

страны. Складывается впечатление, что ни болгары, ни румыны не учатся на своих ошибках и продолжают повторять их.

Болгария – мой родной дом. Румыния стала для меня вторым, но не менее любимым домом. Я искренне желаю всего самого наилучшего этим двум прекрасным странам, имеющим колоссальный потенциал. Уверенна, что уважение к своей родине, согражданам, культуре, истории, традициям, а также совместная борьба с трудностями, коррупцией, популизмом и проблемами, возникшими в результате глобализации Европы, помогут Болгарии и Румынии стать развивающимися, прогрессивными и комфортными для проживания странами в самом скором будущем.

UDK 501; 576.8; 614.1; 930.85

*K. J. van Zwieten^a, K.P. Schmidt^a,
S.A. Varzin^{b, c}, O.E. Piskun^b, I.A. Zubova^a*

250 YEARS OF SMALLPOX VACCINATION IN EUROPE

a) Functional Morphology, Department of Anatomy, University of Hasselt, Diepenbeek, Belgium, b) Department of Physical Culture and Adaptation, Peter-the-Great St. Petersburg Polytechnic University, St. Petersburg, Russia, c) Department of Intermediate Level Surgery, Faculty of Medicine, St. Petersburg State University, St. Petersburg, Russia, koosjaap.vanzwieten@uhasselt.be

Summary

This paper discusses the effects of smallpox vaccination on the public opinion, 250 yrs. ago. Dr. Dimsdale [1, 2] and Dr. Ingen-Housz [3-5], and Empress-Queen Maria Theresa [6] are highlighted, and we conclude our literature search with the Wiener Zeitung weekend edition of October 1, 1768 [7].

Keywords *smallpox inoculation, 18th century public opinion, medical history*

Introduction

Now that a certain vaccine hesitancy in Europe should be overcome in order to prevent massive outbreaks [8], it is interesting to commemorate the first successful smallpox vaccinations in Europe on large scales, as started by Drs. Dimsdale and Ingen-Housz, exactly 250 years ago (1768). Dr. Dimsdale was called to St. Petersburg by the Russian Empress Catherine the Great to inoculate her and her son, although his method had some health risks [1, 2].

Doctor Thomas Dimsdale (1712-1800)

Much-dreaded frequent and devastating, deadly outbreaks of smallpox in 18th century Europe threatened not only whole populations including royalties and their offspring, but also caused unexpected and bizarre shifts in surviving heirs to the throne [9, 10]. Whatever the reason was, the modified and rather user-friendly method of inoculation as developed by Dr. Dimsdale attracted the attention of Empress Catherine the Great, and in 1768 she invited him to St. Petersburg [2]. Griffiths comprehensibly describes the happy results of Dr. Dimsdale's venture, his most honorable rewards, and return to Russia in 1781 to inoculate the Grand Duke Alexander and his brother Constantine [1].

Doctor Jan Ingen-Housz (1730-1799)

This famous scientist from Breda in the Southern Netherlands [3 - 5], was a medical doctor by vocation. He had been inspired in his youth by Dr. John Pringle, who has been called the "father of military medicine", and who by that time was physician-general to the British forces in the Low Lands during the War of the Austrian Succession (1740-1748) [11]. Dr. Pringle's regiment "had once (in the winter of 1742-1743) been quartered at Terheijden near Breda, during which he became acquainted with young Jan Ingen-Housz through his father, an apothecary at Breda" [4, modified]. Once graduated as a young MD and above all an eager scientist, Ingen-Housz was later introduced in London by Sir Pringle. He became interested in smallpox inoculation and therefore assisted Dr. Dimsdale during a smallpox outbreak, early in 1768 [2]. About that time too, Ingen-Housz instructed his good friend and colleague Dr. Deckers MD at 's-Hertogenbosch (Southern Netherlands) how to safely manage inoculations: "... furnish a large house outside the city on dry ground, far from the other houses, and a league or half a league from the city. Follow the dogmas of Dimsdale, always take fresh, fluid matter, taken from the patient in the presence of the one you will inoculate" [3].

Empress-Queen Maria Theresa (1717-1780)

The Empress-Queen Maria Theresa herself had luckily survived a smallpox infection during the 1767 outbreak in Vienna, however, "she had the misfortune to lose two close relations" [4]. Afterwards (by means of her Austrian envoy in London) she inquired with Dr. John Pringle, which doctor would be suitable to carry out a vaccination campaign in Austria. Sir Pringle recommended to her his protégé "as the best person" to perform the inoculations in Vienna [2]. Ingen-Housz's honorable invitation to Vienna in the spring of 1768, including his successful vaccinations there, are extensively described by e.g. Godefroi (1875) [3], Anreth (1876) [12], and more

recently by Ingen Housz (2005) [4] and Magiels (2015) [5]. In this context however, it can be enlightening to cite the Empress-Queen herself, in a letter to her son Leopold: “We must confide in this subject alone, especially if he is a good Christian (always the first quality) and an honest man. The good Lord, if he wants to enlighten this doctor, and support you, will surely do it by his hands, especially if one blindly follows his advice” [6].

