needs require. A certain institution has this excellent motto: "See the child all the way through."

*Such tables are given in *Elements of Record Keeping for Child-Helping Organizations* by Georgia G. Ralph. New York, Survey Associates. \$1.50.

THE MEDICAL STAFF

One of the few advantages which the city has over the country as a location for institutions for dependent children is its larger medical resources. The city institution has within easy reach general and specialized hospitals with their free wards, dispensaries, clinics, or psychopathic bureaus; and it can usually secure the services of specialists in nearly every branch of medicine and surgery. Its medical staff, therefore, should include if possible the following: a physician to have general charge of all children, as the laws of many states require; a dentist; an oculist; an ear, nose, and throat specialist; a skin specialist; an orthopedic surgeon; a trained nurse, with an assistant; and a physical director to introduce and supervise proper gymnastics and outdoor play.

The expense of such a staff will vary. Some cities through their boards of health provide free the initial examination of entering children, leaving to the institution the treatment of defects disclosed. A salary or fees are usually paid to the physician in general charge, the oculist, and the dentist, although their rates are often merely nominal; and operations or continued treatment by other specialists are frequently donated. Many of the most eminent physicians and surgeons in the country are accustomed to devote a considerable part of their time to charity cases without compensation.

The country institution is naturally more limited in medical facilities. Its staff should include, at least, a physician in general charge, living near enough to the institution to be quickly available in case of emergency; a graduate nurse, with an assistant; a dentist, to visit the institution at regular periods; and a physical director.

For the fitting of eyes, operations for tonsils and adenoids, and other medical service requiring expert skill, arrangements can be made to take the children to specialists in near-by cities. The transportation will, of course, be an additional expense but often some wealthy friend can be found to pay it. No feature of institutional care enlists a readier sympathy from the public than the relief of the bodily handicaps of children.

PREVENTIVE TREATMENT

Every institution has during a year children who are not actually sick, but are physically below normal. They look peaked and pale,

do not attack work with their accustomed vigor, are listless at play, eat little, seem tired and lackadaisical. These cases are especially apt to develop during the winter and early spring period when the stormy weather keeps the children indoors for a large part of their play time.

A keen lookout for such cases and prompt treatment may save a doctor's bill later on. Such children need a special diet, a lessening of work, and an increase of rest. One institution uses its hospital, which is larger than necessary, for the care of this class. Twenty children at a time are taken from the cottages to the hospital where they can have long hours of quiet sleep, relief from physical tasks, and an increased amount of milk, eggs, meat, fruit, and the like. After several weeks of this life the children are physically made over and return with eagerness to their cottages, while another group takes their places. Largely through this intelligent method of prevention the institution keeps its sick list amazingly small, although it has over six hundred wards.

DIETARY, CLOTHING, DORMITORIES, AND SANITATION

DIETARY

A popular novel whose plot is laid in an orphanage in this country contains the following: "Here is one of her [the former superintendent's] frequently recurring dinners: boiled potatoes, boiled rice, blanc-mange. It's a wonder to me that the children are anything more than one hundred and eleven lumps of starch."

One of the deepest ruts of an institution leads from the kitchen to the table, which explains why a meal of potatoes and beans is so often followed by one of beans and potatoes. In many institutions menus are in use because they are easy for the cook, because they are cheap and filling, or for any other reason excepting that they form well-balanced, appetizing meals which will nourish every part of the young consumers.

It is possible to provide two widely differing dietaries. The one has little reference to the needs of the children. It disregards a proper proportion of protein, carbohydrates, and fat. It omits nitrogenous foods and stuffs the child with starch—in bread, potatoes, and rice. It substitutes tea and coffee for milk and cocoa. It usually

produces in the children unnatural fatness, flabbiness, anemia, and dullness.

The other dietary is based upon the fact that the necessary food elements, as contained in different kinds of food, are needed to keep the body well-nourished and allow for its growth. It uses the correct amounts of bread, cereals, starchy vegetables, fats, and sweets to produce heat and energy, and includes with them meat, fish, cheese, nuts, fruits, vegetables, milk, and eggs to build up the brain, nerves, and muscles, and to make red blood. It employs fresh vegetables and fruits in their season, adjusts the menu to the calendar. This dietary seeks variety, consults the tastes of the children, and thrills their souls with occasional surprises. It costs somewhat more than the other but the extra investment cuts many a coupon in sturdy bodies, active brains, and happy faces.

Information regarding proper dietaries can readily be had. State boards of charities and corrections and educational institutions have issued literature upon the subject. For instance, the California State Board of Charities and Corrections has recently published "A Standard Dietary for an Orphanage" which includes model menus covering a month with "an extra week for variety" and "surprise days for occasional use."

