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Preface

Sam Willner

This volume contains three articles discussing different aspects of public health in late 19th and early 20th century.

Stephan Curtis examines the logistical obstacles as well as the cultural and psychological resistance that midwives had to overcome before women would entrust them to deliver their infants in late 19th century rural Sweden. The study is based on the daybooks of two midwives in the parishes of Indal and Tuna in the Sundsvall region from 1882 to 1890. Diffusion theory is used to illuminate the process by which an increased willingness to have midwives attend births diffused through the region during the study period.

Virgine De Luca Barusse demonstrates how sex education for young people proposed and introduced in France during the first half of the 20th century was based on considerations about morality, demography and public health, particularly regarding decline in family fertility and the rise of venereal diseases. Sex education was conceived as an instrument for the reproduction and “preservation of the race”. The article also discusses how opposition based on underlying political and religious concerns affected the processes of sex education, and demonstrates how the education differed according to whether it addressed girls or boys.

The search for international measures to prevent and control epidemics of cholera, the plague, yellow fever, malaria and typhus which ravaged the world throughout the 19th century, led to a series of International Sanitary Conferences and Conventions under the leadership of European states. Nermin Ersoy, Yuksel Gungory and Aslihan Akpınar review the reasons, process and the results of the international sanitary conferences 1851–1938 from the Ottoman social and health perspective.

The Arrival and Diffusion of Academic Medicine in Rural Sweden: The Case of the Sundsvall Region in the late Nineteenth Century

Stephan Curtis

This study examines the numerous logistical, cultural and psychological obstacles that midwives had to overcome before women in the Sundsvall region of Sweden would entrust them to deliver their infants. By extension, this analysis reveals the tenuous position academic medicine had in many remote villages. These well-trained women benefitted from numerous pieces of legislation designed to enable them to replace the help-women who remained their greatest rivals. None the less, trained doctors and midwives often encountered resistance among local populations. Historians have tended to focus attention on the work of individual physicians and the consequences of government intervention without paying much attention to the patients themselves and the reasons they either accepted or rejected the people sent to provide medical care. This paper represents an attempt to address this imbalance by suggesting how theories of diffusion, concepts of trust, and perceptions of risk can help us understand the decisions made by people confronted with new medical practitioners.

Diffusion theory provides an opportunity to illuminate the process by which the acceptance of academic medicine, here represented by an increased willingness to have midwives attend births, diffused through the Sundsvall region of Sweden during the second half of the nineteenth century. Certainly the role of formal legislation, medical associations, and the practices of individual medical practitioners were critical to the introduction of new innovations. No one should dismiss the integral role these agents played in making academic medicine available to the public.¹ Unfortunately, historians have tended to place less atten-

1 See, for example, Staffan Nilsson, "Hur X-strålarna nådde Dalarna och länslasaretet i Falun. Om röntgenteknikens spridning till landsorten kring sekelskiftet", *Nordisk Medi-*

tion on examining the reasons why those who needed medical assistance eventually turned to a doctor or midwife rather than the local folk healer or help-woman to provide it.

One cannot talk about theories of diffusion without acknowledging the innovative work of Torsten Hägerstrand.² Although his earliest studies are now more than 40 years old, reference to them still find their way into the bibliographies of those wishing to explore the mechanisms by which innovations spread from place to place and from person to person. Hägerstrand's most important contribution to questions such as these was the attention he placed on the role of informal communication between people. He believed that it was this, rather than state sponsored initiatives, that offered the most promising explanation for the diffusion of accepted practices.³ The major impediment to the widescale diffusion of innovations was not social inequality per se, but rather the fact that poverty often placed insurmountable obstacles in front of those who may have benefitted from information about a new method, product or behaviour.

A recent study of the diffusion of smallpox vaccination in southern Sweden during the early nineteenth century reveals that not all segments of the population were equally receptive to this innovation even though there was no financial cost attached to it. Martin Dribe and Paul Nystedt argue that it was not the wealth or level of education enjoyed by those most likely to vaccinate their children, but rather the greater access to information that the wealthy and educated enjoyed as a result of their privileged social and economic position.⁴ Anders Brändström, Sören Edvinsson, and John Rogers make a similar argument and conclude that the first women to employ a midwife typically came from the upper classes while those whose husbands were small farmers or unskilled workers were more likely to be among the 'laggards'.⁵

The more recent work of Everett Rogers reaffirms Hägerstrand's conclusions regarding the importance of informal conversations but recognises that people do not always respond to common information in the same way or for the same

cinhistorisk Årsbok, (1994), 123–131. Of course this is only one of many such works that emphasise the role of individual physicians.

2 T. Hägerstrand, *Innovation Diffusion as a Spatial Process*. Trans. A. Pred. (Chicago: University of Chicago Press, 1967).

3 T. Hägerstrand, *Innovation Diffusion as a Spatial Process*. Trans. A. Pred. (Chicago: University of Chicago Press, 1967), pp. 77, 164.

4 Martin Dribe and Paul Nystedt, "Information, Trust and the Diffusion of Smallpox Vaccination: the Case of Scania in Sweden, 1802–1835", *Scandinavian Economic History Review*, 51 (2003), 9–29.

5 Anders Brändström, Sören Edvinsson, John Rogers, "Did Midwives Make a Difference? A Study of Infant Mortality in Nineteenth-Century Sweden", Paper presented at the European Association for the History of Medicine and Health conference, Oslo, September 3–7, 2003.

reasons. He reminds us that the diffusion of innovation ‘is essentially a social process in which subjectively perceived information about a new idea is communicated.’⁶ For Rogers, the pace at which an individual accepts an innovation is determined by asking whether it offers some sort of advantage for the person (relative advantage), how closely it conforms to existing values (compatibility), how difficult it will be to adopt (complexity), whether it is possible to adopt it on a ‘trial basis’ (trialability), and finally, will it be possible to observe the effects of it (observability).⁷ Those innovations that promise the most advantage, entail no major cultural break, are relatively easy to adopt, provide the opportunity to revert back to previous practices, and offer clear and observable proof of their value are the most likely to be accepted quickly.

Obviously Rogers does not discount the power of government agencies to enforce new modes of behaviour or the power of science to provide irrefutable proof of the benefits of a new innovation. However, he is not convinced that they alone are sufficient to change behaviour. Although people may be aware of, and indeed impressed by scientific claims, ‘most people depend mainly upon a subjective evaluation of an innovation that is conveyed to them from other individuals like themselves who have previously adopted the innovation.’⁸

There can be no doubt that local communication networks were essential to ensuring the success of state sponsored medical initiatives. For this reason it is imperative that we identify those characteristics of interpersonal communication that either impeded or encouraged both the introduction of new ideas, and their wider acceptance within the community at large. Dribe and Nystedt emphasise how important it was for a sense of trust to exist between those seeking to implement a new technology and the potential recipients of it.⁹ Obviously it is difficult to identify the precise mechanism through which a trusting relationship is formed and then create an accurate measurement of it. None the less, the argument that Dribe and Nystedt present adds an important dimension to our understanding of how academic medicine diffused through society. Their work combines, rather than separates, the supply and demand driven models that attribute the gradual expansion of medical influence as the result of either a greater number of medical practitioners and institutions, or rising popular demand for such services. Instead, they suggest how the medical worlds of trained practitioners and that of largely isolated rural inhabitants may have been bridged. It does so by demonstrating how the combination of ‘vertical trust’ between medical practitioners and their patients, and ‘horizontal trust’ among

6 Everett Rogers, *Diffusion of Innovations*. 4th ed. (Toronto: Free Press, 1995), p. xvii.

7 Rogers, *Diffusion of Innovations*, pp. 15–16.

8 Rogers, *Diffusion of Innovations*, p.18.

9 Dribe and Nystedt, “Information, Trust and the Diffusion of Smallpox Vaccination”, 14–16.

the different recipients of new innovations, in this case smallpox vaccination, allowed it to extend beyond the small group of ‘innovators’ to the larger group of ‘laggards’.

Undoubtedly there were tremendous hurdles that 19th-century medical practitioners had to surmount in their efforts to introduce new methods and personnel into the more isolated parts of the country. Not only did they need to overcome perceived and actual socioeconomic differences between themselves and their patients, they also needed to convince the population of the advantages of their new methods.¹⁰

Sources available here do not permit a comprehensive understanding of the dynamics of historical village relationships or enable us to determine accurately the levels of trust that existed between individuals. The best we can hope to achieve is to identify those characteristics that may have acted as impediments to it. Some diffusion studies suggest that younger people are more likely to accept new ideas than are those who are somewhat older.¹¹ Therefore, the level of success that these practitioners achieved may have been somewhat dependent upon the average age of their clientele. While it might be true that some younger women may have been more inclined to call a midwife if she was approximately the same age, others might have perceived her youth as proof of her inexperience. In such an environment the age and assumed experience possessed by an older midwife would have accelerated the diffusion of academic medicine rather than acted as a brake upon it. It is also possible that a midwife’s ability to earn the trust of the women in her parish may also have been a function of the length of time she had lived in the parish. For example, people seem more likely to entrust their health to a physician who has lived in the area for 5–10 years rather than a new arrival even if the latter might be more qualified.¹²

Diffusion theorists and medical historians continue to debate the relationship between the presence of major ‘crises’ and the level of acceptance of new ideas. On the one hand, Grethe Banggaard suggests that a large outbreak of smallpox in southern Sweden in the early 1800s may have contributed to the fairly rapid and widespread acceptance of vaccination well before the state made it compul-

10 E. Rogers, *Diffusion of Innovations*, pp. 15–16, 332–4.

11 See for example, S. Svensson, “Bygd och yttervärld. Studier över förhållande mellan nyheter och tradition”, *Nord. Museets Handlingar*, 15 (1942). Hägerstrand, however, argues that knowing the age of individuals who adopted and refused to adopt innovations is unlikely to explain any pattern that might appear as people of various ages are generally randomly distributed through a region. Hägerstrand, *Innovation*, p. 150.

12 James Coleman, Elihu Katz, and Herbert Menzel, *Medical Innovation: a diffusion study* (Indianapolis, 1966), pp. 150–1.

sory.¹³ On the other hand, other studies suggest that any surge in acceptance of new technologies during an epidemic would be short-lived, and that the rate of diffusion would return to expected levels not long after the crisis had passed.¹⁴

The Sundsvall Region

The 12 parishes of the Sundsvall region of Sweden contain a total area of approximately 2,600 square kilometres approximately 500 kilometres north of Stockholm. From the 1870s to the early 20th century this region was one of the world's largest lumber producing areas and many of its parishes were at the forefront of this rapid industrialisation. However, other parishes remained almost entirely dependent upon agriculture and were largely insulated from the economic and demographic boom occurring along the coast. By the end of the 19th century the town of Sundsvall could boast of having 8 doctors – five more than in 1870, but there were still only two rural physicians for a population of more than 50,000 scattered throughout the various parishes.¹⁵ It was left to midwives to fill this medical vacuum.

Sources

This study examines midwives' daybooks to identify the extent to which academic medicine infiltrated two rural parishes of the Sundsvall region.¹⁶ These daybooks offer a valuable insight into the lives of these women by enabling us

13 Grethe Banggaard, "Sygdom och sundhed: offentlige indgreb och deres virkninger i Sydsverige ca. 1750–1894", *Lund Papers in Economic History*, 76 (2002) cited in Dribe and Nystedt, "Information, Trust and the Diffusion of Smallpox Vaccination", 22.

14 H. Earl Pemberton, "The Effect of a Social Crisis on the Curve of Diffusion", *American Sociological Review*, 2 (1937), 55; A.J. Mercer, "Smallpox and Epidemiological Demographic Change in Europe: the role of vaccination", *Population Studies*, 39 (1985), 303–4. One of the reasons for the lack of support for vaccination in Stockholm in 1874 was that the disease had been absent for several years prior to the epidemic. M. Clark-Nelson and J. Rogers, "The Right to Die? Anti-Vaccination Activity and the 1874 Smallpox Epidemic in Stockholm", *Social History of Medicine*, 5 (1992), 370, 388.

15 Anders Brändström and Sören Edvinsson, "Folkhälsans utveckling – tiden efter 1870," in L-G. Tedebrand ed. *Sundsvalls Historia*, vol. 2 (Sundsvall: Stadshistoriska Kommittéen, 1997), p. 190. The population of the rural parishes is based on files obtained from the Demographic Data Base (DDB) in Umeå, Sweden.

16 An earlier study used computerised parish registers to calculate mortality rates from direct obstetric deaths and assessed the role that midwives may have played in bringing it about. Stephan Curtis, "Midwives and the Role in the Reduction of Direct Obstetric Deaths during the late Nineteenth Century: the Sundsvall Region of Sweden (1860–1890)", *Medical History*, 49 (2005), 321–350.

to follow their movements through their parishes. We can see how frequently they attended births in each of the far-flung villages and remote farms they visited, learn something about the women they helped, and any problems that may have arisen during or immediately after the births.

Of particular interest here are the comprehensive and complete run of daybooks from the parish midwives in the two inland parishes of Indal and Tuna from 1882 to 1890. Unlike frequently the case elsewhere, these two parishes each had only one parish midwife which means that we can be relatively certain that all births attended by a midwife are recorded in the books available. Finally, in both cases the same midwife fulfilled her duties throughout the entire period being studied. In the parish of Indal, Maria Liljeqvist tended to the needs of approximately 550 women between the ages of 15 and 45 who lived there.¹⁷ The second set of daybooks comes from Elisabeth Holmgren, the parish midwife in Tuna, who was responsible for providing assistance to the 700 women in the same age group.¹⁸ These two women combined to attend a total of almost 850 births during this period.¹⁹

In addition to the daybooks from these two midwives, three other sources contributed to this study. Computerised parish records constructed by the Demographic Data Base (DDB) in Umeå, Sweden provide the raw data needed to identify birth and death rates, and provide information about the occupations and age structures of the population. Another valuable source is the DDB's internet database *Indiko* which provides additional information about specific individuals. Finally, the annual reports that physicians submitted to authorities in Stockholm serve as comprehensive medical topographies. Not only do they provide general statements about the level of health among the population, but they also shed light on the public's attitudes towards physicians and academic medicine in general.

The Role of the State and the Supply of Medical Practitioners

Already by the 1820s the Swedish government had launched measures designed to increase the likelihood that academic medicine would have a sound foundation in rural parishes. The creation of parish councils was a first step towards this goal. Their responsibilities included making the population aware of the

17 DDB files. It is generally accepted that a woman's fertile period is between 15–45 years of age.

18 These figures include only those who appear in the parish registers and do not take into account the large number of migrants travelling through these parishes to find work in the coastal sawmills or returning from them in the late autumn when the mills closed for the year.

19 Liljeqvist attended 512 and Holmgren assisted with 335 births.

consequences of their unhealthy lifestyles and the dangers of consulting quacks rather than licensed physicians. The government also charged them with ensuring that infants and children were not neglected.²⁰ The preamble to legislation passed in 1822 reinforced the government's commitment to ensuring the health of its citizens regardless of where they lived by comprehensively describing the duties and responsibilities of all provincial physicians.²¹ By mid-century these measures had begun to be felt throughout the country and various pieces of legislation, of which the Public Health Act of 1874 was only the most prominent example, attested to the sincerity of this effort. Despite these best of intentions, traditional methods and cures remained well entrenched in the countryside and rural opposition to the intrusion of academic medicine ensured that the battle for local minds would be a long and difficult one. For example, the nineteenth-century Swedish government was committed to providing the country with an army of well-trained midwives but it could not always convince the public to use them. It appears that even women living in parishes only somewhat distant from urban centres were reluctant to abandon their help-women and other unlicensed providers of medicine.

In addition to enacting various pieces of legislation the government did what it could to increase the number and skills of medical practitioners. Unfortunately, few could be enticed to the northern and remote parts of the country.²² A re-organisation of medical education and the creation of a new institution (Karolinska Institutet) charged with the training of physicians proved the state's commitment to increasing the number of skilled doctors. In 1805 there were only 281 people who had received medical training and of those only 52 were skilled both in medicine and surgery. By 1850 there were 463 doctors and almost 400 of them had both medical and surgical knowledge.²³

By the late 19th century many of the state's initiatives had paid off but it still had much to do especially outside the more populated areas in the south. Official statistics from 1861 reveal that there were a total of 452 physicians in all of Sweden, or one for every 8,500 people. In the province of Västernorrland the ratio was 1:10,600. By 1881 the total number of physicians in the country had risen to almost 570 and there was now one doctor for every 8,100 people. While this gradual improvement at the national level may have seemed encouraging enough to medical officials in Stockholm, the situation in Västernorrland was

20 The text of this legislation can be found in H. Wistrad, *Författningar angående Medicinal-Väsendet i Sverige* (Stockholm, 1860), p. 381.

21 "Kungl. Instruktion, d. 13 Juni 1822, för provincial-läkarne i riket", in H. Wistrad, *Författningar*, pp. 213–224.

