

## ISTORIJSKI PRIKAZ RAZVOJA VAKCINACIJE DO KRAJA 19 VIJEKA

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**Sažetak.** Imunizacija je proces u kome je osoba, zbog primljene vakcine, imuna ili otporna na infektivnu bolest. Priča o vakcinaciji ne počinje od prve medicinski uokvirene vakcine Edvarda Jennera, već shvatanjem o rizicima zaraznih bolesti kod ljudi u davnim vremenima i pokušajima da se obezbijedi imunitet prema toj bolesti. Postoje saznanja da je četiristote godine prije nove ere, Hipokrat opisao zauške, difteriju, epidemijsku žuticu i druga stanja, a da su već oko 1100 godine nove ere u Turskoj, Kini, mnogim afričkim zemljama i ponegdje u Evropi bile razvijene tehnike variolacije koje su uključivala inokulaciju djece i odraslih osušenim materijalom iz krasta dobijenim od pacijenata s velikim boginjama. Ovaj rad ima za cilj da sistematično predstavi događaje koji su uticali na razvoj procesa donošenja zakona ili uredbi o obavezi masovne imunizacije ljudi do kraja 19 vijeka. Zahvaljujući svijesti znamenitih ljudi tadašnjeg vremena, o rizicima širenja epidemija teških zaraznih bolesti, razne tehnike variolacije iz mnogih dalekih zemalja starog svijeta donesene su u Evropu i Ameriku. Time je podstaknut rad na medicinskim tehnikama kojim bi se spriječila pojava smrtno opasnih zaraznih bolesti što je dovelo do prvog ozbiljnog zakona koji je definisao vakcinaciju u Virdžiniji 1792 godine, a uključivao je kaznu u iznosu od 1.500 dolara ili šest mjeseci zatvora za svakoga ko namjerno širi velike boginje na način koji nije određen zakonom. Neki od tih znamenitih ljudi su: gospođa Mary Wortley Montagu supruga engleskog ambasador u Turskoj, engleski ljekar Charles Maitland, pronalazač iz 17 vijeka Benjamin Franklin, škotski ljekar Francis Home, ruska carica Katarina Velika, engleski ljekar Thomas Dimsdale kao i Džordž Vašington tadašnji komandant kontinentalne vojske u građanskom ratu u SAD. Nakon 1888. godine i osnivanja Instituta Paster u Parizu, počinje era uvođenja javno zdravstvenih zakona koji u svom sastavu imaju i segment vezan za obaveznu, preporučenu ili apsolutno dobrovoljnu imunizaciju čime počinje moderno doba u imunizaciji ljudi.

**Ključne riječi:** zarazne bolesti, variolacija, Jenner, vakcinacija, zakoni

## **HISTORICAL OVERVIEW OF THE DEVELOPMENT OF VACCINATION UNTIL THE END OF THE 19th CENTURY**

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**Abstract.** Immunization is the process by which a person, due to a vaccine received, is immune or resistant to an infectious disease. The story of vaccination does not begin with the first medically framed vaccine by Edward Jenner, but with the understanding of the risks of infectious diseases in humans in ancient times and attempts to provide immunity to that disease. There is knowledge that in the fourth century BC, Hippocrates described mumps, diphtheria, epidemic jaundice and other conditions, and that by around 1100 AD, variolation techniques had been developed in Turkey, China, many African countries and some parts of Europe, which involved inoculating children and adults with dried scab material obtained from smallpox patients. This paper aims to systematically present the events that influenced the development of the process of passing laws or regulations on the obligation of mass immunization of people by the end of the 19<sup>th</sup> century. Thanks to the awareness of prominent people of that time, about the risks of spreading epidemics of serious infectious diseases, various techniques of variolation from many distant countries of the Old World were brought to Europe and America. This stimulated work on medical techniques to prevent the occurrence of deadly infectious diseases, which led to the first serious law defining vaccination in Virginia in 1792, which included a fine of \$ 1,500 or six months in prison for anyone who deliberately spread smallpox in a way not specified by law. Some of these prominent people are: Mrs. Mary Wortley Montagu, wife of the English ambassador to Turkey, English physician Charles Maitland, 17<sup>th</sup> century inventor Benjamin Franklin, Scottish physician Francis Home, Russian Empress Catherine the Great, English physician Thomas Dimsdale, as well as George Washington, then commander of the Continental Army in the US Civil War. After 1888 and the founding of the Pasteur Institute in Paris, the era of introducing public health laws began, which included a segment related to mandatory, recommended or absolutely voluntary immunization, thus beginning the modern era in human immunization.

**Keywords:** infectious diseases, variolation, Jenner, vaccination, laws