The Saturday edition of the Wiener Zeitung, Saturday October 1, 1768

In matters of health, safety, prosperity, and climate (and also of religion), the important opinion of the general public can make the difference. Apparently, economy, ecology (and ecumenism) are interrelated. No wonder that Ingen-Housz’s positive results were immediately communicated to the general public (hot of the press), directly after September 1768, in the weekend edition of the Wiener Zeitung [7]. More than 100 years later, Anreth [12], and more than 200 years later Magiels [5] also report this, inevitably not firsthand. In order to acquire more information, therefore, we consulted the original “Wienerisches Diarium, oder Nachrichten von Staats, vermischten, und gelehrten Neuigkeiten”, of October 1, 1768 [7]. In its Saturday issue, the following joyous account comes directly after the political news, namely at pages 6-7, above the appendix with “Scientific Contributions” (“Gelehrte Beyträge”) of this issue of the Wiener Zeitung [7] (see Facsimiles, Figure 1.).

Translation of the above pages 6-7 of Wiener Zeitung, October 1, 1768

“To their Royal Highnesses the Archdukes Ferdinand and Maximilian, as well as to the Archduchess Theresa, daughter of His Majesty the Emperor, on the 10th of September last the smallpox have been inoculated with the happiest success by Mr. Ingen-Housz, a famous Dutch physician appointed for that purpose. With the Royal Highnesses it went well, until the fever could be observed on the 15th, and it continued to go well as the course of this condition requires.

The outbreak of the smallpox began on the 18th and lasted four days, the pustulation had its course until the 24th, and on the 29th the blisters had dried up again. From the time of the inoculation to their full recovery, their Royal Highnesses did not stay in bed during the day, but occasionally drove out by carriage, once again however, on foot in the gardens or in the halls of the Schönbrunn castle. The Archduke Ferdinand has a very average number of smallpox, while the Archduke Maximilian has a lot more, but the Archduchess has also had very little.

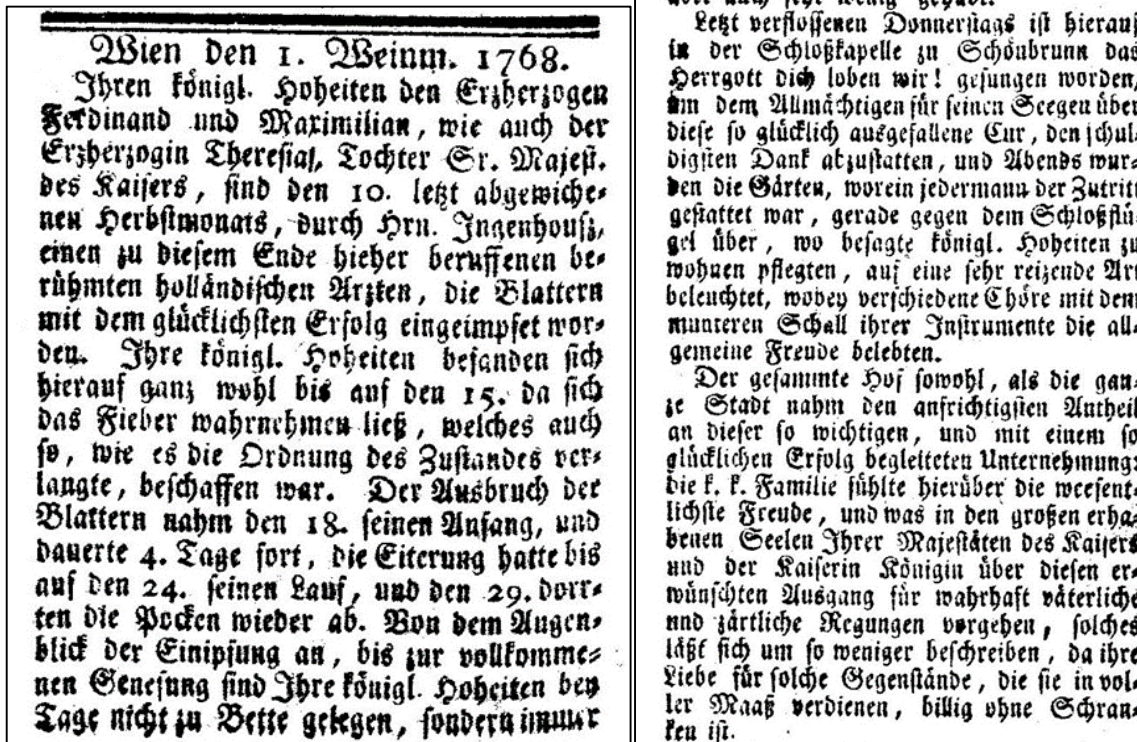


Figure 1. Report on successful inoculations, Wiener Zeitung, Oct. 1st, 1768.