22 Henrik Sandblad, *Världens nordligaste Läkare 1750–1810* (Stockholm, 1979), pp. 19–28.

23 Hilding Bergstrand, "Läkarekåren och Provinsialläkareväsendet," in Wolfram Kock ed. *Medicinalväsendet i Sverige 1813–1962* (Stockholm, 1963), pp. 109–113.

actually worsening. Each physician in that province was, by 1881, now responsible for more than 11,400 people.²⁴

The number of provincial physicians i.e. those responsible for rural inhabitants rather than urban dwellers, paints an even more telling picture of the shortage of physicians working in the rural parishes of northern Sweden. In Västernorrland there was one of these medical practitioners for every 16,700 rural inhabitants in 1861. Twenty years later there had been no increase to the seven provincial physicians and this ratio had worsened to 1: 24,500. A decade later the situation had worsened yet again as there was one of these physicians for every 30,300 people.²⁵ The point here is to reiterate how unlikely it would have been for most people living in small isolated villages to have ever encountered a provincial doctor unless he had been specifically summoned either by a midwife to assist with a particularly difficult birth, or by a parish council confronting an epidemic.

The shortage of trained physicians meant that government officials relied almost entirely on midwives to improve the population's health. The result was a comprehensive strategy designed to achieve three objectives: prevent unlicensed women from attending births; increase the number of formally, well-trained midwives; and make these women an integral part of the medical landscape. Already in 1819 all women who wanted to work as a midwife were required to be trained unless no licensed midwife was available. Legislation introduced that year also made it illegal for women to use the services of unlicensed '*Jordgummor*' if there was a trained midwife in the parish.²⁶ At least that was what the legislation prescribed but what happened in the field was frequently another matter entirely. As late as the early 20th century a very small minority of parishes simply refused to replace untrained midwives with ones who had received their licence.²⁷

Figure 1 compares the ratio of females to midwives for Sweden, the province of Västernorrland, and the Sundsvall region to illustrate the government's success in gradually increasing the supply of these medical practitioners. The provision of these women in this group of parishes compared quite favourably both to the country as a whole and to the province with the exception of the early 1870s

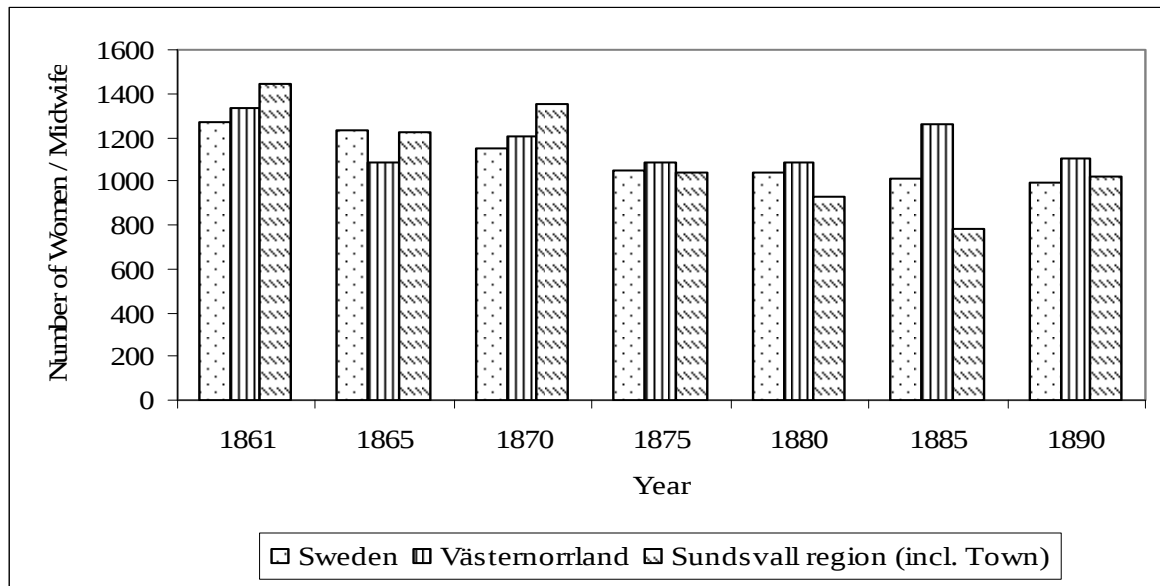
24 Bidrag till Sveriges Officiella Statistik (BiSoS) Series K. It is also worth noting that the national figures paint a particularly optimistic image because they include the 111 doctors practicing in Stockholm where, in 1880 the ratio of doctors to population was 1:1,600.

25 BiSoS K.

26 Riksarkivet. Årstrycket 1819, Nr. 18. "Reglementet för barnmorskor".

27 Christina Romlid, *Makt, Motstånd och förändring: Vårdens historia speglad genom det svenska barnmorskeväsendet 1663–1908* (Stockholm, 1998), pp. 197–204, 291; Irvine Loudon, *Death in Childbirth: an international study of maternal care and maternal mortality, 1800–1950* (Oxford, 1992), pp. 408, Ulf Högberg, "The Decline in Maternal Mortality in Sweden: the role of community midwifery", *American Journal of Public Health*, 94 (2004), 1312–1320.

Figure 1. Ratios of Females to Midwives in Sweden, Västernorrland, and the Sundsvall Region (1861–90),



Sources: DDB files; RA. Sundhets Collegium and Medicinal Styrelsen, Series E5A (Årsberättelser från Provinsialläkare). Reports from Sundsvall and, after 1870, Wifstavarf District Physicians.

when rapid economic and demographic growth in the area clearly undermined the state's efforts to provide an adequate number of midwives.

The second objective was to ensure an adequate supply of skilled midwives and here, too, the government was largely successful. Midwives' training became increasingly more comprehensive and included a wide array of non-obstetrical instruction. It was first doubled from 3 to 6 months and part of this education entailed the treatment of childhood diseases.²⁸ The government undertook various strategies to increase the number of midwives such as reducing the cost of their education and offering free training to a limited number of rural women who otherwise could not pay for their education. In 1829 midwives were granted the right to use sharp instruments provided they first complete an additional 3 months of training, and if it was impossible for a physician to be present at the birth.²⁹ The state introduced additional legislation in 1856 regarding the education and duties of midwives that clearly defined the training that they would be required to complete, their responsibilities and the conditions under which they could use instruments or provide medications.³⁰ In 1863 the government decreed that all midwives would be required to receive

²⁸ See, for example, P.G. Cederschjöld, *Handbok för Barnmorskor* (Stockholm, 1822)

²⁹ Romlid, *Makt, Motstånd och förändring*, p. 292.

³⁰ This legislation and subsequent amendments can be found in H. Wistrad, *Författningar*, pp. 552–560.

training in the use of instruments.³¹ Government officials tackled the problem of puerperal fever on 13 June, 1881 by sending a circular to all midwives instructing them to follow all necessary steps to provide as clean a birthing environment as possible.³²

The government expected these women to do far more than simply attend births. For example, they were taught how to combat many childhood diseases and would have been the primary source of such information among those who lived outside the towns where doctors were most likely to be found. Their most important role, however, extended far beyond the treatment of diseases or assisting at births. They, and members of the clergy, were also expected to change the public's behaviours and attitude toward modern medicine.³³ This required them to participate in a comprehensive restructuring of how people perceived physicians and midwives and the potential value of the new medicine they brought with them.

Midwives in the Parishes of Indal and Tuna

Between 1882 and 1890, Maria Liljeqvist and Elisabeth Holmgren attended approximately 65% of all births that occurred in their parishes of Indal and Tuna. Until 1887, Liljeqvist attended almost 10% more births per year than did Holmgren in Tuna.³⁴ It seems that this was well below average for the region as a whole.³⁵ Sundsvall's district physician, Dr Söderbaum, reported that for most of the parishes under his supervision midwives attended 65% of all births in 1884 and more than 80% of them by 1890.³⁶ This was well above the national average

31 A. Kullberg, *Författningar m.m. angående Medicinalväsendet i Sverige omfattande tiden från och med år 1860 till och med år 1876* (Stockholm, 1877), p. 99.

32 Almost all daybooks from the Sundsvall region for this period include a copy of this legislation to their daybooks for easy reference. Härnösand Landsarkiv.(hereafter H-sand) Series D III "Första Provinsialläkaren i Västernorrlands län. Barnmorskors dagböcker "Kongl. Medicinalstyrelsens cirkulär till barnmorskorna i riket, angående försigtighetsmått, som böra af dem iakttagas till förekommande utfärdadt den 13 Juni 1881."

33 Romlid, *Makt, Motstånd och förändring*, p. 291–4.

34 However, these figures are deceptive especially by the late 1880s when Holmgren attended many more births per year than did Liljeqvist. The number of births attended is found in H-sand, Förste Provinsialläkarens i Västernorrlands län, "Barnmorskors dagböcker – Tuna and Indal Series D III:I. The total number of births in these parishes is supplied by the 'Birth file' constructed by the DDB.

35 H-sand, Förste Provinsialläkarens i Västernorrlands län, "Barnmorskors dagböcker – Indal and Tuna" Series D III:I. DDB files provide the total number of births in this parish.

36 RA. Medicinal Styrelsen. Series E5A, 'Årsberättelser från provinsialläkare' XIV. Report #114 from Dr. Söderbaum in Sundsvall. He reported that there had been a total of 450 births in the parishes for which he was responsible.

of approximately 70% of all home deliveries that midwives attended in 1890.³⁷ Obviously women in much of the region had, by the 1890s, almost entirely abandoned help-women and entrusted their own health and that of their newborns to the skilled hands of midwives. See Table 1.

Table 1. Total Number of Births and Births Attended in Indal and Tuna Parishes 1881–90.

	1882	1883	1884	1885	1886	1887	1888	1889	1890	Total
Indal(total births)	59	91	85	73	96	80	72	91	70	717
midwife present	39	56	59	48	66	53	60	65	39	485
<i>Indal % births attended</i>	<i>66.1</i>	<i>61.5</i>	<i>69.4</i>	<i>65.8</i>	<i>68.8</i>	<i>66.3</i>	<i>83.3</i>	<i>71.4</i>	<i>55.7</i>	<i>67.6</i>
Tuna(total births)	101	86	91	86	116	99	130	110	143	962
midwife present	57	45	54	45	69	67	84	76	97	594
<i>Tuna % births attended</i>	<i>56.4</i>	<i>52.3</i>	<i>59.3</i>	<i>52.3</i>	<i>59.5</i>	<i>67.7</i>	<i>64.6</i>	<i>69.1</i>	<i>67.8</i>	<i>61.7</i>
Total births	160	177	176	159	212	179	202	201	213	1679
midwife present	96	101	113	93	135	120	144	141	136	1079
<i>Total % births attended</i>	<i>60.0</i>	<i>57.1</i>	<i>64.2</i>	<i>58.5</i>	<i>63.7</i>	<i>67.0</i>	<i>71.3</i>	<i>70.1</i>	<i>63.8</i>	<i>64.3</i>

Sources: DDB files and Midwives' Daybooks, (Förste Provinsialläkarens i Västernorrlands län, 'Barnmorskors Dagböcker, Series D III:1 (Tuna and Indal Parishes).

By all appearances these two women shared very similar life-histories and they would not have been considered very much different from the population at large. Liljeqvist was born in Kalmar province in the south of Sweden and was 32 years old when she arrived in Indal with her husband and two sons in 1878.³⁸ Her husband, a farmer and carpenter, had been born in the province of Östergötland.³⁹ Within a year of their arrival they had another son but he died within two weeks of being born and it is possible that this personal tragedy prompted Liljeqvist to become a midwife two years later in 1881. Holmgren and her husband also were not native to the Sundsvall region. She had been born in Kopparberg province but by the time she began her career as a midwife in 1865 she had already been in Tuna for five years.⁴⁰ As was the husband of Lileqvist, her husband was also a native of Östergötland and also appears in the parish records as a carpenter.⁴¹ Both women had children of their own although

37 RA. Medicinal Styrelsen. Series E5A, "Årsberättelser från provinsialläkare", XXIV. Report #248 from Dr. Söderbaum in Sundsvall. U. Högberg, S. Wall, and G. Broström, "The Impact of Early Medical Technology on Maternal Mortality in Late 19th-Century Sweden", *Int. J. Gynecol. Obstet.*, 24 (1986), 255.

38 Indiko database id # 846002666.

39 Indiko database id # 851002899.

40 Indiko database id # 823001950.

41 Indiko database id # 823002013.

Holmgren's eldest son died in 1878. Despite the fact that these two midwives had not grown up in the Sundsvall region, they had enough in common with the local population that they probably would have no difficulty fitting into local society. Certainly there is no reason to believe that either woman's social status or residence history gave her some advantage over the other when trying to garner the trust of local women although it is true that by 1882 Holmgren had resided in the region far longer than had Liljeqvist and at 59 years of age was 23 years older.

It appears that those living in Indal enjoyed, on the whole, a somewhat more secure livelihood than inhabitants of Tuna. Table 2 illustrates the occupational structure of all people over the age of 15 in the two parishes of Indal and Tuna in 1885. The percentage of farmers was almost identical in the two parishes but the percentage of crofters in Indal was almost three times higher than in Tuna. This suggests at least some degree of security in the event of poor harvests or particularly harsh winters. No such insurance existed for the labourers and day-labourers who accounted for a higher percentage of the total population in Tuna than in Indal. See Table 2.

Table 2. Selected Occupations at Death for those Aged 15 Years or Older (1885).

Occupation	Indal	Tuna
Unknown (n)	402	412
%	22.30%	21.51%
Farmer (n)	389	407
%	21.58%	21.25%
Crofter (n)	402	153
%	22.30%	7.99%
Farm worker (n)	47	80
%	2.61%	4.18%
Maid (n)	122	185
%	6.77%	9.66%
Labourer (n)	256	420
%	14.20%	21.93%
Total (n)	1803	1915

Source: DDB Files.

The occupational structure among women at the birth of their child for the two parishes is shown in Table 3 and largely confirms the pattern shown above although the dependence upon day labour and the very few cotters in Tuna parish is even more apparent. See Table 3.

Table 3. Mothers Occupations at birth of their Child in Indal and Tuna (1882–90).

Indal	N	%	Tuna	N	%
Farmer	214	29.8	Farmer	257	26.7
Crofter	218	30.4	Crofter	55	5.7
Maid	33	4.6	Maid	53	5.5
Labourer	179	25.0	Labourer	410	42.6
Total	644	89.8	Total	775	80.5
Total all records	717		Total all records	962	

Source: DDB Files.

Although not too much can be made from these Tables, they do suggest that the average inhabitant of Indal was somewhat better off than those in Tuna and, perhaps, this relative wealth made the population of Indal more willing to accept new ideas. The presumed ability of most people to pay a financial penalty for neglecting to have a midwife deliver their children might explain the decision taken by Indal's parish council to impose a fine on women who chose to employ the services of a help-woman.⁴²

The salary the midwives received from their respective parishes also suggests that the economy of Indal was healthier than that of Tuna. In 1881, Holmgren received 400 kronor from Tuna parish. Eight years later the total of her salary and other income had increased only to approximately 410 kronor. In contrast, Liljeqvist's salary in Indal parish had improved considerably during this period from 450 to almost 550 kronor although her daybooks reveal that she was attending far fewer births than was Holmgren.⁴³

It was not without good reason that authorities encouraged women to take advantage of the services that midwives offered and penalised those that did not heed this advice. Swedish midwives were among the most skilled in nineteenth-century Europe and the relatively low maternal and infant mortality rates attest to their abilities. Ulf Högberg has conducted the most thorough investigation of maternal mortality in Sweden and argues convincingly that the midwives' knowledge of antisepsis in the early 1880s was directly responsible for reducing the number of women who died as a result of childbirth.⁴⁴ By the late nineteenth

42 On 12 December 1880, for example, in response to learning that Liljeqvist had not been called to assist with several births, the parish council declared that the new mothers would each be required to pay two kronor to the council which would then forward it to her. Sundsvall. Medelpadsarkivet, Series A1:2 Indahls Kommun Kommunalstämman protokoll (12 December, 1880).

43 Med. Styr. E5A, "Årsberättelser från Provincialläkare i Sundsvall", Vols. 8 (1881), and 24 (1889).

44 U. Högberg, S. Wall, and G. Broström, "The Impact of Early Medical Technology, p. 254. See also Irvine Loudon, *Death in Childbirth*, p. 412. Idem., "Maternal Mortality in the

century maternal mortality rates in Sweden were lower than those found elsewhere in Europe.⁴⁵ Table 4 illustrates midwives' overall success in reducing the rate of direct obstetric deaths i.e. those that were most probably an immediate consequence of childbirth from the 1870s onward in Sweden and the Sundsvall region. The sole exception to this largely secular decline was the increase in the Sundsvall region during the early 1880s.⁴⁶ In those parishes a total of only slightly more than 220 women died as a result of complications at birth during the entire period from 1860 to 1890. This is not to discount these deaths as irrelevant or suggest that they were anything but devastating to their families. The point is that although women did die from childbirth, such events were uncommon enough that most people would probably have had no knowledge of them unless the deceased lived nearby.

Table 4. Mortality Rate from Direct Obstetric Causes / 100,000 Live Births (1856–1890).

	1856– 1860	1861– 1865	1866– 1870	1871– 1875	1876– 1880	1881– 1885	1886– 1890
Sundsvall Region	460.0	599.0	530.0	646.0	355.0	438.0	377.0
Sweden	450.0	550.0	540.0	620.0	520.0	400.0	350.0

Source: DDB files.

