

Alexandre Lion's Incubator Charities in Europe (1894-1898)

Alexandre Lion established incubator charities in the late 1890s in France to promote his infant incubator. Lion's infant incubators kept premature infants warm and improved their chances of survival, but were expensive and not widely used. In order to promote his new technology, Lion displayed incubators that carried premature infants in storefronts and at fairs and expositions throughout Europe. After the public began paying admission to view the infants and incubators, the expositions became incubator charities. Admission fees went directly to the care of the premature infants. The charities treated roughly 8,000 premature infants and greater than 7,500 of them survived. The charities in France occurred in Paris, Nice, Marseille, Bordeaux, and Lyon. The charities in Belgium were located in Liège and Brussels.

A physician specializing in the care of infants, Alexandre Lion promoted the usage of his infant incubator and created incubator charities. Lion invented his infant incubator in 1891. He expressed the need for premature infants to be placed in incubators immediately after birth. When physicians used Lion's incubators, they placed infants in a two doored cabinet. Heated air flowed up through the cabinet, warming the infant, before exiting through a fan system at the top.

In 1894, Lion opened Maternité Lion in Nice, France, an institute for the care of premature infants. The municipality in Nice granted Lion money to support the Maternité, which also received charitable donations by wealthy locals. The Maternité used Lion's incubators to care for premature infants from all social classes, largely acting as a charity. The charity in Nice reported a seventy-two percent survival rate among 185 premature infants.

Lion began opening other charities in store fronts throughout France to increase use of his incubators. During the first year of its opening, the charity located on 26 Boulevard Poissonnière in Paris, had more than fifty thousand people pass through the charity's doors. Lion only charged parents who could afford to pay for support of their infant. He took in infants regardless of social or financial background, and they were all provided with regular medical supervision. Lion charged an admission fee to pay for his staff, and other expenses. Nurses received sixty francs a month, as well as meals, lodgings, and clothes. Each nurse cared for three infants and remained at the facilities for six months on a contract. Lion searched for new nurses to train and they took the place of nurses who finished their six month contracts.

In Lion's charities, more than a dozen incubators were situated in one area, lined up against the wall. Lion used a glass barrier between the audience and his staff. Above every incubator was a chart indicating the weight and temperature of the infant, which had to be recorded each day, from the infant's arrival at the facility to their departure months later.

At each charity, a separate room (called the dining room) held organized scales, bottles, mattresses, and powder boxes. Nurses changed, fed, and weighed the premature infants in that room. Each morning, every infant got weighed. Nurses fed the infants every two hours. For weaker infants, nurses used a long slightly curved spoon to pour milk through the infant's nose. The liquid dripped down through the nose and slid down the throat, without the infant straining to swallow. Nurses fed infants using that method for two to three weeks. Nurses also used a tube to feed the infants through their mouths, and in both cases the infant received the food they needed without strain.

Due to the success of Lion's incubator charities, by the early 1950s, Lion's model became the standard incubator used in US hospitals.

Sources

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