The majority of children's institutions make their own bread, biscuits, cakes, and so forth. The comparative cost of buying and baking is about the same but by home baking institutions avoid the illegal deception sometimes practiced of short-weight loaves, and of cheap flour or flour that has been bleached and adulterated with alum, chalk, or gypsum. Also, home-made cake will be free from the yellow coloring matter sometimes used by unscrupulous bakers to cover the absence of eggs, and from decomposed eggs made odorless.

Institutions can promote variety of diet and the health of their children by using in place of part of the ordinary white flour the coarser whole wheat and graham flours, which serve a medicinal purpose as a laxative and are valuable in the diet because of the large amounts of iron, lime, and phosphorus which they contain.

DINING ROOM

Of hardly less importance than the meals are the surroundings in which they are eaten. The conditions in many children's institutions

are strikingly like those usually found in prisons. Like prisoners the children, clad in a common garb, march single file into a dark dining hall and sit down on benches without backs at long bare tables. Like prisoners they eat their monotonous fare in silence out of dishes of enameled ware or heavy crockery and then file as silently out again, glad that the meal is over. Yet they are not prisoners but are young boys and girls whose only crime is that they have been neglected, abused, or deserted, and they are entitled to all the joy and cheer and merry laughter of childhood.

Now reverse the conditions. Paint the dark walls a light color and hang upon them bright pictures suited to children. Cut up the tables into smaller ones for family groups of six or eight, transform them with tables cloths, doilies, napkins, and simple china, and draw up chairs. Bid the children come in naturally and enjoy the meal to their hearts' content, so long as they are not boisterous. Give them wholesome, inviting food and do not forget the gingerbread and cookies, or fail to put plenty of raisins in the pudding.

What have you done? You have changed the prison into a home, glad, care-free, and joyous. You have doubled, yes quadrupled, the physical benefit of the meal, and you have sent the children back to their tasks full of life and vigor.

MILK AND WATER SUPPLIES

Many institutions have paid a high price for failing to safeguard their milk supply. Epidemics of typhoid, diphtheria, scarlet fever, and sore throat have suddenly broken out which not infrequently have involved the deaths of children and adults. Investigation has usually shown that the farmers who supplied the milk had neglected to keep it clean. The cows, stables, and farm hands were found dirty; pails and cans had not been sterilized; the milk had been left exposed to flies and dirt; or the cows were discovered to be diseased. Because of this carelessness the milk became alive with bacteria—and sickness and death resulted.

The great dairies which supply the larger cities throughout the country have found that as a business proposition it pays them to sell clean milk, and nearly all of them are pasteurizing it. However, less than 20 per cent of the smaller dairies of the United States use pasteurization, and in very many of them sanitary care is so

neglected that their patrons are bound to receive unsafe milk.

In spite of the admitted dangers from bad milk, very few institutions take pains to find out from week to week what kind they are actually getting. A great majority of them buy raw milk, accept it without question, and trust in a kind Providence to protect the children. As above stated, this plan sometimes results disastrously.

Every institution can do three things reasonably to insure the sanitation and food value of its milk.

First, by the personal visits of directors or the superintendent to the dairy from time to time it can make sure of the conscientiousness of its dealer and of his efforts to preserve cleanliness.

Second, it can have the milk tested at regular intervals. Arrangements can often be made with a near-by board of health or a university to test the milk for cleanliness, percentage of butter fat, and the number of bacteria per cubic centimeter; or at an expense of about \$100 for the necessary equipment the institution can itself make the tests. The accepted standard of nourishing, safe milk requires at least 4 per cent of butter fat, and forbids more than 200,000 bacteria per cubic centimeter. Certified milk, the highest grade, has about 10,000 bacteria per cubic centimeter.

Third, it can either buy pasteurized milk or can itself pasteurize it. A simple method of pasteurizing is to put bottles of milk in a kettle or boiler of water, slowly raise the temperature of the water to 145° Fahr., and maintain the temperature for thirty minutes. The bottles are then placed in cold water to cool the milk rapidly. Thereafter the milk is kept at a temperature of not higher than 50° Fahr. It has been scientifically proven that pasteurization kills the bacteria which cause typhoid, diphtheria, septic sore throat, and tuberculosis. Practically all of the eighty-four children's institutions now supervised by the New York Board of Health use only pasteurized milk.