The reduction of infant mortality during the course of the nineteenth century also demonstrates the expertise that midwives had achieved. Here, too, Sweden had a pronounced advantage over other European countries. Within the Sundsvall region, the infant mortality rate peaked in 1875 due largely to the tremendous population increase and concomitant worsening of living conditions that characterised the most industrialised parishes. In that year, the infant mortality rate for the entire region was almost 250/1,000 while that found in the industrial parishes of Skön and Alnö reached almost 300/1,000. Thereafter the regional infant mortality rate followed a largely secular decline until by 1890 it was less than 160/1,000. Infant mortality in both Indal and Tuna followed this general trend. In the former it declined from 139/1,000 in 1875 to approximately 102/1,000 in 1890 and Tuna parish witnessed a similar decline from 230/1,000 to 173/1,000 during the same period.⁴⁷

It is impossible to know whether women were aware that more and more infants were surviving their first year of life, and that the likelihood of surviving

past and its Relevance to Developing Countries Today”, *American Journal of Clinical Nutrition*, 72 (2000), (suppl):241–6s.

⁴⁵ See, I. Loudon, *Death in Childbirth*, pp. 542–553.

⁴⁶ The very small number of women who died from such causes in individual parishes, let alone individual villages, makes the calculation of such rates at that level quite pointless.

⁴⁷ DDB files

childbirth also seemed to be improving. Residents in the town and its immediate hinterland may have been cognisant of such trends because local newspapers often included information about the town's mortality statistics but whether such information typically reached women living in the more distant parishes remains unclear.⁴⁸ Although we should be cautious about attributing the rise of academic medicine solely to the real or imagined benefits it provided to the wider population, it is reasonable to assume that women would not have called upon a midwife unless they were convinced that she offered some advantage to them that a 'help-woman' did not.

Changes in the disease panorama and a perception that practitioners failed to protect the population or respond adequately when people became sick could certainly have undermined public faith in the abilities of doctors and midwives. Major epidemics of scarlet fever and diphtheria arrived for the first time in the Sundsvall region in the latter decades of the nineteenth century. Circumstantial evidence suggests that it was at times such as these that parents dropped their often well-justified reservations about seeking medical care from trained physicians. Their sheer desperation often resulted in doctors being called to treat extremely sick children.⁴⁹ While one can hardly construe this as a raving endorsement of academic medicine, it at least suggests that it was now on the population's mental radar. Between 1860 and 1890, these two diseases alone accounted for at least 1,700 deaths among infants and children less than nine years of age.⁵⁰ There are no accurate records revealing how many young children contracted but survived their encounter with these diseases but the number must have been several times that figure.

We should not be surprised if some parents blamed the doctor or parish midwife for the death of their or a neighbour's child. After all, these practitioners had received training in the treatment of childhood diseases and often took it upon themselves to discredit those who did not have formal training. It is somewhat surprising, then, that no such attack against physicians and midwives occurred. Between 1860 and 1885, there is no correlation between the number of children who died from these diseases in a particular village and the likelihood that a midwife would attend births in them. In Tuna parish, for example, nineteen children died from diphtheria and 8 of those deaths occurred in the village of Vivsta. However, Holmgren attended between $\frac{1}{2}$ and $\frac{3}{4}$ of all births that occurred

48 See, for example, the newspaper *Sundsvalls-Posten* # 30, 24 February, 1890.

49 Stephan Curtis, "In-migration and Diphtheria Mortality among Children in the Sundsvall Region during the Epidemics of the 1880s", *Journal of the History of Medicine and Allied Sciences* 63 (2008), 23–64; Marie Clark Nelson. "The Year the Children Died: a study of the diphtheria epidemic in Råneå parish, Sweden", in John Rogers ed. *Death and the public spheres*, (Uppsala, 1986), pp. 53–75.

50 DDB files.

there. Similarly, diphtheria claimed the lives of 5 children in Rude but Holmgren attended more than 75% of all births in that village. There were fewer deaths from scarlet fever than from diphtheria with 3 of the 4 deaths during this period occurring in Hallsjö. Again, it seems that the people did not hold Holmgren in any way responsible and her reputation did not suffer as a result of these deaths.

Practical Obstacles to Midwives' Ability to Provide Medical Care

It could not have been easy to be a midwife in rural Sweden and particularly not in parishes so far north of the capital. A harsh climate, poor roads, and slow communication all contributed to the hardships these women faced. An expanding economy brought more and more people to the region that increased midwives' workloads.

There appears to have been a gradual improvement in the ratio of women who would have been most likely to require birthing assistance to midwives between at least 1870 and 1890 for the region as a whole reveals. Unfortunately, some parishes continued to be underserved throughout this period. This was particularly true for the inland parishes of Indal and Tuna where 1,200 women between the ages of 15 and 45 were dependent upon the services of the two parish midwives.⁵¹ As might be expected, the situation in the coastal industrial parishes was considerably better with one midwife for every 400 women within this age group.⁵² Table 5 compares the ratio of women to midwife in the various groups of parishes in the Sundsvall region, the town of Sundsvall itself, and the two parishes of Indal and Tuna.

Despite being somewhat insulated from the unprecedented population boom occurring along the coast, the total number of inhabitants living in the parishes for which Holmgren and Liljeqvist were responsible also rose during the second half of the nineteenth century. This was particularly true for Tuna parish which saw its total population increase from 2,100 in 1860 to 3,400 in 1890. This resulted in an additional 230 women between the ages of 15 and 45 being added to Holmgren's potential clientele. Indal witnessed a much more modest growth with only 400 more people being added to the parish records during this period. Of these new inhabitants, only 50 were likely to need Liljeqvist's assistance. This very gradual increase in the number of fertile women in Indal produced only a slight increase in the total number of births from an average of 65 per

51 These figures are for 1885 when there were 625 women in Tuna and 551 in Indal between 15 and 45 years of age. DDB files.

52 DDB files.

year during the 1860s to approximately 80 per year in the 1880s. These figures were only marginally lower than those for Tuna parish.⁵³

Table 5. Ratio of women (15–45) to midwives.

Parish Location and Economy	1860	1865	1870	1875	1880	1885	1890
Coastal Industrial	355	491	514	402	398	448	356
Coastal Diversified	472	504	554	446	516	420	470
Coastal Agricultural	227	452	236	261	273	146	278
Inland Diversified	970	1006	1161	1270	655	664	707
Inland Agricultural	653	569	839	428	363	485	518
Town of Sundsvall	627	491	439	505	221	210	338
Total	522	551	573	474	352	353	400
Indal Parish	499	495	492	517	539	551	548
Tuna Parish	493	540	585	693	646	625	733

Source: Files constructed by the DDB, Umeå University.⁵⁴

The most serious impediment to the spread and acceptance of academic medicine must have been the geographical distances that these women had to travel to fulfil their duties. In 1890 there were a total of 12 midwives working in the group of industrial parishes located along the coast. The total area of these parishes amounted to 225 square kilometres, or, expressed another way there was 1 midwife for every 19 square kilometres. In stark contrast to this relatively dense coverage were those parishes located in the interior where each midwife was responsible for an average of more than 300 square kilometres.⁵⁵

Midwives in both parishes had greater success attending births in some villages than in others. One can generally see an inverse relationship between the percentage of births attended and distance the midwife would have needed to travel. Map 1 displays the location of the various villages in Indal parish and the percentage of births that Liljeqvist attended. For the parish as a whole, it was distance from her residence that largely dictated whether she would assist with

⁵³ There were approximately 80 births per year in Tuna during the 1860s and slightly more than 100 per year during the 1880s. DDB files.

⁵⁴ The coastal industrial parishes include the major parishes of Alnö, Skön, Njurunda, and Timrå. Hässjö is the sole coastal diversified parish, and Tynderö is the only coastal agricultural parish. The inland diversified group of parishes consist of Attmar and Tuna. Indal, Ljustorp, Sättna and Selånger belong to the inland agricultural group of parishes.

⁵⁵ Included here are the 2 groups of inland parishes. The ‘inland diversified’ group included the parishes of Attmar and Tuna. The parishes of Indal-Liden, Ljustorp, Sättna and Selånger comprise the group designated as ‘Inland agricultural’. Tuna parish had an area of 217 square kilometres and Indal was slightly larger and occupied an area of 309 square kilometres.

the birth.⁵⁶ She delivered 73% of all infants born within 2 kilometres of her home although this included 5 sets of twins. Between 2 and 5 kilometres from her home she only attended slightly more than one-half of all births. Although several of the villages in which births occurred were quite some distance from the major road running through the parish, this does not appear to have presented a significant obstacle to her. The most obvious exception is the village of Högsjö along the southern border of the parish where she managed to attend only 5 of the 36 births between 1882 and 1890.

However, before we place too much emphasis on the relative isolation of a village as an explanation of why midwives were unlikely to be present at the majority of births, it is worth noting that only a kilometre away from Säter where Liljeqvist delivered only 13 of 34 infants was the village of Backen where she assisted with all 40 births.⁵⁷ Both of these villages were similarly distant from the main artery running through the parish. There were also villages even closer to home where she had difficulties convincing local women to call upon her expertise. She attended only 2 of the 16 births in Prästbordet although it was just slightly more than 2 kilometres from where she lived. The fact that both of these births were to Olifvia Bergström further illustrates the degree to which she had failed to convince most local women of the benefits she could offer.⁵⁸ Similarly, at Indals Såg, a mere 3 kilometres away from her home in Kårsta, Liljeqvist delivered only 1 of 50 infants.⁵⁹ It is possible that the sawmill had its own midwife but there is no evidence to suggest this was the case. Although Liljeqvist seems to have been unable to garner the trust of those living in Prästbordet or at Indals Såg, she was much more successful in doing so in the village of Sunnås almost 15 kilometres away where she attended 13 of 22 births.⁶⁰ See Map 1.

The distance that Holmgren in Tuna parish would have had to travel also largely explains whether she would be present at births.⁶¹ In fact distance from her home appears to have been even more important than in Indal as it is statistically significant beyond 5 kilometres. However, while it might be tempting to

56 Correlation is significant at the 0.05 level.

57 DDB files and Midwives daybooks

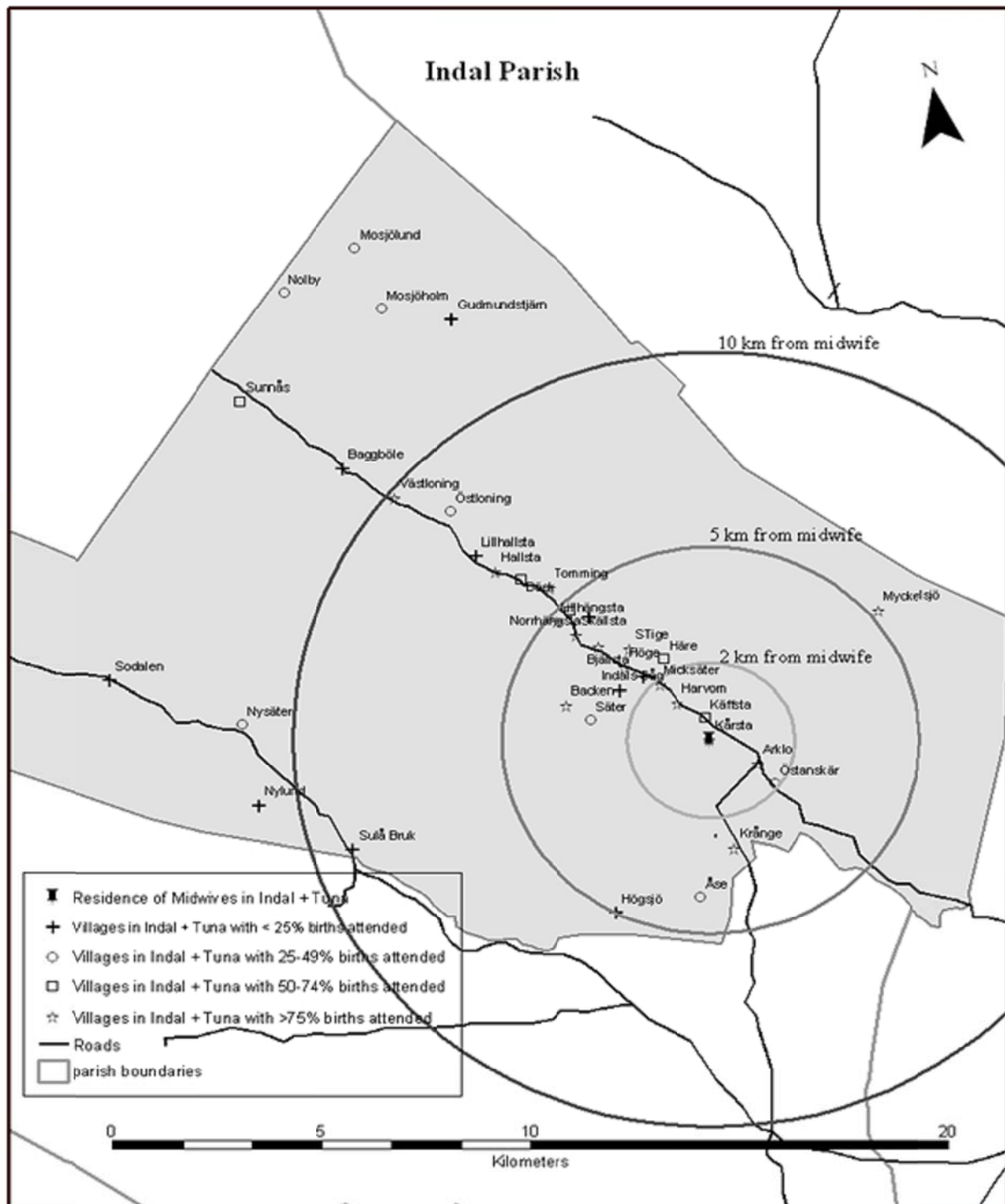
58 Why Bergström was the sole woman in the village to turn to Liljeqvist is unknown. She already had 6 children before the first recorded birth delivered by Liljeqvist in 1886 but the records do not reveal whether a midwife had attended them. What we do know is that she was born in the nearby parish of Selånger and arrived in Prästbordet in 1880. Her husband, a farmer, was from a parish approximately 90 kilometres north of Sundsvall and had lived in Indal since 1858.

59 Härnösand, Förste Provinsialläkarens i Västernorrlands län, "Barnmorskors dagböcker – Indal" Series D III:I.

60 This higher percentage of attended births in that village was not simply the result of mothers calling upon Liljeqvist to deliver more than one infant.

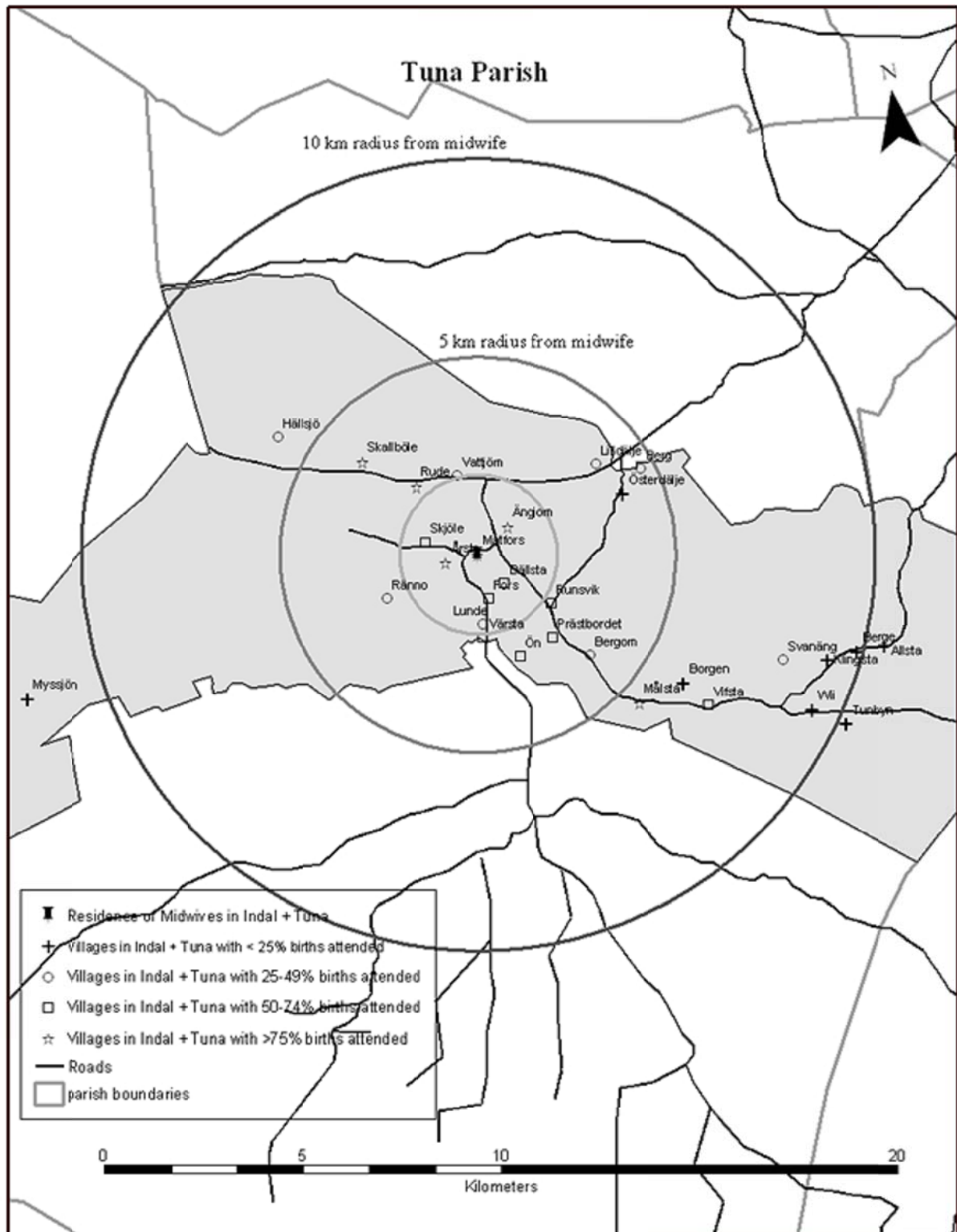
61 Correlation for the whole file is significant at the .01 level period.

attribute this to the fact that by 1890 Holmgren was 67 years of age while Lileqvist in Indal was only 44 years old, there might also have been another explanation for her inability to attend more births in the easternmost villages of the parish.