Last Thursday (29th) the Te Deum was sung in the Schönbrunn castle chapel to pay the dearest thanks to the Almighty for his blessing on this happy treatment, and in the evening the gardens in which everyone was allowed to enter, right across the castle wing where the said royal highnesses used to live, were illuminated in a very charming way, during which several choirs expressed the general joy by the cheerful sounds of their instruments.

The whole court as well as the whole city shared this so important enterprise, followed by such a happy result, the royal and imperial family felt the most intense joy about it, and what was felt about truly paternal and tender emotions in the great lofty souls of their Majesties the Emperor and Emperor Queen, dealing with this desired outcome, is all the less described, because their love for such subjects that they fully deserve is rightly unlimited.”

Conclusion

Taking into account Maria Theresa's religious convictions, the above 1768 newspaper fragment illustrates her concern for all subjects, including her own children, as described in detail by e.g. Meerhaeghe [6]. However, her family was put into service for her political services. One can refer to both tendencies as belonging to so-called credibility enhancing displays (CREDs): "means to convince individuals of commitment to belief systems" [13 - 15].

Acknowledgements

The authors wish to thank the Austrian National Library for their assistance.

References

1. Griffiths, J. (1984) Doctor Thomas Dimsdale, and Smallpox in Russia. The Variolation of the Empress Catherine the Great. Bristol Medico-Chirurgical Journal, 99, 1, 14-16.
2. Dimsdale, R. (2017) Mixed Blessing: The Impact of Suttonian Smallpox Inoculation in the later Eighteenth Century. Study Group on Eighteenth-Century Russia SGECR Occasional Series, 1, <http://www.sgecr.co.uk/dimsdale/article.html>, accessed October 6, 2018.
3. Godefroi, M. J. (1875) Het leven van Dr. Jan Ingen-Housz. Geheimraad en lijfarts van Z.M. Keizer Jozef II van Oostenrijk. Nederlands Tijdschrift voor Geneeskunde, 19, 285-302.
4. Ingen Housz, J. M., Beale, N., Beale, E. (2005) The life of Dr Jan Ingen Housz (1730-99), private counsellor and personal physician to Emperor Joseph II of Austria. Journal of Medical Biography, 13, 1, 15-21.
5. Magiels, G. (2010) From Sunlight to Insight: Jan IngenHousz, the Discovery of Photosynthesis & Science in the Light of Ecology. Brussels, VUB Press-Brussels University Press.
6. Meerhaeghe, A. (2015) Maria Theresia, Mater Familias. Discoursanalytisch onderzoek naar de rol van het vorstelijk moederschap aan de hand van de briefwisseling met haar kinderen. History Master's Thesis, Ghent University, Faculty of Literature and Philosophy.
7. Anno (2018) Wienerisches Diarium, 79, October 1, 1768, 6-7, Verlegt bey den

von Ghelischen Erben. "ANNO / Österreichische Nationalbibliothek".

8. Weigmann, K. (2017) An injection of confidence: Scientists explore new and old methods to counter anti-vaccine propaganda and overcome vaccine hesitancy so as to increase vaccination rates. *EMBO reports*, 18, 1, 21-24.
9. Blower, S., Bernouilli, D. (2004) An attempt at a new analysis of the mortality caused by smallpox and of the advantages of inoculation to prevent it. *Reviews in Medical Virology*, 14, 5, 275-288.
10. Hopkins, D. R. (2002) *The Greatest Killer: Smallpox in History*. Chicago and London, University of Chicago Press.
11. Lang, U. (2013) Sir John Pringle (1707-1782) Hilfe für die Verwundeten im Krieg. *Deutsches Ärzteblatt*, 110, 37, A1680-1683.
12. Anreth, A. Ritter von (1876) *Geschichte Maria Theresia's - VII Band 'Maria Theresia's letzte Regierungszeit 1763-1780' Zehntes Kapitel - Inoculation der Blattern*. Wien, Wilhelm Braumüller.
13. Henrich, J. (2009) The evolution of costly displays, cooperation and religion: credibility enhancing displays and their implications for cultural evolution. *Evolution and Human Behavior*, 30, 244-260.
14. Lanman, J. A., Buhrmester, M. D. (2017) Religious actions speak louder than words: exposure to credibility-enhancing displays predicts theism. *Religion, Brain, and Behavior*, 7, 1, 3-16.
15. Rorabaugh, A. Shantry, K. (2016) *Credibility Enhancing Displays and the Changing Expression of Coast Salish Social Commitments*. Presented at The 81st Annual Meeting of the Society for American Archaeology, Orlando, Florida (tDAR id: 404209).