While the danger from water is not as great as that from milk, still occasional outbreaks of typhoid fever warn institutions that their water supply must be carefully looked after. Institutions in cities which are supplied by a municipal water system are ordinarily sure of a safe supply, but when the percentage of typhoid cases in the city rises above the normal, as sometimes happens, the institution should boil all of its drinking water until it has ascertained from the local board of health that the special danger is past.

Institutions in the country which maintain their own water system are in greater risk of infection. The chief danger is that sewage or other refuse may reach the water supply, especially where shallow wells and cisterns are used. An institution can protect itself to a large extent by periodically sending samples for testing to the local or state board of health, and, if it has not already done so, by having a survey made of the source and environment of its water supply by an expert on sanitation.

CLOTHING

Fifty years ago the general practice of institutions was to clothe the children in a common uniform. Girls usually wore blue or gray gingham dresses and the boys were clad in ill-fitting nondescript suits. This wholesale method of clothing undoubtedly possessed the virtues of convenience and economy, but it had a deadening effect upon the children.

In recent years the new emphasis upon the development of the individual child has been accomplished by a change in the method of dressing. Many institutions now provide a variety in the color and style of clothing and give their children an opportunity to make a choice. The individual ownership covers all garments, including underwear, and in some cases even towels, sheets, and pillow cases. Superintendents have found no more effective way to increase a child's self-respect and heighten his pride in his own personal appearance.

During a recent visit to a children's institution the writer was taken by the superintendent to the stock room. Upon the shelves were seen a dozen or more remnants of cloth of different colors and textures which, it was explained, were to be made into dresses for the girls of the institution. There were different kinds and sizes of boys' suits, overcoats, and shoes which had been secured at a surprisingly low cost at end-of-season sales.

At another institution, for Catholic girls, the Mother stated that every girl was given two dresses, of distinctive color and style as far as practicable. One was for every-day wear and the other for "nice." If a girl took good care of these for several months, she was provided with a third dress as a special reward. This method of encouraging neatness had met with gratifying results.

Individual lockers have come into favor as an excellent means of training a child in the care of his clothing and other possessions and in developing a sense of ownership. A good steel locker costs about \$5. Institutions which find lockers too expensive can substitute roomy boxes of wood or cardboard.

DORMITORIES, VENTILATION, AND OUTDOOR SLEEPING

In congregate institutions it is customary for from twenty to three hundred children, depending upon the size of the institution, to sleep in one dormitory. In one western institution for many years four hundred boys slept in the same room.

In dormitories of such large size, the windows are apt to be on one side only, with the result that the draught blows directly upon the heads of the children nearest the windows and that cross-ventilation is impossible. Often the dormitories are without sunshine to dry them out and destroy germs. Furthermore, the older children lack single rooms which are needed to give privacy, develop individuality, reward good conduct, or separate from their fellows those whose influence is harmful.

A good way to secure single rooms in a big dormitory is to build cubicles. Partitions of wood or of wire lath plastered with cement, six feet high and seven feet long, can be put in on both sides of the room, leaving a corridor running down the center. The partitions are usually six feet apart, are raised four inches from the floor to permit free ventilation and ready cleaning, and have curtains hung at the open end which can be dropped or drawn together to insure privacy. To prevent the children from climbing over the partitions into each other's quarters, a wire lattice can be run over the top of the cubicles. The plan is inexpensive and provides a child with a room which he can call his own and can decorate according to his fancy. One institution has employed this idea in a still more economical way by using curtains for partitions.

The New York state law requires that each child in a dormitory shall have at least six hundred cubic feet of air space and that the beds shall be not less than two feet apart. In reckoning the number of beds to a dormitory at least forty-five square feet should be allowed per bed; and every child should have a single bed.

In cottage institutions much better sleeping arrangements can be made. A good plan for a cottage containing sixteen children is to have four dormitories, for three children each, and four single rooms. In cottages containing twenty-four or thirty children, each dormitory can have without detriment five or six or even seven or eight of the younger ones, but a few single rooms should always be included for older boys or girls.

The cottage dormitory admits of excellent ventilation. Cross-ventilation is permitted by having windows on two sides and, in the case of the best arranged cottages, on three sides of the dormitory, and plenty of sunshine is assured.

One of the most beneficial provisions for children is outdoor sleeping. Nothing is more invigorating for an anemic, run-down child, or serves to arouse sooner a keen appetite and bring color to the cheek and sparkle to the eye. Yet the practice is comparatively unknown in children's institutions today except in hospitals for the tuberculous and crippled.

At least a third of the children in an institution should sleep outdoors. This can easily be arranged in almost every institution by placing cots on sheltered piazzas, or by using tents with raised platforms of wood. Sleeping porches for from six to a dozen beds each can be built at a moderate cost. If there is fear of children running away, their clothes can be locked up over night or the piazzas can be enclosed with heavy wire screening.