Holmgren attended 65% of all births that occurred within 2 kilometres of her home, and 75% of those that occurred between 2 and 5 kilometres from her residence. Only beyond that distance did the percentages of attended births decline

markedly. She appears to have had a particularly hard time influencing the behaviour of women living in the cluster of 5 villages (Allsta, Borgen, Klingsta, Tunbyn, and Wii) located within 5 kilometres of one another in the easternmost part of the parish and all on major roads. See Map 2.



Nothing suggests that the women in these villages had any real reason to question Holmgren's expertise. According to her records, she had employed forceps only twice during the 23 births she had attended during her career and in both cases the infant survived. In fact only one infant had died of all the ones she delivered. There is, however, a disturbing pattern in the village of Tunbyn that does not appear in Holmgren's daybooks. Between 1880 and 1885, 8 infants died before they reached 2 months of age.⁶² This was far more than occurred elsewhere in this cluster of villages and may have at least caused some local residents to question her expertise.

The death of the 41-year old Brita Nordstrand, the only woman to have died as a result of childbirth in this group of villages, may have proven even more damaging to Holmgren's reputation.⁶³ There is no way of knowing if this event caused people to question whether her presence at a birth minimised or increased the risk of a fatal outcome. Similarly we cannot be sure if such questions, if they arose, were widely articulated or simply remained lurking in the subconscious of local men and women. However, it does seem more than just coincidence that Holmgren attended such a small percentage of births in precisely those villages that had witnessed several deaths among very young infants and a very rare case of a mother dying during childbirth.

Nordstrand's death in 1882 was an exceptional case and the delivery of her still-born son made it an even more tragic one. Most of the villagers would have at least known of her through their relationships with her father. He and his father had been born in Allsta and both earned their livelihoods as jurists which would have brought them into contact with many of the local inhabitants. Brita's father began his career already in 1834 when he was twenty years of age. When he died in 1864, Brita was the sole remaining heir.⁶⁴ In April 1865 she married the farmer Georg Hansson who had been born in Attmar but had moved to Allsta in late November the previous year.⁶⁵ All this suggests that Brita was well-known in the village and her death during childbirth was sure to have attracted a great deal of attention not just because of who she was, but also because of the nature of her death. Furthermore, villagers would know that her 6 surviving children were now motherless. We can never determine the degree to which the midwife was held responsible for the death of Brita and her son but it is not unlikely that whispers surrounded the whole affair and that Holmgren's reputation suffered as a result.

62 The cause of death for all of these infants is not given in the records.

63 Midwives database id # 3482033. Indiko # 839002056

64 Indiko # 810001257. The duties of this group of professionals can be found in *HISCO Historical International Standard Classification of Occupations* (Leuven, 2002), p. 122.

65 Indiko # 842002423.

Conclusion

This study has gone some way to refuting the idea that by the late 1880s academic medicine was universally well entrenched in the rural parishes. There is no doubt that more and more women were using midwives to deliver their infants than had been the case earlier in the century but pockets of resistance remained in villages often located not very far away from where these two parish midwives lived. The geographical distance between mothers and midwives goes some way to explain the spatial pattern of attended births but there were other forces at work that influenced women's decisions. Informal discussions between local and nearby inhabitants regarding the potential advantages and disadvantages of calling a midwife surely played no small role in determining whether she would be summoned or not.

In these two parishes we encounter two midwives with similar social backgrounds who were probably equally well integrated into their respective parishes. There is nothing to suggest that either woman was more skilled than the other and both were equally capable of delivering healthy babies and caring for new mothers. Not surprisingly, the younger Liljeqvist appears to have been somewhat more able than was Holmgren to attend to the needs of those in distant villages. On the other hand, Holmgren could call upon her age and greater experience to appeal to those women who were unaccustomed or hesitant to employ her services. What we are presented with are two similarly skilled and diligent midwives working among two largely identical populations but who, in some cases, achieved markedly different levels of acceptance.

There is no reason to believe that residents in the group of 5 villages where Holmgren found it most difficult to make inroads were unrepresentative of the parish population as a whole. They were no poorer or wealthier, and no less or more educated than their counterparts living in any of the other villages scattered throughout the parish. There was no significant correlation between the occupational structure of the villages and the likelihood that she would be present at births. Similarly, it does not appear that in either parish the age of the mother played any significant role in her decision to call a midwife.⁶⁶

Instead, it is likely that news of the unexpected and uncommon death of Brita Nordstrand, a well-placed woman with a long family history in the area, during childbirth probably undermined local and nearby support for the attending midwife. We should not be surprised that this death, coupled with a disproportionate number of deaths among very young infants in these same villages, caused people to question whether Holmgren's presence at birth offered a safer alternative

⁶⁶ Although the average age of all mothers differed from village to village, there was no significant statistical correlation between it and the percentage of births attended.

to that provided by her unlicensed counterparts. These individual assessments of risk and the discussions they evoked counterbalanced the state's considerable efforts to bring academic medicine to all communities of the Sundsvall region. It is unlikely that Holmgren was the only midwife in Sweden who fell victim to public suspicion. These women were undoubtedly highly skilled but their reputations and ability to garner the respect of their clientele determined how successfully they could alter the behaviour of local populations. Even by the late 1800s many had not yet become so ensconced in the medical landscape that their position could withstand a mistake or simple misfortune.

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Härnösand Landsarkiv [Härnösand Regional State Archive]

Förste Provinsialläkarens i Västernorrlands län, "Barnmorskors dagböcker"– Series D III:I. Tuna and Indal parishes.

"Kongl. Medicinalstyrelsens cirkulär till barnmorskorna i riket, angående försigtighetsmått, som böra af dem iakttagas till förekommande utfärdadt den 13 Juni 1881." Första Provinsialläkaren i Västernorrlands län. Barnmorskors dagböcker. Series D III

Medelpadsarkivet [The Medelpad Archive]

Series A1:2. Indahls Kommun Kommunalstämma protokoll (12 December, 1880).

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Årstrycket 1819, Nr. 18. “Reglementet för barnmorskor.”

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The Concerns Underlying Sex Education for Young People in France During the First Half of the 20th Century: Morality, demography and public health

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In France during the first half of the 20th century, the issue of sex education for young people of both sexes was the focus of debate among actors in various fields. Their aims converged, however, in the guiding principles they proposed for action to regulate sexual behaviour. In this essay, we would like to demonstrate that sex education, as it was proposed and introduced, was based on a set of proposals or choices reflecting an overall representation of the demographic stakes involved and a framework for their interpretation. Fuelled by fear of the “venereal peril” as well as degeneration and depopulation, sex education consisted of a set of prescriptions and recommendations to help young men gauge the consequences of sexual intercourse for themselves, their families and society. It sought to instil a sense of responsibility by preparing them for a family model that would ensure reproduction of the population in the desired quantity and quality. The representation of these demographic concerns and the framework for interpreting them determined the guidelines for sex education: they set limits on what was desirable and undesirable in the area of sex education as well as its objectives. Other concerns have already been brought out, not only in the case of France but more broadly in Europe and the United States or Canada : morality, in particular, imposed or ruled out some of the prescriptions¹. By focusing our attention on these underlying concerns, we will

1 See Alain Corbin, “Le péril vénérien au début du siècle: prophylaxie sanitaire et prophylaxie morale”, *Recherches*, décembre, 29, (1977), 245–283; Mary Lynn Stewart, “Science is Always Chaste: Sex Education and Sexual Initiation in France, 1880–1930s”, *Journal of Contemporary History*, 32(3), (1997), 381–394; Rebreyend Anne-Claire, *Intimités amoureuses, France, 1920–1975*, (Toulouse, 2008) pp. 61–63. Lutz Sauerteig and Roger Davidson, *Shaping sexual knowledge. A cultural History of Sex Education in Twentieth Century Europe* (London, 2008); Jay Cassel (1987), *The Secret Plague; Venereal Disease in*

reveal the cognitive and ideological constraints that delimited the scope of possible action in sex education. At the same time, it will enable us to decode the sometimes-conflicting stakes of sex education and the objectives it sought to achieve.

Proposals relating to sex education were underpinned by considerations about the future of the French population and the state of public health, which justified the efforts undertaken (Part I). Indeed, two dangers threatened the population: a decline in family fertility and above all the rise of venereal disease, whose effects in terms of mortality and morbidity were especially feared. The projects and efforts to introduce sex education reveal the chain of events that helped bring the issue of sex education into the public arena as a factor that could help solve the country's demographic problem.

Strong opposition – above all from Catholics – to these projects, especially to mandatory, collective sex education at school, resulted in adopting other means of reaching out to young people and oriented the content (Part II). It shows how an action programme in the area of public health was negotiated, together with its limits and the norms underlying the action ultimately carried out.

Finally, we will see how the actors defined, thought about and regulated bodily conduct relating to sexuality and how recommendations concerning sexual activity were produced. Sex education for young people of both sexes was conceived as an instrument for reproduction of the population and “preservation of the race”. Upon closer inspection, the systems used are seen to have differed according to whether they addressed girls or boys, revealing not only what was considered acceptable and unacceptable in the area of sex education, but also a hierarchy among the underlying concerns. For the history of sex education is the story of the clash between disease prevention, moralising recommendations and demographic prescriptions.

Projects Underpinned by Demographic Considerations

Depopulation and Degeneration

Since the late 19th century, the decline in demographic growth had given rise to fears of depopulation and a weakening of France's position in Europe. The anxiety caused by the publication of successive census figures generated strong reactions, mainly in two directions. On the one hand, action was deemed

Canada, 1838–1939 (Toronto, 1987); Roy Porter Roy and Lesley Hall, *The facts of Life; the Creation of Sexual Knowledge in Britain, 1650–1950* (Yale, 1995).

necessary to increase the birth rate. Those who militated in support of a higher birth rate succeeded in laying the groundwork for a family policy focused primarily on encouraging large families². On the other hand, attention was brought to bear on the need to reduce the mortality rate, which meant introducing a genuine public health policy³. While the dangers and effects of tuberculosis were the main target, syphilis was also viewed as a disease that could and should be combated to help lower the overall mortality rate⁴.

As in many other European countries, French medical circles were called upon to measure the effects of syphilis and propose a plan to combat it⁵. Alfred Fournier, a renowned dermatologist, estimated that 13% to 15% of the male population of Paris suffered from the disease.⁶ The increased incidence of syphilis revealed by figures at the beginning of the century carried serious demographic consequences. The mortality of syphilitics was compounded by the ongoing effects of the disease, which was claimed to be hereditary: “*syphilis is a hereditary disease: it strikes the first, second and even third generation of the syphilitic*”⁷. Hereditary syphilis would doubly compromise the future of the population because it was responsible for most cases of female sterility and a high proportion of intrauterine deaths, and was therefore taking a toll on already reduced generations.⁸ In 1922, the report on syphilis drawn up by the Interior Ministry’s Commission on Venereal Disease Prevention determined that syphilis would cost 140,000 lives annually: “*20,000 children killed in the womb (stillbirth*

2 Virginie De Luca Barrusse, *Les familles nombreuses. Une question démographique, enjeu politique, France 1880–1940* (Rennes, 2008).

3 Patrice Bourdelais, *Les épidémies terrassées. Une histoire des pays riches*, (Paris, 2003).

4 Jean-Pierre Bardet, Patrice Bourdelais, Pierre Guillaume, François Lebrun and Claude Quétel, *Peurs et terreurs face à la contagion* (Paris, 1988); Pierre Guillaume, *Du désespoir au salut. Le tuberculeux au XIXe et XXe siècle* (Paris, 1992); Claude Quétel, *Le mal de Naples. Histoire de la syphilis* (Paris, 1992).

5 Roger Davidson, *Dangerous Liaisons: a Social History of Venereal Disease in Twentieth-Century Scotland*, (Amsterdam, 2000) ; Ramón Castejón-Bolea, *Moral sexual y enfermedad: la medicina española frente al peligro venéreo, (1868–1936)*, (Granada, 2001); Roger Davidson, Leslie Hall, *Sex, Sin and Suffering, Venereal Disease and European Society since 1870*, (London, 2001); Jay Cassel, *The Secret Plague: Venereal Disease in Canada, 1838–1939*, (Toronto, 1987); Bridget Towers, “Health education policy 1916–1926, venereal disease and the prophylaxis dilemma”, *Medical History*, 24(1) (1980), 70–87.

6 Dr. Alfred Fournier, *Traité de la syphilis* (Rueff, 1903).

7 Dr. Queyrat quoted in Lucien Viborel, *La technique moderne de la propagande d’hygiène sociale* (Editions de la vie saine, 1930).

On syphilis as a hereditary disease see Alain Corbin, “L’hérédosyphilis ou l’impossible rédemption. Contribution à l’histoire de l’hérédité morbide”, *Romantisme*, 11(31), (1981), 131–150.

8 Virginie De Luca Barrusse, “Pro-Natalism and Hygienism in France, 1900–1940. The example of the Fight against Venereal Disease”, *Population*, 64(3), (2009), 477–506.

rate), 40,000 pathological abortions, 80,000 deaths of children or adults”.⁹ Moreover, it had repercussions on the health of those who survived:

30% of French children are impaired by hereditary syphilis, which results in arrested development, malformations (such as harelip), nervous disorders (convulsions, epilepsy, meningitis), eye lesions, teeth alteration and mental disorders and anomalies.¹⁰

Venereal disease therefore combined the effects of depopulation and degeneration by compromising female fertility and the health and survival of children. The debates were also marked by the notion of degeneration, which postulated that inherited characteristics were not identical but rather deteriorated from one generation to the next, thus creating pathological predispositions that became more pronounced and widespread over time¹¹. Hence, “one of the surest means to preserve the number and value of our children is to organise a powerful fight against syphilis”.¹² The medical profession was therefore mobilised. In 1901, Alfred Fournier set up the Society for Sanitary and Moral Prophylaxis, which soon became established as a pressure group to fight venereal disease through a network of active physicians and hygienists. The fact that the prophylaxis was sanitary *and* moral was not innocent: discursive precautions were required in any discussion of sexual risks to avoid offending public opinion, which was sensitive about sexual matters.¹³ This discursive precautions formed an initial set of underlying concerns that restricted discussion about syphilis; even the name of the disease was censored.¹⁴ While the medical profession was allowed talk about it, they had to take verbal precautions when doing so. Prophylactic choices did not leave aside moral

9 Quoted in “Projet de loi relative à la prophylaxie des maladies vénériennes, Rapport de Cavaillon et Sicard de Plauzoles”, *Prophylaxie antivénérienne*, janvier 1929.

10 Op. cit.

11 In 1857, Benedict Augustin Morel published a theory of this notion in *Traité des dégénérescences physiques, intellectuelles et morales de l'espèce humaine* (Paris).

On his influence see William Schneider, *Quality and Quantity, The quest for Biological Regeneration in Twentieth Century France* (Cambridge, 1987) pp. 11–54; Daniel Pick, *Faces of Degeneration. A European Disorder, 1848–1918* (Cambridge, 1999), pp. 97–106; Patrice Pinell, “Degeneration theory and heredity patterns between 1850 and 1900” in Gaudillière J.P., Löwy Ilona eds., *Heredity and Infection. The History of disease Transmission* (Londres, 2001), pp 245–259.

12 Dr. Sicard de Plauzoles, “La question de population, la surpopulation du globe”. *Prophylaxie antivénérienne*, 1936, juin.

13 Annie Stora-Lamarre, *L'enfer de la IIIe république*, (Paris, 1990), pp. 49–79; Marcela Iacub, *Par le trou de la serrure* (Paris, 2008), pp. 87–134.

14 For example, until the 1920s, the word “syphilis” was prohibited in radio broadcasts.

considerations and they were assessed not only in terms of their therapeutic efficacy but also as a means of raising moral standards, as we shall see.

