her information in the areas of microbiology, malnutrition and immunological impairment. Today leprosy, with an incidence rate four times higher than noma and a much lower case mortality rate, is listed for elimination. This research and its related health promotion will go a long way to moving noma closer to elimination too.

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Noma:
in Europe yesterday
...in Africa today

There are good reasons to believe that noma is as old as mankind. At the beginning of the Christian era, Celsus described lethal mouth ulcers in children. The first clear description of noma as a clinical condition comes from Carolus Battus in his handbook of surgery published in the Netherlands in 1595. The disease was commonly known as “waterkanker”, or water cancer.

It was Cornelis van de Voorde, also from the Netherlands, who in 1680 first used the Greek word noma (meaning a grazing herd, and metaphorically “spreading like a festering”). Van der Voorde clearly distinguished noma from other oral malignancies. He described the quick progression of the disease, the horrible aspect of the black necrotic parts of the face, the awful smell, and the fact that the disease started on the inside of a child’s mouth. He was fatalistic about the prognosis, though he wrote that at least some children managed to survive the acute stage of the disease.

In the 18th and 19th centuries noma was a common disorder in many countries, particularly in northern Europe. An overview of the medical insights of that period is contained in the impressive monograph Der Wasserkrebs der Kinder (Water cancer in children) by A.L. Richter, published in Berlin, Germany, in 1828. It was well known at the time that important predisposing factors for noma were both malnutrition and a history of a debilitating disease, particularly measles. The conclusion that noma is seen only in the children of poor families was already made more than 150 years ago.

The illustration comes from one of the many medical theses that were published in the Netherlands in the mid-19th century. Noma was well known in the medical world of that time. Now, however, noma has faded from the European medical scene. Cases are rare and text books pay little attention to it.

The disappearance of noma from Europe was the result of the activity of a group of doctors and engineers who are called nowadays the hygienists. They promoted preventive medicine by organizing large-scale public health measures such as vaccination, clean drinking-water, a closed sewerage system, improvement of public housing and better nutrition.

In our century noma returned to Europe only during the sad episode of the second world war when the disease was seen in concentration camps. The discovery of penicillin and the development of reconstructive plastic surgery made active treatment of the disease possible. However, in economically less developed countries noma has remained what it once was in Europe — a devastating facial gangrene that kills most of the children it affects and mutilates the few who survive.

History teaches that noma is not some rare exotic disease but simply the true face of poverty. It is a disgrace for humanity that noma still exists. Only preventive measures can eradicate noma. Until then, the children whose faces are mutilated by noma deserve help: my help, your help, our help.

Klaas W. Marck,
President, Dutch Noma Foundation

The effects of noma, as shown in a European medical text book 150 years ago.