TOILET ARTICLES

Every child should have for his exclusive use the following toilet articles: comb, hair-brush, tooth-brush, tooth paste or powder, cake of soap, towel. The importance of each child using his own articles should be clearly explained, and borrowing by other children should be dealt with promptly and severely.

Towels should be changed at least twice a week. In the place of individual cakes of soap the more hygienic glass soap retainer which releases liquid soap upon pressure or inversion has come into favor in many institutions and public schools.

The usual place for keeping toilet articles is the wash room. This is not objectionable if each child has a small compartment of tin or wood for holding them. The compartment and the articles should

be carefully marked with the child's name. Marking with numbers is apt to cause confusion and error. The place for each towel should also bear the child's name and the towels should be hung far enough apart so that they will not touch.

KEEPING THE INSTITUTION CLEAN

The standard of cleanliness that fairly may be sought in an institution is at least that of a good housekeeper in a private home. Indeed, the larger population of the institution and the resulting risk of the spread of infection call for even a higher standard.

To safeguard the health of children and employes a careful matron will see to it that:

All the rooms and their furniture, from garret to cellar, are cleaned when necessary and aired daily.

The table cloths and napkins are changed twice a week.

The food is kept covered, refuse from the preparation of food is at once covered, and all garbage is disposed of every day.

The refrigerators, including drain-pipes and traps, are cleaned and scalded weekly.

Flies throughout all rooms are killed or driven outdoors, particularly from the dining room and kitchen; and that at least the dining room and kitchen, and if possible all of the rooms in the house, are equipped with window screens and screen doors in season.

The breeding places of flies are sought in the stables, and in refuse and manure heaps, and that either the larvae are destroyed by such means as petroleum, chloride of potash, or Paris green, or the barn manure is disposed of every week during the summer fly-breeding season.

In the dormitories, mattresses used for bed-wetting children are covered with oilcloth; that bed linen is changed once a week and the blankets are washed every month.

All beds are inspected weekly for vermin and, if vermin is found, that beds are treated daily until vermin is exterminated; that dormitories are fumigated if necessary.

The children bathe at least twice a week in summer and once a week in winter; and wash face and hands with soap before each meal.

The night gowns and underclothing of the children are changed every week.

The heads of the children are regularly inspected and kept free from vermin.

The children are instructed in the proper use of the tooth-brush and use it morning and night.

In the wash room, towels are changed twice a week; combs and hair-brushes are kept clean; that the floors, seats, and basins of toilets are scoured with hot soap suds every day, the toilet basins are disinfected daily, and the stoppage of toilets is given immediate attention.

While the cleanliness of the institution is absolutely essential, care must be taken that the welfare of the children is not sacrificed to maintain it. The amount of floor scrubbing usually required of girls in institutions is far too great and in some cases has affected their health. The cleaning of walls and ceilings, which involves high reaching, should be done by adults. Also, the children should not be denied the use of rooms in order to keep them clean. This applies especially to playrooms and living rooms. Painful cleanliness does not appeal to visitors as it is manifestly unfair to the children.

BATHING IN TUB, SHOWER, OR POOL

Many institutions through inadequate facilities fail to give their children the physical and moral tonic to be had from frequent bathing. Where two tubs have to suffice for a hundred or more children, many are apt to go unbathed, or in some cases more than one child bathes in the same water. Institutions have been known where a large number of children habitually used one tubful.

While many superintendents favor the old-fashioned tub, others have substituted the shower and find it more satisfactory. The shower costs less than the tub and takes up only half as much space, can be operated much more quickly because it does not need to be emptied and cleaned, and is more hygienic because the water is always fresh and can not be used by more than one child. A liberal soaping in connection with a shower bath insures proper cleanliness. Superintendents find that children prefer the shower and therefore through its use more readily acquire the habit of frequent bathing. Tubs are

perhaps preferable for frail and delicate children and certainly for those in the hospital. The best plan is to have both.

The shower equipment need not be expensive. Stalls can be constructed of wire lath plastered with cement, and plain fixtures can be bought for \$6 or \$7. It is preferable to use a base of marble or soapstone as a satisfactory cement base is difficult to obtain. The fixtures should be adjusted low so that the force of the falling water upon the head will not be violent. A shower need not take up more than three feet square of space.

The pool should be used for recreation rather than for cleanliness. It affords no end of fun during the winter months when outdoor swimming is impossible. Care should be used that children take a shower or tub bath with soap before entering the pool, and that the water in the pool is changed at least twice a week.