Initial Proposals

From its inception in 1901, the Society for Sanitary and Moral Prophylaxis promoted sex education consisting mainly of sexual dissuasion.¹⁵ A few doctors belonging to the association attempted to communicate their advice to young people in brochures, which drew mixed reactions, testifying to the general reluctance to talk about sexuality and the dangers of venereal disease, especially to girls.¹⁶ Thus, in 1902, a book by Dr. Burlureaux, *Pour nos filles quand elles auront dix-huit ans* [For our daughters when they reach the age of eighteen] was extremely poorly received, contrary to the one by Dr. Fournier, *Pour nos fils quand ils auront dix-sept ans* [For our sons, when they reach the age of seventeen]. Fournier tried to dissuade the latter from any form of extra-conjugal sexual activity. He sought to convince young men of the necessity of abstinence until marriage and fidelity to their wives. For their fiancées, chastity until marriage and fidelity to one's husband went without saying; they were basic postulates of the education of bourgeois girls. The first brochures were clearly addressed to adolescents from good families, in part because they made up the clientele of the physicians engaged in the debate. Furthermore, bourgeois children were precisely the demographic lacking in France. Indeed, population statistics confirm the Malthusianism of the bourgeoisie. Hence, this was the class that had to be encouraged to have healthy children – not the working class, which was always considered dangerous.¹⁷ Whatever form sex education might take, it was always an exhortation to produce a healthy family.

In 1908, the hygienist Justin Sicard de Plauzoles, a member of the Society for Sanitary and Moral Prophylaxis, proposed a school programme intended to inculcate the idea that individuals are first and foremost “seed carriers” in the words of the childcare specialist Adolphe Pinard. He defined his sex education project as “*a pedagogical initiative tending to subject the sexual instinct to the action of the will controlled by an educated, aware and responsible intellect*”.¹⁸ It was a question of developing a sense of responsibility regarding procreation.

15 Alain Corbin, “Le péril vénérien au début du siècle: prophylaxie sanitaire et prophylaxie morale”, *Recherches*, décembre, 29, (1977), 257.

16 Jill Harsin, “Syphilis, Wives, and Physicians: Medical Ethics and the Family in Late Nineteenth-Century France”, *French historical Studies*, 16(1), (1989), 72–95.

17 Virginie De Luca Barrusse, “Des liaisons avantageuses. L’Alliance nationale pour l’accroissement de la population française et les fonctionnaires”, *Annales de démographie historique*, 2 (2008), 255–280.

18 Dr. Sicard de Plauzoles, *La fonction sexuelle* (Giard et Brière, 1908).

His programme involved three cycles: Children between the ages of six and nine would be given elementary notions about how life is transmitted using examples drawn from animal and plant reproduction. Children would learn that “*all beings come from other beings, that there is solidarity between generations in perpetuating the species*”. Children between the ages of ten and thirteen would be introduced to the notion of contagious and hereditary diseases with a view to teaching them the basic principles of hygiene. Finally, adolescents between the ages of fourteen and sixteen would be prepared for their future roles as fathers and mothers either at school or through special lectures for those no longer attending school. This preparation was to include elements of physiology, sexual hygiene and information on venereal diseases and their consequences for the individual, the family and the race and notions of prophylaxis.

While it is necessary to teach children that they must protect their family’s honour and property, it is necessary and indispensable to teach them that they possess something else, another sacred trust: their descendents. This has to be learned in school. Among young French boys and girls, the sexual instinct must be trained and educated, like the other instincts.¹⁹

The system was designed to tame sexuality in order to manage the biological interests of the family, and consequently, of the population as a whole. This was the purpose assigned to sex education.

Two years later, in an address to the International Conference on School Hygiene, Dr. Doléris, a member of the Academy of Medicine, presented a programme of sex education organised around several disciplines: the natural sciences, ethics and hygiene. “*The first step is to teach and then to create a higher morality in the order of the will and resistance to instinct when the latter makes itself heard loudly at the time of puberty; finally, to warn older youths about the dangers inherent in the exercise of the genital functions*”.²⁰ He proposed to teach children about sex from early age because if these questions were introduced too late, they might arouse unhealthy curiosity. At puberty, the programme was limited to explaining the reproductive organs and sexual diseases. Later on, “*it would involve initiating future mothers and fathers to matters concerned with procreation*”.²¹ The two projects were similar, but in this case the primary objective was to channel the thinking of young people into learning about the biological functions, which would “de-eroticise” sexuality by concentrating on the mechanics of reproduction. Both proposals sought to warn, prescribe and impose conduct to combat instinctive sexuality, control it by

19 Op. cit.

20 Dr. Doleris, Jean Bouscatel, *Hygiène et morale sociale* (Masson, 1918).

21 Op. cit. pp. 145.

understanding how it works and make young people aware of and accept maternal and paternal roles. Other authors supported these projects, but they sparked little interest.

The First World War changed the social visibility of venereal disease, however, giving the nascent movement a boost, not only in France but more widely in Europe and the United States where the interwar period was marked by plans to combat it through widespread use of propaganda: brochures, posters and films in which sex education became one of the core topics.²² The resurgence of syphilis, especially among soldiers coming home and threatening to infect their wives and pollute their descendents helped to open up the debate on introducing sex education at school, which until then had found only a small audience. “*I dare say the future of our race depends entirely on sex education*”,²³ asserted the childcare specialist Adolphe Pinard in a preface to the book by the feminist Adrienne Avril de Sainte Croix. Both authors urged the regulatory board of Public Education to supplement the training of schoolteachers so they could teach it, but their efforts proved to be in vain. Supported by eminent personalities, the movement gained momentum until it was brought to a halt by strong opposition.

Efforts Impeded by Strong Opposition

It is important to insist on the forms of opposition that sex education encountered when it began taking shape, for it crystallised two different modes of managing sexuality: the first, which was private, was based on the confidential relationship between parent and child; the second was public, led by doctors and educators who, claiming to act in the best interests of the

22 Enrique Perdiguero, Rosa Ballester, Ramón Castejón, “Films in Spanish health education: The case of child health (1928–1936)”, *Hygiea Internationalis*, (2007), pp. 69–97; Enrique Perdiguero, Rosa Ballester, Ramón Castejón, “Mass-media and health informations campaigns in Spain (1920–1936)”, in ITEMS Networks, *Medecine, health and society in Europe; trends and prospects; contributions to the Symposium* (Coimbra, 2005), pp. 216–220 ; Ramón Castejón, Enrique Perdiguero, Rosa Ballester, “Les medios de comunicación al servicio de la lucha antivenérea y la protección de la salud materno-infantil (1900–1950)”, *Historia, Ciências, Saúde – Manguinhos*, vol. 3, 2, abr.-jun. (2006) pp. 411–437 ; Jay Cassel, *The Secret Plague; Venereal Disease in Canada, 1838–1939*, (Toronto, 1987), pp. 206–245; Davidson Roger, *Dangerous Liaisons: a Social History of Venereal Disease in Twentieth-Century Scotland*, (Amsterdam, 2000), pp. 135–155; Virginie De Luca Barrusse, “Pro-Natalism and Hygienism in France, 1900–1940. The example of the Fight against Venereal Disease”, *Population*, 64(3) (2009), 477–506.

23 Adolphe Pinard, preface to Adrienne Avril De Sainte Croix, *L’éducation sexuelle*, (Paris, 1918), p. 4.

population, imposed publicising information about sexuality²⁴. Competition between these approaches restricted the possible scope of sex education. It gave rise to two competing strategies based on underlying political and religious concerns that determined the processes of sex education. Indeed, Catholics comprised the main opponents of sex education at school. In February 1922, when the Society of Sanitary and Moral Prophylaxis stepped up its support and demanded action from the ministers of Public Education and of Social Hygiene, Assistance and Benefits, the college of cardinals and bishops rejected “the processes of what is called Sex Education relying on science alone, independently of the moral teachings of religion”.²⁵

In 1923, in the face of Catholic opposition, which had begun to marshal its forces around the issue, the National Conference on Social Hygiene Propaganda and Prophylactic Education launched a survey on sex education at school and how it should be taught.²⁶ 20,000 questionnaires were sent out to national school inspectors, school principals, teachers, high school physicians and chaplains. 15,000 replies were received. The majority of respondents thought schools should initiate children to sexual questions but they expressed reservations about the content and teaching methods, particularly as regards who would be in charge. On the basis of this survey, the Society for Sanitary and Moral Prophylaxis indicated its desire to see sex education instituted in schools for both sexes “on the grounds that innocence does not consist of ignorance and ignorance is the main cause of the sexual peril [...], that it is essential to the future of the race to orient the maternal instinct early on through accurate knowledge about the body and give future mothers all the notions of hygiene and prophylaxis they need to watch over their health, bring their pregnancies to term and rear and educate their children in a healthy manner”.²⁷ This project involved both preparation for family life and protection against the dangers of venereal disease.

To reach a specifically female audience, in 1925 the Society of Sanitary and Moral Prophylaxis set up a Committee on Female Education (CFE), headed by Dr. Germaine Montreuil-Straus²⁸. The Committee was put in charge of introducing a system for educating girls that would be “above all, moral and

24 Jacques Donzelot, *La police des familles*, (Paris, 1977), p. 159.

25 R.P. De Ganay (1922). *L'éducation de la pureté*, (Paris, 1922), p. 5.

26 “Enquête du comité national de propagande d'hygiène sociale et d'éducation prophylactique sur l'éducation sexuelle de la jeunesse”, *Prophylaxie antivénérienne*, 1923, October.

27 Quoted by Yvonne Knibiehler, “L'éducation sexuelle des filles au XXe siècle”, *Clio*, 4 (1996), 141.

28 Catherine Rollet, “Savoir trébuche ignorance. L'éducation sexuelle et la lutte contre les maladies vénériennes entre les deux guerres”, in De Luca V. ed. *Pour la famille. Avec les familles. Des associations se mobilisent* (France 1880–1950). (Paris, 2008), pp. 159–184.

scientific preparation for marriage and motherhood with a view to personal preservation and the protection of the race”.²⁹ Until sex education could be introduced in schools, the doctors, who were exclusively women, would give lectures to young girls between the ages of sixteen and nineteen in which they would discuss their future role as wives and mothers and inform them about the risks of venereal disease. The authorisation of the Ministry of Public Education and subsidies from the Ministry of Social Hygiene, Assistance and Benefits demonstrate that the political circles were beginning to listen to their arguments. The education of boys was not neglected. In December 1925, Dr. Laignel-Lavastine, president of the parents’ association of Lycée Condorcet, – a position that allowed him to bring together second- and third-year high school students – gave an initial lecture entitled *Vénus et ses dangers* [The Dangers of Venus]. Although attendance was optional, the lecture aroused great interest and drew a large audience. In view of its success, it was repeated every year.

As these lectures became more widespread, the opponents of sex education at school felt obliged to react. Parents’ associations were the primary opponents; they expressed their concern and asserted that this type of teaching was opposed to the freedom of the family and respect for their religious convictions. The first parents’ associations were of Catholic persuasion and they were reacting against the secularisation of schools. They were supported by alumni associations, which also demanded to be consulted regarding any changes in the curriculum.³⁰ In 1924, when the Minister of Public Education issued a circular asking these associations for their opinion on the desirability of such teaching at school, they had answered that the parents alone should decide. The Catholics were not against sex education per se; in fact they were counting on it to impose the family model, but they objected to the idea of collective instruction by the teaching staff. They noted that, according to statistics, schoolteachers had few children on average.³¹ Could they and would they be convincing about the importance of the family? Above all, by disclosing the mechanics of reproduction, sex education would allow these young people to understand how to avoid it and trivialise sexual intercourse. Poorly supervised teaching about sexual questions at school might actually go against the very interests it was originally intended to promote: those of the family.³²

29 Germaine Montreuil–Straus, “Éducation sanitaire de la jeune fille”, *Bulletin de la Société de prophylaxie sanitaire et morale*, 1929, June.

30 Jacques Donzelot, *La police des familles*, (Paris, 1977), p. 184.

31 Virginie De Luca Barrusse, “Des liaisons avantageuses. L’Alliance nationale pour l’accroissement de la population française et les fonctionnaires”. *Annales de démographie historique*, 2 (2008), 264–265.

32 Remi Lenoir, *Généalogie de la morale familiale* (Paris, 2003), p. 307.

The Catholics attempted to silence their opponents by showing that parents already took care of this question. They sought to demonstrate that they were not opposed to the idea of sex education, which had such high social value. When viewed as a health and demographic issue, it could not be totally rejected. Hence there was a consensus on the need for sex education; how it should be done was the focus of the debate. In 1927, Marguerite Lebrun, the Catholic mother of a large family, published a book under the pseudonym Vérine entitled *Le sens de l'amour* [The Meaning of Love] in which she emphasised “*the attention parents must give to training young people, educating them about the meaning of love*”.³³ At the time, rumours were circulating that the Ministry, under pressure from the Society of Sanitary and Moral Prophylaxis to take action, intended to introduce courses in sexual hygiene in high schools and middle schools. On 2 May, 1928, Dr. Gallois, the president of the federation of parents' associations, questioned Minister Édouard Herriot, who replied that he did not intend to impose sex education : “*The associations have complete freedom to decide whether or not the lectures should be given and choose the speakers*”.³⁴ The following year, Vérine created *l'École des parents*, an association that brought together Catholics convinced that sex education should be left in the care of parents. From the outset, it called for expanding the number of parents' associations to form a rampart against collective sex education. To achieve its objectives, *L'École des parents* held annual conferences featuring lectures in which the sexual issue was always the subtext.

From April to June 1929, the Society of Sanitary and Moral Prophylaxis organised meetings during which Germaine Montreuil Strauss, Vérine, Abbé Viollet, Pastor Wauthier d'Ayguetier and Justin Sicard de Plauzoles, in particular, presented their views. These debates show the efforts made to reach a consensus by highlighting common interests: sex education could not abandon moral principles nor could there be any objection to sex education in principle, because they all recognised the danger of demographic decline. Everyone agreed that sex education should include both medical and moral aspects. For, as Sicard de Plauzoles reminded the audience, “*the goal of sex education is not to teach young people the practical means to avoid venereal disease while engaging in debauchery, but rather to make them understand the importance of the sexual function, warn them about the perils of sexual life and the serious moral and social consequences that can result from sexual intercourse as well as their responsibilities and duties*”.³⁵ Authors who dealt with the topic constantly

33 *Revue de l'Alliance nationale contre la dépopulation*, 1927, August. Vérine, *Le sens de l'amour* (Paris, 1927).

34 Quoted by Dr. Monsaingeon, *Un devoir des parents*, (Paris, 1929).

35 Dr. Sicard de Plauzoles, *Principes d'hygiène sociale* (Paris, 1927).

declared: “*There can be no sex education without moral education*”.³⁶ But aside from agreeing on this basic point, each group remained entrenched in its respective position: “*Parents do not want sex education to become mandatory at school under any circumstances*”.³⁷ Faced with firm opposition, the Society of Sanitary and Moral Prophylaxis fell back upon lectures for young people between the ages of fifteen and twenty, the overall content of which was unanimously approved. The talks were to explain physiology, genital hygiene and the dangers of venereal disease and above all insist on family life as the guarantee of a healthy life, fortified generations and a prosperous nation.³⁸ Emphasis was placed on the individual and collective dimensions of each person’s choice. Collective sex education was to be called “The Sanitary and Moral Prophylaxis Lecture Series: Advice to young people on the conduct of their lives”. As the lecture series was not mandatory, the high school principal could decide whether or not to organise it. Before deciding, the principal was to send a letter to the parents of students in the second year of high school asking them to authorise their child’s attendance. The letter was to be accompanied by a brochure explaining the purpose of the lecture series, which would be divided into three parts: the first – on morals – would be presented by the philosophy teacher; the second – on biology – by the natural history teacher; the third – on prophylaxis – by a physician. Henceforth, sex education was confined to lectures and leaflets.

This meant that a consensus had been reached on the need to combat venereal disease and the underlying health and demographic concerns had met with the approval of all the actors involved. These concerns translated into a reaffirmation of the family as the frame of reference that sex education must constantly invoke. Supervised by the Society and its CFE, the lectures on sanitary and moral prophylaxis were to be an integral part of the public health policy being developed at the time. Sex education thus became education on reproductive health, which had a hard time ridding itself of its moral overtones.

Which Prescriptions?

In 1913, the remarks of Dr. Mathieu and Dr. Dufestel at the Alliance for Social Hygiene conference summarised quite well the content of sex education that was

36 Lucien Viborel, *L’éducation publique contre la syphilis, de l’importance de l’éducation morale*. Rapport présenté à la Conférence internationale de la défense sociale contre la syphilis, Nancy, mai 1928 (Paris, 1928).

37 This was the conclusion of the general assembly of parents’ association presidents in Paris in 1929. Quoted in the *Bulletin de la Société de prophylaxie...*, 1929, april.

38 *Bulletin de la Société de prophylaxie...*, 1929, april.

to prevail at least until the 1950s: “Boys will be shown the danger of venereal diseases; girls will be taught the role they will be called to play in life and given an introduction to childcare”.³⁹ The differences and hierarchy of the social roles of the sexes relative to the constitution of the family and sexuality characterised the system of reproductive health education during the interwar period.⁴⁰ The same hierarchy of social roles according to sex was reflected in the way 19th century girls and boys learned about love in many country.⁴¹ In the French case, the different prescriptions for girls and boys confirm the objectives set by the system that was introduced.

