

HEREDITY

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THE question of heredity is one which cannot be disposed of without making some concessions to those who have clung so long to the theory. If we accept the theory of heredity, however, we must of necessity give up, almost entirely, all hope of ever being able to get rid of this disease.

Heubner of Berlin, who has given us excellent statistics, draws our attention to the fact that children seldom die from this disease within the first three months of life. If it were hereditary we should have deaths even within the first few days after birth. Among the children brought to his clinic for treatment for all sorts of diseases, the following percentage suffered from tuberculosis:

884 infants less than 3 months,	0	per cent.
218 children, 3 to 6 months...	3.6	"
93 children, 6 to 9 months...	11.8	"
79 children, 9 to 12 months...	26.6	"
458 children, 2nd year of life...	14.2	"
367 children, 3rd year of life...	13.4	"
306 children, 4th year of life...	11.1	"
470 children, 5-7th year of life...	7.4	"
682 children, 7-10th year of life	5.0	"

A few moments' reflection upon the above figures will explain why one should cling to the idea of infection rather than of heredity. It is a well-known fact that paternal transmission is impossible, and the disciples of the theory of heredity have striven in vain to explain it. Maternal transmission, owing to the early contact, could be easily explained by the fact that contagion takes place almost at birth, and is continued during a long period of nursing, during which time the baby and the mother are in almost continual contact, and therefore contagion becomes the only hereditary factor.

"Without exposure, no hereditary tuberculosis," says Bernheim. In all his observations he has never found that the reverse ever happened. No matter how far advanced the disease may have been in the parents, if the child was removed early and kept away from the parental home, there has been no inheritance of tuberculosis.

The following are given as examples of his observations:—

The family of B— was composed of five children, a father who died of tuberculosis, and the mother who was quite well. The second child was removed from its home immediately after its birth, reared by a healthy nurse until he was thirteen years of age, and then placed in a school. He is now a healthy man of 36; he has never lived with his parents. The other four children lived with their parents; two of them have died of pulmonary tuberculosis, and the other two have the disease in an advanced stage.

In another family of seven children, the father and mother were both tuberculous. The second and fifth child were removed from their parents and never lived with them. The five children reared by their parents have all died of tuberculosis. The two who were removed remained well and are now both married and have fine healthy children of their own.

Three times has this observer had an opportunity to assist at the birth of twins born while their mothers were affected with pulmonary tuberculosis. In each instance one of the children was reared in its own home, being nourished by a healthy wet nurse, while the other child was sent from its home and reared in the country. The three children which remained at home died, one of pulmonary tuberculosis, the two others of tubercular meningitis or inflammation of the brain. Two of these healthy nurses also died of tuberculosis later on. On the other hand, the three children removed from their homes and reared in the country under healthful hygienic conditions, are still living and well. Could one require any further proof of the non-heredity of the disease? If so, he has but to look into modern medical literature and read of thousands of observations of a similar character, establishing the proof beyond all doubt.

In cattle the records give parallel results. Baumgarten, in his experimental work with guinea pigs, arrived at the same conclusions, after having isolated some of the offsprings and left others with the infected animals.

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