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The Origins and the Evolution of the Anti-Vaccination Movement

AIMS AND OBJECTIVES: To present the events of the Anti-Vaccination Movement from the first vaccine for smallpox to the global spread through the social media of the distrust in vaccines based on fears and anxieties.

MATERIAL AND METHODS: The review of the medical literature and the texts of the journalists of those times as well as the contemporary publications concerning the dangers of vaccination.

RESULTS: The Anti-Vaccination Movement has a long story beginning in France in 1763, in the times of variolation. The Italian Doctor Gatti introduced the variolation without taking any measures of quarantine for the inoculated persons, risking therefore the health of the Parisian population and finally resulting to the French Parliament's order to discontinue it. After the invention of the smallpox vaccine by Edward Jenner in 1799 the Vaccination Act of 1853 in Great Britain ordered mandatory vaccination but was immediately met with resistance and formation of several anti-vaccine organizations. Although the reactions were usually restricted and the new vaccines were very successful eliminating or almost vanishing severe diseases, the anti-vaccination movements never stopped.

In 1998, a research paper was published in the scientific journal "Lancet" connecting the Measles, Mumps and Rubella vaccine (MMR) with autism. The investigation was based on 12 children only and soon it was revealed that that the author, Andrew Wakefield had broken ethical codes, the paper was found to be fraudulent and was retracted. In spite of the scientific arguments, supporters of the conspiracy theory believe that there are no safe vaccines, as they contain toxic additives, although in 1999 US public health and medical organizations agreed to remove Thimerosal, a preservative containing mercury. This event, along with the vaccination-autism controversy constitutes the basis of the Modern Antivaxxer Movement. The organized anti-vaccination groups have a strong presence on social media and well-developed websites attracting people and contributing to the drop in vaccination rates. As a significant consequence of the falling vaccination rates, measles outbreaks occurred in several countries, reminding of past times.

CONCLUSIONS: The anti-vaccination movements supported by social media constitute a permanent threat towards the medical achievements of children's immunity because the decrease of the vaccination rates always leads to epidemics.

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