Anti-venereal prophylaxis was the sole guide for the talks given to boys. “There will be no question of giving practical lessons in lovemaking, but rather of warn the boys against the dangers of a dissolute sex life”, explained Dr. Bassac⁴². Overall, sex education for boys strove to demonstrate the consequences of unbridled sexuality for the individual, the family and the race. Thus, Dr. Laignel-Lavastine explained to students at Lycée Condorcet that “the dangers of Venus” were at once moral, medical and social. Precocious sexual activity would lead to vice and debauchery, he told them. The consequences were also pathological: masturbation threatened those who were impatient, along with venereal diseases, which he described in sordid detail. From the social standpoint, the danger lay in producing descendents impaired by hereditary syphilis.⁴³

After warning the boys about the risks of venereal disease, it was necessarily to advise them about the conduct they should adopt. The authors oscillated between urging abstinence for everyone and presenting prophylactic methods to those who broke the rules. “There is no danger in sexual abstinence; on the contrary, it will preserve all your strength for your future marriage”,⁴⁴ Dr. Cavaillon and Dr. Gougerot assured the students in 1930. That same year, Dr. Fouqué beseeched athletic young people to abstain from sexual relations prior to

39 Dr. Mathieu and Dufestel, “L’éducation de la santé dans l’enseignement secondaire”. *Alliance d’Hygiène sociale*, 1913, Congrès de Paris, 14–15 May.

40 Yvonne Knibiehler, “L’éducation sexuelle des filles au XXe siècle”, *Clio*, 4 (1996), pp. 139–160; Stewart Mary Lynn, “Sex Education and the Sexual Initiation of Bourgeois French Girls, 1880–1930”, in M.J Maynes, B. Sølund, C. Benninghaus eds., *Secret Gardens, Satanic Mills. Placing Girls in European History, 1750–1960* (Bloomington, 2005), pp. 164–177.

41 See for example Susan Freeman, *Sex goes to School; Girls and Sex Education Before the 1960’s*, (Illinois, 2008).

42 Pierre Bassac, *La vie sexuelle, précis d’initiation* (Paris, 1935), p. 5.

43 Dr Laignel-Lavastine, *Vénus et ses dangers* (Paris, 1926).

44 Drs Cavaillon et Gougerot, *Protégez-vous contre les maladies vénériennes, Conseils aux étudiants*, (Office national d’hygiène sociale, 1930).

marriage: “Marry young and remain steadfastly faithful to your spouse”.⁴⁵ Whereas the incipient sciences of sexology and neurology criticised prolonged abstinence for encouraging masturbation and even homosexuality, the physicians in the Society of Sanitary and Moral Prophylaxis firmly maintained their choice of abstinence as the sure guarantee against debauchery and disease⁴⁶. In essence, this group was promoting morality that can be glimpsed in its recommendations to young people, a moral code that underlay – and limited – the possible scope of sex education. “Alas, instinct sometimes speaks louder than reason”.⁴⁷ In the lectures and brochures, young men were never made to feel guilty about succumbing to temptation: they were always victims of a moment of confusion and yielding to a temptress. The aim was to give them a sense of responsibility without stigmatising them. To achieve their objectives, physicians could not present syphilis as a shameful disease if they hoped to encourage young people to consult a doctor quickly without fear of a lecture on morals. Educating young men thus went hand in hand with pointing the finger of blame at the prostitutes and loose girls who were guilty of leading them astray.

If young men gave in to temptation, they were taught to be concerned about suspicious signs of bodily manifestations in women. Foreplay became an opportunity for observation or even examination. “Before embarking upon a love affair, take the woman on your knees, gently caress her neck, let your hand wander towards her private parts and feel the folds of her groin. If you discover hard glands here and there, ranging from the size of a pea to the size of a hazelnut, that roll beneath your finger, you should immediately stop”.⁴⁸ Others suggested praising the woman’s bosom while looking for any suspicious blotches or admiring her mouth while scrutinising her gums and tongue.⁴⁹ Such ominous signs were a way of imparting medical knowledge to the population, but the context in which they were presented led to dramatising the symptoms, as often happens with cancer.⁵⁰ After describing suspicious signs on the woman’s body, those on the young man’s were summed up succinctly as a dubious discharge. The aim of this educational work was to make each individual capable of discerning such signs and interpreting them.

There were two possibilities open to physicians who set out to advise young people about how to protect themselves against venereal disease: they could

45 Dr Fouqué, *Jeunesse sportive lis-moi !* (Paris, 1930).

46 Alain Corbin, “Le péril vénérien au début du siècle: prophylaxie sanitaire et prophylaxie morale”, *Recherches*, décembre, 29, (1977), 245–283.

47 Op. cit.

48 Op. cit.

49 Dr. De Bernay, *La syphilis et ses conséquences*, (Paris, 1902).

50 Patrice Pinell, *Naissance d’un fléau. Histoire de la lutte contre le cancer en France (1890–1940)*, (Paris, 1992), p. 288.

either advise them to use a condom or encourage them to use a prophylactic ointment. The first solution was suspect, for it would enable the enjoyment of the senses without fear of the consequences. Eliminating the fear of venereal infection meant opening the door to debauchery. Once again, we find the moralising overtones glimpsed earlier, which took concrete form in presenting methods of protection. Moreover, condoms fostered birth control, thereby contributing to depopulation. Wives familiar with condoms might use them to limit the number of their children. In 1902, Dr. Burlureaux took a stand against condoms. The following year, Dr. Sicard de Plauzoles accused certain physicians of promoting the idea of risk-free coitus with prostitutes. The demographic argument, backed by the moral argument, took precedence over the sanitary issue⁵¹ and health concerns were pushed into the background by demographic and moral injunctions.

Yet, following virtually unanimous rejection, opinions about condoms increasingly diverged after the First World War. The rising prevalence of venereal disease and the continuing high rate of stillborn babies helped to shift the focus from moral prescriptions to sanitary concerns. Dissemination of figures on public health and more broadly the demographic situation reversed the order of priorities. The rate of primary syphilis among soldiers was 16 times higher in 1919 than in 1915. By the end of the war, 2% of the soldiers had been infected, i.e. nearly 50,000 men. In addition, there were 130,000 cases of gonorrhoea and 60,000 cases of cancrs.⁵² When the law prohibiting any form of birth control dissemination was passed on 31 July 1920 under pressure from pro-birth groups, condoms were not included because they were distributed to soldiers. In 1925, one tenth of the population was believed to have syphilis, i.e. 4 million people; in 1929, the figure was estimated at 8 million.⁵³ An increasing number of physicians defended the use of condoms and rejected the prejudices against them. In 1925, Dr. Spilmann reminded students of the witty remark by a famous woman “who called [condoms] armour against pleasure and a spider web against danger. That is a mistake. When this contraceptive method is judiciously employed, it provides safe prophylaxis”.⁵⁴ But three years later, the Commission on Venereal Disease Prevention suggested this method not be presented to the public: condoms “should only be recommended within certain

51 On the “demographic argument” in various policies see Paul-André Rosental, “L’argument démographique. Population et histoire politique au XXe siècle”, *Vingtième siècle*, 95(3) (2007), 3–14 and the texts in this volume.

52 A. Mignon, *Le service de santé dans l’armée pendant la guerre 1914–1918*, (Paris, 1927).

53 Estimates of the Commission of Venereal Disease Prophylaxis of the Ministry of the Interior.

54 Dr Spilmann, *Le péril vénérien, conférence de prophylaxie sanitaire et morale*, (Paris, 1926), p. 20.

groups and with the necessary precautions to avoid revolting public opinion and encouraging shamelessness and contagion among young people by giving them a feeling of safety which is only relative”.⁵⁵ In 1930, Dr. Fouqué warned that condoms “are still extremely inadequate and can even give rise to a false sense of security if a tear goes unnoticed [...]. In place of a condom, apply Vaseline very carefully to the glans and the penis to prevent scratches”.⁵⁶ The choice of protective ointment instead of a condom led to describing the gestures of intimate care. Ablutions and the careful use of a prophylactic were scrupulously detailed: opening the urinary meatus and applying the ointment to one’s sex involved new gestures that implied a different relationship to the body was now permitted in order to fight venereal disease.

The education of boys during these years can be summarised as sexual dissuasion, description of symptoms and intimate hygiene. This was in stark contrast to the education given to girls, which was better organised thanks to the activity of the CFE which sponsored lectures for various groups such as Red Cross workers, young working-class girls, residences for women students. The speakers, who were always women physicians, began with a talk on anatomy, physiology and the hygiene of female genital functions and ended with a discussion of venereal disease.⁵⁷ While the purpose was to provide information about sexual risks, the CFE also intended to prepare the young girls for their future role as wives and mothers. Motherhood was their destiny, as the title of a book by Germaine Monteuil Straus indicated: *Tu seras mère*. [You will be a mother]. To accompany their presentations, the speakers projected an educational film produced by the United States Association of Social Hygiene. The film was in two parts: the first part discussed the maternal function and the second venereal disease. The lectures “mainly reach bourgeois circles, but we have had a certain number of working class audiences that were equally interested in what we have to say”,⁵⁸ G. Montreuil Strauss asserted. There was more opposition to these lectures than to those for boys, which was relayed by newspapers in the cities that hosted the talks. Official support and the curiosity “aroused by meetings on a topic that seemed obscene which were organised by

55 The commission, made up of members of the Society of Sanitary and Moral Prophylaxis and the League against the Venereal Peril founded in 1923 by Sicard de Plauzoles to help develop a network of dispensaries, was attached to the Ministry of Hygiene. Quoted by Lucien Viborel, *op. cit.*, p. 13.

56 Dr Fouqué, *op. cit.*

57 Yvonne Knibiehler, “L’éducation sexuelle des filles au XXe siècle”, *Clio*, 4 (1996), pp. 139–160; Catherine Rollet, “Savoir trébuche ignorance. L’éducation sexuelle et la lutte contre les maladies vénériennes entre les deux guerres”, in V. De Luca ed., *Pour la famille. Avec les familles. Des associations se mobilisent* (France 1880–1950), (Paris, 2008), pp. 159–184.

58 Germaine Montreuil Strauss, *Bull de la Société de prophylaxie...*, 1936, june.

women of the world and given by women physicians” explain why “our lectures are always full”.⁵⁹ Over a period of 10 years, the CFE gave 644 lectures, including 325 in the provinces. They were attended by 140,000 people.

Educators sought to combat syphilis in the lectures to boys, hereditary syphilis when they addressed girls. The aim was to protect their bellies and their children. The talk on syphilis delivered by Dr. Nelfrand was laconic to say the least: “the lesions caused by syphilis can be fatal; indeed syphilis kills 30% of patients who contract it. But what you must know about is the terrible hereditary consequences. Hereditary syphilis is, in every acceptation of the term, what can be called a birth defect”.⁶⁰ The remarks to girls were prompted by the essential need to respect their modesty in sexual matters. Indeed, while boys were taught ways of detecting the disease, girls were advised to ask for a prenuptial certificate, which hygienists were promoting. It would consist of a medical visit to inform young men about their own health and the dangers to which they could expose their spouses and their children. The CFE promoted the certificate in its lecture series and leaflets. Dr. Houdré explained: “Nature does not always abide by sentimental or social combinations [...]. Chronic illnesses that are hereditary or known by futures spouses or sometimes even voluntarily hidden can also be real contraindications to marriages. What can be done about this? Require that young people undergo a medical examination prior to engagement? Although this would not ensure absolute safety, it would be a reassuring guarantee”.⁶¹ But the fiancée must count on the honesty of her future husband, who will have to inform her of his disease, since doctors insist on medical confidentiality. Like sex education, the prenuptial certificate aimed to give both spouses a sense of responsibility. Maintaining a difference and a hierarchy between the sexes led physicians to produce a discourse that would foster responsibility in choosing their future spouse. If the future bride succeeded in convincing her suitor to see a doctor, it meant that the young man, who had become aware of the risks of venereal disease through the education he had received, was demonstrating a sense of responsibility towards his future wife and his descendants. The physician was therefore intervening in the domestic organisation of the home by confirming the respective responsibilities of the spouses with regard to health and reproduction.⁶²

59 *Bull de la société de prophylaxie...*, 1933, march.

60 Dr. Nelfrand, *Ce que toute jeune fille doit savoir à l'âge de la puberté*, (Paris, 1932).

61 Dr. Houdré, *Ma doctoresse. Guide pratique d'hygiène et de médecine moderne de la femme moderne*, (Paris, 1928).

62 Under pressure from the medical profession, the prenuptial certificate was to become mandatory in 1942. See Anne Carol, *Histoire de l'eugénisme en France* (Paris, 1995), pp. 318–338. At the same time, the question of introducing a health record for children

Thus, during the first half of the 20th century, sex education was shaped by several competing imperatives – moral, demographic and public health – which were the underlying concerns that determined the limits and objectives of sex education. The projects to provide sex education at school took the family model as their reference. They were designed to enable individuals to “think about” their sexuality and grasp its consequences through a set of normalising recommendations that entailed learning from a very young age about biology and sexual morality. In the process, this set of prescriptions would affect demographic components: birth rate and morbidity. The size of the population – the quantity – and the health of the people – the quality – had everything to gain from sex education focused on developing self-control and awareness of the family standard.

But during the interwar period, when sex education was only permitted as optional instruction given solely to adolescents, it distilled social and sexual attitudes that echoed those of the physicians who backed it. Nevertheless, it still combined sanitary and demographic objectives with methods for moral surveillance of sexual practices. These systems were intended to convince young people to adopt the right attitude to their own health, the health of their future spouse and that of their descendants. Thinking about sex education was indeed adapted to demographic concerns, but it could not entirely rid itself of the tattered morality that suggested a certain mode of managing sexuality. Sex education became a tool for managing the population aimed at governing sexuality in accordance with principles that were moralising and sanitary rather than educational or pedagogical.

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reflected similar concerns. See Catherine Rollet, *Les carnets de santé des enfants*, (Paris, 2008), pp. 165–188.

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International Sanitary Conferences from the Ottoman perspective (1851–1938)

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Introduction

The backdrop to the epidemics of the nineteenth century was the Industrial Revolution with the rapid increase of the urban population, unsanitary settlements in the vicinity of factories, long working hours and deterioration of living conditions for workers, malnutrition and the failure of nation-states to meet these challenges.¹ The acceleration of transport due to the invention of steamships (1810) and the railway (1830) and the extension of international trade and pilgrimage via the Suez Channel (1869), as well as huge waves of migration from Europe to America led to the outbreak of the contagious diseases.²

Plague followed by other contagious diseases like cholera, typhus and tuberculosis were also exposed to Ottoman Land from the beginning of the nineteenth century to the beginning of the twentieth. In the first part of this era initiating the quarantine measures in Ottoman World was highly grueling because of protestations by the ulema (religious clergy) to whom diseases were the scourge of God on his unruly subjects. However with the pressure of the European powers, both quarantines and the other necessities enforced by them had been adminis-

1 Simon Szreter, “Industrialization and Health”, *British Medical Bulletin*, 69 (2004), 75–86.; Marie-France Morel, “The Care of Children: The Influence of Medical Innovation and Medical Institutions on Infant Mortality 1750–1914”, in R. Schofield, D. Reher, and A. Bideau, eds., *The Decline of Mortality in Europe*, (Oxford Clarendon Press, 1991), pp. 196–220.; Edwin Chadwick, “Report on the sanitary condition of the labouring population and on the means of its improvement”, London May 1842, <http://www.deltaomega.org/ChadwickClassic.pdf>, (accessed February 04, 2010); Bekir Metin and Sevim T. Aydın, *Dünya Sağlık Örgütü ve Türkiye ile İlişkileri* [Relations between the World Health Organization (WHO) and Turkey] (Ankara, 1997), <http://195.142.135.65/who/yayinlar/DSO1.html> (in Turkish), (accessed November 26, 2007).

2 Charles Issawi, *An Economic History of the Middle East and North Africa* (Columbia University Press, 1982); Obijiofor Aginam, “The Nineteenth Century Colonial Fingerprints on Public Health Diplomacy: A Postcolonial View”, *Law, Social Justice & Global Development Journal* 1 (2003).

tered till the foundation of the Turkish Republic. In this study we aimed to analyze the international sanitary conferences and the affect of their consequences to the Ottoman State in the light of the historical sources and Ottoman archive documents.

The cholera epidemic could not be controlled despite the implementation of measures such as isolation and quarantine by affected countries that spanned the vast territory from Asia and the Arabian Peninsula to Anatolia, Europe and America. It was absolutely necessary for them to coordinate their efforts. Peter Frank (1745–1821) pioneered the idea of an international health organization, but he found no followers at the time.³

After his proposal, in 1831, Mehmet Ali Paşa, the Khedive of Egypt, set up a Sanitary Council managed by a commission of European diplomats (Commission Consulaire de Sante). This commission implemented and monitored corrective actions to prevent the spread of contagious diseases to Europe. In 1838, the Ottomans set out to deploy 77 public order and quarantine stations in Anatolia and along the borders.⁴ However, due to the dearth of local expertise and know-how in quarantine affairs, assistance was obtained from abroad.⁵ Germany, the United States, Austria, France, the Netherlands, England, Spain, Sweden, Iran, Norway, Russia and Greece responded to the call by the Minister of Foreign Affairs Mustafa Reşit Paşa on 10 January 1840 by each sending a delegate to the council, and Belgium and Italy followed suite in 1847.⁶

The 21-member Supreme Council of Health (Meclis-i Kebir-i Umur-u Sıhhiye) assumed an international character with the joining of 13 foreign members, and separate quarantine councils were set up for Anatolia (Asia) and Rumelia (Europe). The Council in Istanbul acted as the seat of the organization. Dr. Bernard, Dr. Neuner, Dr. MacCarthy, Dr. Marchand and Dr. Francheschi were appointed during the term of Dr. Minas starting on January 1839; and Dr. Marchand, Dr. Andre Leval, Dr. Hermann, and Dr. Agopi known as the son of David, were appointed from February 1840 onwards when Lebib Efendi became

3 George Rosen, *A History of Public Health*, (The Johns Hopkins University Press, 1993), p. 267; Emine Melek Atabek, *1851'de Paris'te toplanan I. Uluslar arası Sağlık Konferansı ve Türkler* [The First International Sanitary Conference that met in Paris in 1851 and the Turks] (İstanbul: İstanbul University Cerrahpaşa School of Medicine Publications, 1974), p. 14, (in Turkish).