ROUTINE AND RECREATION

THE CHILD'S PART IN ROUTINE WORK

Every child should have some part in the work of the institution. The small child of five as well as the larger boy or girl should render some service. The amount and kind of work will depend upon the child's age and upon his physical condition. The task assigned may be the simple dusting of a room, the setting of the table or weeding in the garden; or it may be one requiring a greater degree of skill such as assisting to fire the boiler or operate the power plant; but each child should have a definite task suited to his years and strength, and should be taught to perform it cheerfully, thoroughly, and for some time at least without pay.

On the other hand the child must not be exploited for the benefit of the institution. The tasks should be varied. Simply because a girl mops a floor well or makes a bed neatly and uncomplainingly, she should not be kept at the same job month after month. The institution is intended for her education and development and therefore a rotation of work should be planned by which she will learn from actual experience to wash, starch, and iron; make and mend her own clothing; use a sewing machine; prepare a meal; and keep a home clean and attractive.

The boy should learn to repair a chair, mend a broken pane, or lay a sidewalk; plant a garden and raise fruits and vegetables; milk a cow; harness a horse; run an incubator; and do many other useful and practical things. Not only will children repay the institution in a measure for their training and care by such service, but they will also learn lessons in self-respect, unselfishness, and honest efficient citizenship.

DISTRIBUTION OF A CHILD'S DAY

The following is a suggested distribution of a child's day, subject to change on Sundays, holidays, and other special occasions:

Activities	Hours given to each activity by children		
	5-7 yrs. old	7-10 yrs. old	10-14 yrs. old
School	3 hrs.	5 hrs.	5 hrs.
Home study	None	None	1 hr.
Work and play	8 $\frac{1}{3}$ hrs.	7 $\frac{1}{3}$ hrs.	7 $\frac{1}{3}$ hrs.
Meals	1 $\frac{2}{3}$ hrs.	1 $\frac{2}{3}$ hrs.	1 $\frac{2}{3}$ hrs.
Sleep	11 hrs. (including nap)	10 hrs.	9 hrs.
Total	24 hrs.	24 hrs.	24 hrs.
Bedtime	7:30 p. m.	8:00 p. m.	9:00 p. m.

Under this program the institution's day begins at 6:00 a. m. and closes at 9:00 p. m. While each institution will need to arrange its hourly schedule with reference to its particular conditions, several points may be especially emphasized.

It is advisable to break the morning sessions of school with a short recess and during it to serve each child a glass of milk and crackers, bread, or a cookie.

Thirty minutes should be allowed for both breakfast and supper and forty minutes for dinner, in order to train the children to eat slowly and to masticate thoroughly.

A maximum amount of time outdoors should be arranged for each child. While printing, carpentry, cooking, and other indoor vocational work are important and should have their place in the curriculum, it should always be remembered that during the early years of a child's life the foundations of health for his whole after life are being laid, and that no one means is so powerful in building up a strong physique as the fresh ozone of the open air. If possible, outdoor occupations such as gardening, floriculture, and poultry raising should be provided, and each child should have an individual garden. The offering of special prizes for the best garden products helps to arouse keen competition and leads the children to give much time to the care of their respective plots. One institution has now made gardening a part of its school work and requires several years of it for every child.

PLAY AND PLAYGROUNDS

Every institution wherever located can realize for its children their birthright to healthful play.

A child in a country institution has many chances for outdoor play. He may, perhaps, skate and coast in winter; swim in summer; play upon a baseball team; have dog, rabbit, or dove for a pet; climb trees, gather nuts, go a-picnicking in the woods, roam the fields, and in a hundred other like ways tire his legs and send him at the day's end sleepily and happily to bed.

His brother and sister in the city institution are not so fortunate. They may be taken to the country, shore, or public parks for brief outings but most of the time they must get their outdoor recreation upon the restricted grounds of the institution. However, good play facilities are possible in a comparatively small space.

Special equipment can be installed such as swings, see-saws, giant strides, slides, tether ball, and sand bins for the girls and younger children; and basketball, playground ball, standards for vaulting and leaping, horizontal bars, or other gymnastic apparatus for the older boys. A trained play director can be secured to teach the children games, organize their sports, and give them corrective gymnastics.

A simple but adequate playground equipment can be procured and installed for \$300. Much of the apparatus could be made by the boys

of the institution under adult direction, and this would materially reduce the cost.

Both city and country institutions can provide at small expense indoor games for the stormy day and evening hour. Some of the best of these are ping-pong, caroms, bean bag, lotto, parchesi, dominoes, authors, anagrams, checkers, and chess.

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