

Fighting TB with Fresh Air

RIMS' doctors launch a movement

BY MARY KORR

Two women Fellows of the Rhode Island Medical Society, Drs. Mary S. Packard and Ellen A. Stone, launched a nationwide movement when the first fresh-air school for tubercular children opened in Providence in 1908.

Packard, the first woman to graduate from the Johns Hopkins School of Medicine in 1897, and Stone, a 1900 Hopkins' graduate and a medical inspector for the Providence schools, had earlier founded the League for the Suppression of Tuberculosis in Providence. When a summer day camp they conducted for frail, tubercular children proved a success in 1907, they thought to open a fresh-air school similar to the "open-air recovery" schools in Europe.

Packard wrote a letter to Dr. Jay Perkins, president of the League, who was vacationing in Maine. "Do you think it is too early to attempt to have a single small school, necessarily ungraded, for those children, arranged so as to approximate an out-of-door school? It would, of course, be an experiment...It is suggested that the horse sheds of the Friends' Meeting House on North Main Street could be arranged..."

Perkins formed a committee to present the concept to Providence education officials; the school board approved the idea and authorized the use of an empty brick schoolhouse at 24 Meeting Street. The second-floor classroom had windows on three sides. A brick wall on the south side was replaced with floor-to-ceiling wall hinged windows, which were kept raised.

Four visiting nurses employed by the League referred students to the school. For the most part, they were children who had been

exposed to tuberculosis, and except for a few instances, were without active lesions. "In light of the amount of tuberculosis found at autopsy in children dying of other diseases and from accident, we must recognize the fact that many school children are carrying about hidden foci of this disease, and is it not probable that those who are suffering from anemia, debility, etc., are likely to be the ones?" Stone later wrote in a national journal, *Outdoor Life*.

The first fresh-air school in the country opened on January 27, 1908. Although it was a severe winter in Providence, the classroom temperature was never more than 10 degrees higher than the outside air. Pupils faced the teacher, with their backs to the open wall, to allow light and the fresh air to wash over them.

A fire in a cylinder stove arrested the chill. In addition to her teaching duties, Marie E. Powers heated soup and puddings for the students on a cooking range. In winter, the children studied at their desks inside "Eskimo sitting bags" with heated soapstones to warm their feet. In addition to their studies, the students did gentle exercises, including "wand drills," and practiced proper breathing. In the spring, they tended a garden.

Stone regularly supervised the children's medical status, noting their progress, and did a monthly hemoglobin count.

Soon the initial 10 students swelled to 25, the maximum number allowed at that time for an ungraded school.

At the National Association for the Study and Prevention of Tuberculosis in 1909, the eminent William Osler, MD, opened the assembly. He noted, "a great deal can be done by persons who are connected with school work and by trained nurses," but suggested it would take several generations "at least, before we have the mortality from tuberculosis reduced to the rate, say, of that of typhoid fever in well-regulated countries. Whether tuberculosis will be finally eradicated is an open question. It is a foe that is very deeply entrenched in the human race."

After Osler spoke, Perkins gave a presentation on the first year of Providence's open-air school experiment. He reported there were no cases of contagious diseases among the children – not even a head cold. All except one showed marked improvement; and several had returned to regular school.



Pupil sits inside his Eskimo bag in the first fresh-air school opened in this country on Meeting Street, Providence. Photo: Library of Congress

Perkins related Ebba, 9, had been operated on at Rhode Island Hospital for tubercular glands of the neck. The wound didn't heal and she was sent to the fresh-air school, and in a week it began to heal. In the first few months, she gained over six pounds.

Annie, he reported, was a 9-year-old student whose father had died of tuberculosis in 1908. She showed signs of the disease and began to lose weight, and ate and slept poorly. She thrived almost immediately in the fresh-air school and advanced two grades.

And Harold, 7, prone to respiratory infections, grew into a robust boy. He didn't have TB, but his mother, an observant neighbor to the school, liked what she saw and insisted he be admitted.

The school garnered the attention of the national press, and two years later there were 65 in the country. Additional fresh-air schools were opened in Providence and Pawtucket; by 1926 the city had 11.

In 1912, Stone was appointed the director of child hygiene in the Providence health department, a position she held for 21 years.

Dr. Chapin's school rules

Providence's Superintendent of Health, Dr. Charles V. Chapin, instituted a simple set of guidelines for school children in the early 1900s to prevent the transmission of contagious diseases.

Remember These Things

Never spit on a slate, floor, or sidewalk.

Do not pick the nose or wipe the nose on the hand or sleeve.

Do not wet the finger in the mouth when turning the leaves of books.

Do not put pencils into the mouth or wet them with the lips.

Do not put anything into the mouth except food and drink.

Do not swap apple cores, candy, chewing gum, half-eaten food, whistles, or bean blowers or anything that is put in the mouth.

Never cough or sneeze in a person's face. Turn your face to one side. Keep your face and hands clean; wash the hands with soap and water before each meal.