4 Bedi N. Şehsuvaroğlu, “Türkiye Karantina Tarihine Giriş” [Introduction to the History of the Quarantine in Turkey, Introduction a l’histoire de la quarantaine en Turquie], *Journal of the İstanbul University School of Medicine* 22(1) (1959), 326–27, (In Turkish and French).

5 Gülten Sarıyıldız, “Karantina,” [Quarantine], in: *Encyclopedia of Islam*, Volume 24, (İstanbul: Foundation of Religious Affairs of Turkey, 2001), 464, (in Turkish).

6 Şehsuvaroğlu, “History of Quarantine in Turkey,” 320.

president.⁷ Known also as *Meclis-i Umur-u Sıhhiye*, the members of the Council were Dr. Marchand, A. Pezzoni, J. Boskiyoviç, Dr. Agop, F. Lopyree, Dr. Andre Leval, Dr. Francheschi, Dr. Hermann and J. Vadina under the presidency of Baki Efendi. The inaugural meeting was held in İstanbul on 27 May 1840 and was presided over by Lebib Efendi.⁸ According to documents dated 15 March 1839, the penalties clauses of the Sanitary Quarantine Regulations were formulated in French following consultations with physicians and foreign delegates.⁹

The İstanbul Supreme Council of Sanitation was established in 1839 with the approval of Sultan Abdülmecit (1839–1861) to enforce quarantine regulations in the Mediterranean region. The Council consisted of 8 Ottoman members and delegates of 9 European states (Austria, Belgium, France, England, Greece, Prussia, Russia, Sardinia and Italy).¹⁰ The local members consisted of the vice president, the interpreter, two Muslim officers and four physicians with degrees from European universities. Sixty-three sanitary agencies dispersed across the Ottoman domains reported to the Council. Each agency was administered jointly by a Muslim administrator and a European physician.¹¹

During their meeting in Vienna in 1845, European and Ottoman envoys discussed quarantine techniques and pledged to improve them and to coordinate their efforts.¹² The Vienna conference raised awareness on the critical role of international cooperation in the fight against epidemics and the series of International Sanitary Conferences were launched.

7 Ibid., 321.

8 Osman Şevki Uludağ, *Son Kapitülasyonlardan Biri Karantina* [Quarantine, One of the Last Concessions] (İstanbul: Devlet Publications, 1938), 445–451, (in Turkish).

9 Başbakanlık Osmanlı Arşivi (BOA.), [Prime Ministry Ottoman Archives], is a collection of historical sources related to Ottoman State, which contained more than 100 million archive documents mainly divided two groups as defter (registers) and evrak (individual documents) in addition to maps, photographs and albums. Prime Ministry Ottoman Archives, which mostly written in Ottoman Turkish, is open to international scholars, (see *Ottoman archives*, prepared by N. Aktaş and İ. Binark and edited by E. İhsanoglu (İstanbul, 1986).; and T.C. Başbakanlık Devlet Arşivleri Genel Müdürlüğü <http://www.devletarsivleri.gov.tr>; BOA., Hatt-ı Hümayûn Tasnifi, (Number) 523/25535 and 25535A, (Date in Mohammedan calendar) 29/Zilhicce/1254, (Date in Gregorian calendar) 15/March/1839. This document is an imperial rescript about penalties clauses of the Sanitary Quarantine Regulations, (in Ottoman Turkish).

10 Atabek, *First International Sanitary Conference and Turks*, 49.

11 Metin and Aydın, *WHO and Turkey*.

12 BOA., İradeler, Hariciye (İ. HR.), 31/1405, 21/Receb/1261, 26/July/1845. This document is an imperial order related to Ministry of Foreign Affairs about the Vienna meeting, (in Ottoman Turkish).

First International Sanitary Conference: Paris, 1851

The first International Sanitary Conference to control epidemics began on 23 July 1851 at the Palace of the Foreign Ministry in Paris and 12 countries were represented, with the names of delegates being as follows: Ottoman State (Halphen, Dr. Bartoletti), France (C. E. David, Dr. Melier), England (Perrier, Dr. Sutherland), Spain (Segovia, Dr. Monlau), Tuscany (Cecconi, Betti), Austria (Lavison, Dr. Menis), Sicily (Falcon, Dr. Carbonaro), the Vatican (Escalon, Dr. Cappello), Portugal (Grande Dr. Silveira), Sardinia (Magnet, Dr. Bo), Greece (Vitalis, Dr. Costi) and Russia (d'Ebeling, Dr. Rosenberger). Each country sent two delegates, one physician and one diplomat, and the French envoy C. E. David was elected as the chairman.¹³

The Ottoman State was represented by Halphen and Dr. Bartoletti, with Halphen handling political affairs and Dr. Bartoletti taking care of sanitary and health issues as mandated by the office of the French envoy.¹⁴

One of the key themes of this conference, the first international effort at controlling and preventing epidemics,¹⁵ was that cholera penetrated Europe through the Ottoman Empire which had become a breeding ground for this disease, and that the authorities had to play a more active role at prevention.¹⁶ Dr. Bartoletti challenged this view by stating that “cholera invaded Turkey in 1830 when there were no measures at prevention yet, and the quarantine system was put in place in 1838 to control land and sea access.” He indicated that he had toured and made observations at the border with Asia, and was convinced that pilgrims from India carried the disease to Mecca through the Red Sea and infected Ottoman pilgrims. The Ottoman system of port clearance was also discussed and it was decided to reform rather than to abolish it.¹⁷

The main objective of the conference was to standardize isolation periods at the quarantines and lazarettos of the Mediterranean region and obtain the compliance of participating states.¹⁸ The targets were threefold, namely to protect

13 Atabek, *First International Sanitary Conference and Turks*, 32–33; Norman Howard Jones, “The Scientific Background of the International Sanitary Conferences, 1851–1938”, (Geneva: World Health Organization, 1975), p. 10.

14 BOA., Hariciye Nezareti Mektubi Kalemi Belgeleri (HR. MKT.), 42/24, 28/Rabiulevvel/1268, 20/February/1852. This document is located at the documents of Cabinet of Ministry of Foreign Affairs, and it is about Dr. Bartoletti’s attendance of Paris Sanitary Conference, (in Ottoman Turkish).

15 Michael McCarthy, “A brief history of the World Health Organization (Special Report)”, *The Lancet* 360 (2002), 1111–1112.

16 Atabek, *First International Sanitary Conference and Turks*, 44.

17 Ibid., 43, 68.

18 Handan Kılınç, *Isolating the subject: Cholera, Control and Sanitary Discourse in the Istanbul International Sanitary Conference of 1866* (Thesis in Master of Arts in History, Bogaziçi University, 2005), p. 31.

public health, prevent damage to trade and international relations, and lay down quarantine regulations.¹⁹

During the second session on 5 August 1851, the French Minister of Foreign Affairs highlighted one of the objectives of the conference, stating that “the imbalance created in the international system and trade by having separate sanitary regulations has to be eliminated.” The committee consisting of Dr. Bartolletti, Dr Carbonero (Sicily), Consul Dr. Grande (Portugal), Dr. Rosenberg (Russia), Dr. Sutherland (England) and Consul Vitalis (Greece) presented a report on the organization of health affairs in the Middle East and the creation of a cordon sanitaire on 11 November.²⁰

Following 48 sessions and numerous committee meetings, an international health agreement with 137 articles was adopted. The representatives of 12 nations signed the first draft of on 19 December 1851 which was revised on 16 January 1852. The signatures of the representatives were not binding on their governments, and at the end of four months, only five countries had ratified the declaration.²¹ Later during the year the Sultan approved of the new quarantine regulation of Ottoman Empire.²² (Image 1).

Another archival document from 18 January 1853 indicates that the Ottoman state had signed a number of bilateral agreements on quarantine regulations, and that it had been decided with Austria, Sicily, Greece, Portugal, Russia and Sardinia and the Government of Toscana to meet in İstanbul to review the articles regarding quarantine and the appointment of physicians.²³ Political issues would not be within the remit of this meeting, and states would comply with the consensual decisions, reserving the right to reject specific articles.²⁴

19 Atabek, *First International Sanitary Conference and Turks*, 33, 34.

20 Ibid., 38–47.

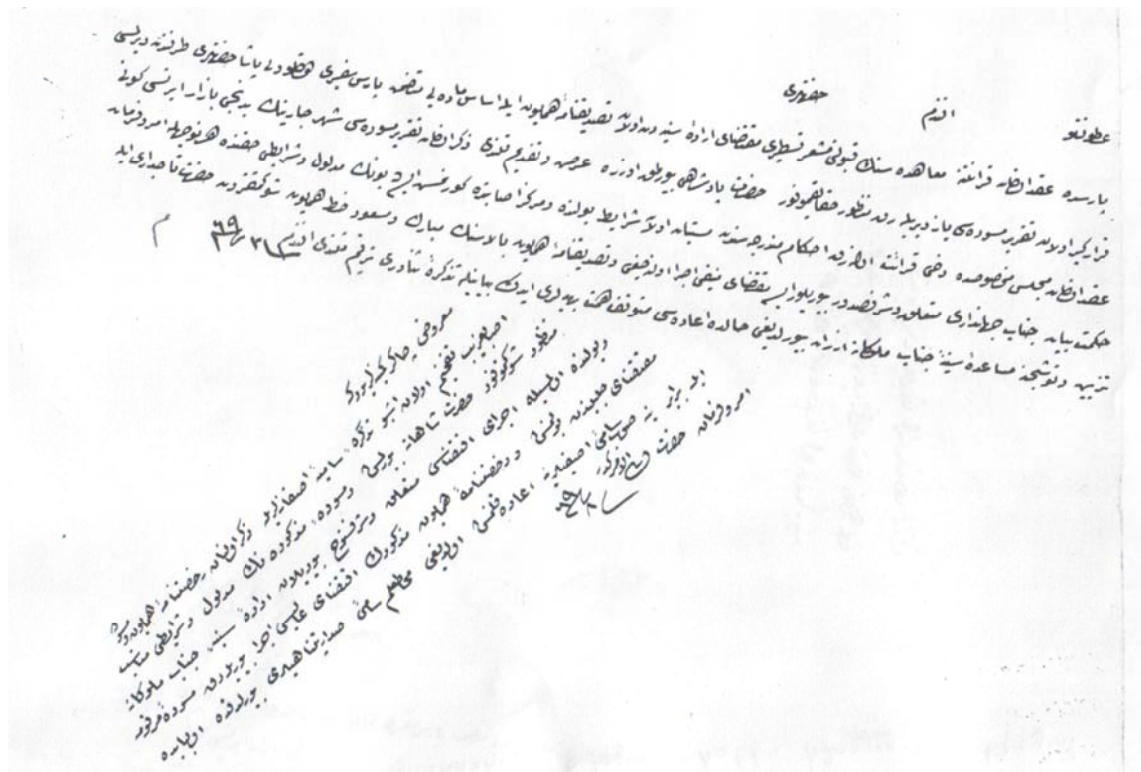
21 Gregorio Delgado Garcia, Eduardo Estrella, and Judith Navarro, *The Pan American Sanitary Code: Toward a Hemispheric Health Policy* (Washington D. C., Pan American Health Organization (P.A.H.O, 1999): pp. 7–8.

22 BOA., İ. HR., 94/4596, 7/Rebiulahir/1269, 19/December/1852. This document is an imperial order related to Ministry of Foreign Affairs about The Quarantine Regulation was approved by imperial rescript, (in Ottoman Turkish).

23 BOA. HR. MKT., 54/100, 07/Rebiulahir/1269, 18/January/1853. This document is located in the documents of Cabinet of Ministry of Foreign Affairs, and it is about the agreement of quarantine regulations and reassignment of doctors, (in Ottoman Turkish).

24 Gülten Sarıyıldız, *Hicaz Karantina Teşkilatı (1865–1914)* [The Hicaz Quarantine Organization (1865–1914)], (Ankara, Turkish Historical Society Publications, 1996), pp. 17–18, 61–68, (in Turkish).

Image 1. Adoption of the quarantine regulation.



Source: Başbakanlık Osmanlı Arşivi, İradeler, Hariciye, Nr: 94/4596, Date: 19/December/1852.

Second International Sanitary Conference: Paris, 1859

Only diplomats and leading politicians participated in the second conference that began in Paris on 14 June 1859²⁵ and extended over the next five months, with the objective of settling the political and economic disputes between the participating countries.²⁶ It was proposed that a mandatory quarantine be introduced for incoming vessels from ports where there had been cases of cholera, and different types of quarantine in the Mediterranean region were explored. Standards of hygiene would be enforced in municipal areas, and the prohibition to bury the dead prior to notifying the quarantine administration would ensure proper record keeping.²⁷

Documents from Ottoman archives from March 2 and 4, 1860 refer to the Health Regulation stipulating that deaths were to be registered, diseases to be reported to the quarantine administration and streets to be kept clean, and the

25 Peter Baldwin, *Contagion and the State in Europe, 1830–1930* (Cambridge: Cambridge University Press, 1999), p. 199.

26 Garcia et al. “The Pan American Sanitary Code,” 7–8.

27 NOVA Science Programming on Air and Online. “History of Quarantine,” <http://www.pbs.org/wgbh/nova/typhoid/quarantine.html> (accessed November 26, 2007).

dead were not to be buried without due notification.²⁸ Nonetheless, a major outbreak of cholera was reported in India in 1865, which spread rapidly across Anatolia and Europe, and took a particularly heavy toll in the Hejaz. Prof. Proust reported that the necessary sanitary measures could not be enforced due to the conservatism of the population of Mecca, and argued that the epidemic had spread from the heap of the corpses of 30,000 pilgrims that had been stacked on sacrificed sheep.²⁹

Third International Sanitary Conference: İstanbul, 1866

The Third International Sanitary Conference on cholera, known also as the Istanbul or Dersaadet Conference, was held in 1866 upon the initiative of France, which was responding to the rapid spread of the major cholera epidemic of 1865 from the Hejaz to Egypt and then to the Mediterranean region and Europe across land and maritime routes.³⁰

The participants were the diplomats and physicians from a number of states: Ottoman state (Salih Efendi, Dr. Bartoletti), Austria (M. Vetsera, Dr. Sotto), Belgium (Noidans), Denmark (Dumreicher), Egypt (Salem Bey), England (William Stuart, Dr. E. D. Dickson, Dr. E. Goodeve), France (Lallemand, Dr. Fauvel), Greece (Kallergi, Dr. G. A. Maccas), Iran (Mirza Malcom Khan, Dr. Sawas Efendi), Italy (Alexandre Vernoni, Prof. Frederic Bosi, Dr. Salvatori), the Netherlands (Keun, Dr. Millingen), Portugal (Edouard Pinto de Soveral, Dr. B. A. Gomes), Prussia (Baron Testa, Dr. Muhlig), Russia (Dr. Pelikan, Dr. Lenz, Dr. Bykow), Spain (Don Antonio Maria Savoglia, Dr. Pedro Felipe Monlau), Sweden and Norway (Oluf Stenersen, Dr. Hubsch) and the Vatican (Brunoni, Dr. Ignace Sparado). Eighteen states participated at the conference also known as the Galatasaray Conference with reference to the name of the school where it was held.³¹

28 BOA., Sadaret Mektubi Kalemî Umum Vilayet Yazışmalarına Ait Belgeler (A. MKT. UM.), 398/66, 9/Şaban/1276, 2/March/1860; BOA., A. MKT. UM., 398/77, 11/Şaban/1276, 4/March/1860. This document is located in the documents of the correspondence between the Cabinet of Prime Ministry and Provinces, and it is about registration of deaths and environmental sanitation, (in Ottoman Turkish).

29 Hasan Hüsrev Hatemi, “Dr. Kasım İzzettin’in “Kolera ve Mekke’de Hijyen” adlı Fransızca Eseri,” [Dr. Kasım İzzettin’s French Work Called Cholera and Hygiene in Mecca], *Studies in Medical History* 2 (1988), 79–84, (in Turkish).

30 Sheldon Watts, “From Rapid Change to Stasis: Official Responses to Cholera in British-Ruled India and Egypt: 1860 to c. 1921,” *Journal of World History* 12(2) (2001), 344–345.

31 Kılınç. “Isolating the subject,” 33.

Chief Physician Salih Efendi was appointed to chair the conference, and Dr. Bartoletti, who had participated at the conference in Paris, was to be deputy chair. Participation was broad due to the severity of the epidemic. The Minister of Foreign Affairs of the Ottoman state Ali Paşa (Image 2) delivered the opening speech of the conference that started on 13 February 1866 at the Galatasaray Academy³².

Image 2. Arrival of Ali Paşa at the opening ceremony at the Galatasaray Academy, Istanbul.



Source: Vahdettin Engin, “Galatasaray Mekteb-i Sultanisi” [School of Galatasaray], *Journal of History and Civilization* 35 (1997), 51.

The conference focused on measures against the cholera epidemic that broke out in the Hejaz.³³ As the Hejaz belonged to the Ottoman Empire, French delegate Dr. Fauvel suggested in his keynote speech that “the Ottoman state promptly dispatch members of the Sanitary Commission to the Hejaz to report on the health condition of the pilgrims,” and “seal off maritime traffic by sending a few warships to the region.”³⁴

It was underlined that cholera had originated and spread from India, with Iranian delegates stressing the need to adapt quarantine measures to the incubation

32 Kılınç. “Isolating the subject,” 33.

33 Orhan Koloğlu, “Osmanlı basınında 1865 kolera salgını, İstanbul Sağlık Konferansı ve Mirza Malkom Han” [The Ottoman press coverage of the 1865 cholera epidemic and Mirza Malkom Khan's argument in the Istanbul International Sanitary Conference] *Studies in Ottoman Sciences* 6:2 (2005), 139–150, (in Turkish).

34 Kılınç. “Isolating the subject,” 34.

period of the disease and to sanitize clothing, and the discussion focused on avoiding the spread of the epidemic to Europe rather than its elimination. The first proposal was to erect a gigantic quarantine station at Babülmendep, which was the gate to the Red Sea of Indian and other Eastern pilgrims. If this proved insufficient to contain cholera at the Hejaz, pilgrims would be directed to sanitation facilities at an appropriate site such as Eloca, failing which they would not be allowed to cross Egypt into Europe. It was further decided to set up quarantine stations on the border with Iran and to take specific measures against the spread of the disease over the Persian Gulf.³⁵ The view that the Ottoman state was responsible for maritime transport and quarantine in the Straits was accepted by a large number of states.³⁶

At the end of forty-four sessions, the cholera regulation had been revised according to the reports of the working groups and the principles of scientific quarantine, and the conference ended with the closing remarks of Ali Paşa on 26 September 1866.³⁷

Despite the prompt implementation of the decisions, cholera had arrived at the gate of Bucharest. Orders were issued to prohibit access to vessels that had not completed the stipulated quarantine term at İstanbul, Anadolu Kavağı and to authorize municipal police to obstruct the access of vessels and passengers without proper documentation.³⁸

Fourth International Sanitary Conference: Vienna, 1874

Within four years, the cholera outbreak in Russia in 1869 had spread to all of Central Europe, which had become more vulnerable after the opening of the Suez Channel. Russia proposed an International Sanitary Conference to forge an agreement with European states on a standard set of international quarantine rules.³⁹ In the meantime, the Ottoman state proposed another conference to explore methods of preventing the spread of the plague that had broken out at

35 Uludağ, *One of the Last Capitulations*, 445–51.

36 Amir Arsalan Afkhami, “Defending the guarded domain: Epidemics and the emergence of an International Sanitary Policy in Iran,” *Comparative Studies of South Asia, Africa and the Middle East* 19(1) (1999), 130.

37 Kılınç. “Isolating the subject,” 69.

38 BOA., Dahiliye, Mektubi Kalemi (DH. MKT.), 1372/22, 15/Muharrem/1304, 14/October/1866. This document is located in documents of the Cabinet of Ministry of Interior Affairs and it is about quarantine regulations at Anadolu Kavağı, (in Ottoman Turkish).

39 Marcos Cueto, “Chapter 1: The Origins of International Public Health in the Americas,” in *The value of health: A history of the Pan American Health Organization* (2006), p. 10, http://www.paho.org/English/DD/PUB/SP+600_Chapter_1.pdf (accessed November 26, 2007).

the border with Iran. A considerable number of states, however, believed that the current health convention was adequate.⁴⁰

The imperative of holding another sanitary conference became evident when the cholera outbreak during the Muslim festival of sacrifices in 1872 took a toll of 60,000 lives⁴¹ in just three months in Mecca and Egypt, from where it spread to Anatolia, Europe and the American continent.⁴² Austria proposed a conference where measures to prevent the spread of other epidemics like the Asian cholera would be discussed. The value of developing a unique set of standards had become apparent to an increasing number of states and the Fourth International Sanitary Conference convened in Vienna on 1 July 1874. One of the themes was municipal sanitation and rules of personal hygiene. At one point of the discussions, most of the delegates seemed to favour easing if not abolishing the quarantines. However, the argument of the Turkish mission (Ali Bey and Bartoletti Efendi)⁴³ that the quarantine regulation based on the decisions of the İstanbul Sanitary Conference had to be strictly implemented was backed by the Greek delegation and carried the day.⁴⁴ The Galatasaray Regulation thus remained in force.⁴⁵

The view that the disease was air-borne prevailed during the conference⁴⁶ where delegates from twenty-one countries including the Ottoman state partici-

40 Afkhami, "Defending the guarded domain," 130.

41 İstanbul Conference was the first of the conferences with respect to Hedjaz sanitary conditions and until the collapse of the Ottoman Empire Hedjaz was an important region which cared by European powers. İzzettin's book is an important source about Hedjaz sanitary conditions, in which he reported that 22 epidemics were emerged from 1831 to the beginning of 1900s. In this book, İzzettin was gave information and statistical data about cholera epidemics in the Muslim Holy Land, especially mortality rates and measures taken such as established commissions and incurred expenditure, e.g.1868 Hedjaz Sanitary Commission. Kasım İzzettin, *Mekke-i Mükerrerme'de Kolera ve Hıfzısıhha* [Cholera and Sanitation in Mekke-i Mükerrerme] (İstanbul: İstanbul University Institute of Medical History Library no: o.1704, 1909), p. 32, (in Ottoman Turkish).

42 Similar to İzzettin's book in this study Dr. Proust gave some statistical data about deaths and information about how cholera was emerged and spread in Hedjaz region. He also gave numbers of the non Ottoman Muslim pilgrims. Dr. Proust, *Sıhhiyye Politikasında Yeni Bir Cevelan Yani Sıhhiyye Mes'ele-i Siyasiyyenin Hal ve Tesviyesi Hicaz Hacıları*, Trs. Ahmed Nermi, (İstanbul: İstanbul University Library, Nr: 4631), p. 64, (in Turkish).

43 BOA., İradeler, Dahiliye (İ. DH.), 692/48387, 24/Şevval/1291, 4/December/1874. This document is located in documents of imperial orders related to Ministry of Foreign Affairs, and it is about reports of Vienna Conference, (in Ottoman Turkish).

44 Uludağ, *One of the Last Capitulations*, 445–451.

45 Afkhami, "Defending the guarded domain," 129.

46 UCLA. School of Public Health, Department of Epidemiology. "Who first discovered Vibrio Cholera?," <http://www.ph.ucla.edu/EPI/snow/firstdiscoveredcholera.html> (accessed November 26, 2007).

pated.⁴⁷ Dr. John Snow's discovery that cholera spread to humans through contaminated water was received enthusiastically.⁴⁸ A committee of physicians was set up to analyze the emerging data. Its task was to study the aetiology of cholera, the incubation period, prophylaxis and the epidemiology in vessels and ports, and assess the impact of the environmental conditions in the Eastern Mediterranean and the Black Sea on the spread of the disease. It was decided that the outcome of this work would constitute the basis for a new international health codex.⁴⁹

Another remarkable aspect of the fourth conference was the unanimous adoption of the French proposal that "an international agency on epidemics be established with its headquarters in with its headquarters in Vienna."⁵⁰

Fifth International Sanitary Conference: Washington, 1881

The Fifth International Sanitary Conference took place in the USA in March 1881. Cholera threatened and yellow fever ravaged both sides of the Atlantic.⁵¹ The USA proposed to host the conference to promote the fight against cholera and yellow fever, and to develop an international sanitary system for the surveillance and monitoring for its ports and residential areas.⁵²

The participants of the conference were ten delegates, most of whom were diplomats, from the west of the United States, and special envoys with expertise on medical subjects from four countries.⁵³ Argentina, Brazil, Bolivia, Chile, Haiti, Mexico, Peru, the USA, Venezuela and Canada were represented.⁵⁴ The conference was chaired by American delegate John Hay (1838–1905).⁵⁵

The proposal of the delegate from South England to develop a standard system of reporting from the ports and their hinterland was discussed.⁵⁶ The dele-

47 Howard-Jones, "The Scientific Background," p. 39.

48 Ralph R. Frerichs, "Asiatic Cholera Pandemic of 1846–63,"
<http://www.ph.ucla.edu/epi/snow/pandemic1846-63.html> (accessed November 26, 2007).

49 Garcia et al. "The Pan American Sanitary Code," 7–8.

50 Ibid.

51 Pan American Health Organization (PAHO), "In the Beginning 1902–1920," in *Pro Salute Novo Mundi A History of the Pan American Health Organization*, (Washington, D.C.: P.A.H.O, 1992), p. 19, Full text version
<http://www.pitt.edu/Super1/lecture/lec0291/fulltext.htm> (accessed November 26, 2007).

52 Hugh S. Cumming, "The International Sanitary Conference," *American Journal of Public Health* 16:10 (1926), 975.

53 P.A.H.O., "In the Beginning," 19.

54 Garcia et al. "The Pan American Sanitary Code," 7–8.

55 NNDB tracking the entire world, "John Hay,"
<http://www.nnbd.com/people/121/000059941/> (accessed November 26, 2007).

56 P.A.H.O., "In the Beginning," 19.

gate from Austria-Hungary proposed that reports be submitted to two bureaus to be set up in Vienna and Havana. Sanitary reports from Europe, Asia and Africa would be submitted to the Vienna office, while reports from the Americas would be transmitted to Havana via telegraph. These proposals were discussed extensively.⁵⁷

Sixth International Sanitary Conference: Rome, 1885

As epidemics spread rapidly in the Mediterranean in 1883 and claimed the lives of as many as 120,000 people only in Spain,⁵⁸ preparations for a new conference came under way. The focus of the conference in Rome that convened upon the initiative of France and Germany⁵⁹ was the fight against epidemics, although discussion revolved around drying up the major river beds at the origins of the disease and particularly in India, where the disease was believed to be endemic.⁶⁰ The conference at which delegates from twenty-eight countries and the luminary Robert Koch participated, witnessed the start of a medical discussion on the aetiology of cholera.⁶¹ This was the first conference where the rights of India as an independent entity were asserted. Four English delegates, two of whom represented India, maintained that cholera had not spread from there.⁶² The Ottoman state was represented by Zeoros Bey.⁶³

The conference began on 7 August 1885. Responding to the charge that England did not regulate tightly enough the quarantine on the route from India to the Suez Canal, it was decided to set up an independent committee to monitor the entry of vessels, mostly of English origin, to the Suez Canal.⁶⁴

57 Garcia et al. "The Pan American Sanitary Code," 7–8.

58 "Cholera," *The Encyclopedia Britannica*, (London, 1926), p. 265.

59 Mariko Ogawa, "Uneasy Bedfellows: Science and Politics in the Refutation of Koch's Bacterial Theory of Cholera," *Bulletin of History of Medicine* 74 (2000), 697–98.

60 Krista Maglen, "Politics of Quarantine in the 19th Century," *MSJAMA*. 290:21 (2003), 2873.

61 "Who first discovered Cholera?"

62 Ogawa, "Uneasy Bedfellows," 698.

63 BOA., Yıldız Sadaret Hususi Maruzat Evrakı (Y. A. HUS.), 182/1, 1/Şaban/1302, 16/May/1885. This document is located in the documents related to Prime Ministry and their notifications of the Sultan, and it is about Zoiros Bey who would present Ottoman State in Roma Conference, (in Ottoman Turkish).

64 Maglen, "Politics of Quarantine," 2873.

Seventh International Sanitary Conference: Venice, 1892

Although the opening of the Suez Canal in 1869 promoted trade, it also led to a cholera pandemic which was at this point claiming more lives in Europe than in India. Cholera spread like a wildfire due to the movement of vessels, most of which were of English origin, and North African pilgrims, and constituted a particularly strong threat France.⁶⁵ It was decided to hold a seventh international sanitary conference in Venice on 30 January 1892 to promote international cooperation.⁶⁶

The main theme of this conference was cholera, and quarantines and hygiene measures were extensively discussed.⁶⁷ French delegate Adrien Proust expressed his opinion on international measures.⁶⁸ Failing to reach a consensus on some issues, European states set out to forge a convention that would be restricted to cholera.⁶⁹ This convention on quarantines and hygiene that was drafted during the First International Sanitary Convention in 1892 was signed during the Seventh International Sanitary Conference in Venice.⁷⁰

Eighth International Sanitary Conference: Dresden, 1893

The outbreak of cholera during the Hartwar festival in 1892 just a few days after the dispersion of the Hindu pilgrims followed by reported cases in Kabil in April, Herat and Tehran in May, Hamburg in August and then from New York, called for a new conference.⁷¹ The spread of cholera to most of the European continent and the fatalities at the ports of Paris, Hamburg, Baku and Russia led the Ottoman state to quarantine incoming trains from Europe.⁷²

65 Ibid.

66 Elisabetta Minelli, "Chapter 1: Origin and Development of International Cooperation for Health: Steps Towards the Constitution of the World Health Organization," in *World Health Organization: The mandate of a specialized agency of the United Nations*, (Political Science Degree diss., State University of Milan, 2006). http://www.gfmer.ch/TMCAM/WHO_Minelli/P1-1.htm (accessed November 26, 2007).

67 Ibid.

68 Valeska Huber, "Contact Zone: Tourists, Slaves and Pilgrims in The Suez Canal Region Around 1900," (2006): 3, http://www.CU_Center_for_International_History (accessed November 26, 2007).

69 WHO. "Facilitation panel (FALP) Third meeting, Montreal, 12 to 16 February 2001, Information Paper, no: 2," <http://www.icao.int/icao/en/atb/fal/panels/falp3/ip02e.pdf> (accessed November 26, 2007).

70 Minelli, "Origin and Development".

71 "Cholera," *The Encyclopedia Britannica*: 265.

72 Nuran Yıldırım, "Tersane-i Amire Fabrikalarında Tebhîr Makinesi/Etûv Üretimi ve kullanımı" [The Production and Use of Autoclaves at Ottoman Shipbuilding Plants] in

The reported death toll in the Hejaz during this period was 40,000.⁷³ Claims were raised that the Ottoman state neglected health affairs in the region and the eighth International Sanitary Conference convened at Dresden focused on setting up a sanitary organization in that region.⁷⁴

The theme of the conference that began on 29 March 1893 was hygiene and demographics. Methods of preventing the entry and spread of cholera to across borders were discussed. Participating states conceded to being surveyed by an international team of experts.⁷⁵ There were lengthy discussions on whether cholera was borne through vessels, goods and passengers, and it was decided that measures had to take into account all instances.⁷⁶

The Ottoman state, which had been represented at the Conference by Bonkovski Paşa,⁷⁷ ratified the decisions, and proceeded to establish a sanitary organization with wide ranging powers to stem the Hejaz epidemic and to appoint sanitary officials to the ports following consultations with Dr. İzzeddin.⁷⁸ The Ottoman state decided to award a salary to the Italian physician La Gope who had played a critical role in setting up the quarantines.⁷⁹

Ninth International Sanitary Conference: Paris, 1894

Cholera broke out once again in the Hejaz during the pilgrimage season in 1893.⁸⁰ The disease spread rapidly to Iran, Russia, Galicia and Europe and struck İstanbul in August.⁸¹ The Ninth Conference convened in Paris, which was hosting such a conference for the third time. A document from 13 January 1894 indi-

Reports at the Symposium of the Past and Present of the Golden Horn, May 22–23, 2003. ed. S. F. Göncüoğlu, İstanbul: Kadir Has University Publications, 2004), pp. 421–31, (in Turkish).

73 İzzettin, *Cholera in Mekke-i Mükerrreme*, 32.

74 Sarıyıldız, *The Hicaz Quarantine*, pp. 17–18, 61–68.

75 Cueto, “International Public Health in the Americas,” 10.

76 Uludağ, *One of the Last Capitulations*, 445–451.

77 BOA., Y. A. HUS., 271/18, 19/Şaban/1310, 8/March/1893. This document is located in documents related to Prime Ministry and their notifications of the Sultan about Bonkowski Pasha who would present Ottoman State in Dresden Conference, (in Ottoman Turkish).

78 Kasım İzzeddin, “Hicaz Sıhhiye İdaresi-Hicaz’da Teşkilat ve Islahat-ı Sıhhiye-1330 Yılı Hac Raporu” [Sanitary Organization in the Hejaz – Organisation and Sanitary Reform in the Hejaz, Pilgrimage Report from the Year 1330], (İstanbul, 1330—of Julien Calender-), pp. 52–3. This report dated 1914/1915, in National Library of Türkiye with the location number of 1973 SA 55. It is about sanitary measures in Hedjaz included members and tasks of Hedjaz Sanitary Council which established at 1910. (in Ottoman Turkish).

79 BOA., İradeler, Hususi (İ. HUS.), 9/1310/Ş-122, 15/Şaban/1310, 2/May/1893. This document is an imperial order about awarded salary of Dr. La Gope.

80 “Cholera,” *The Encyclopedia Britannica*, 265.

81 Yıldırım, “The Production and Use of Autoclaves,” 421–431.

cates that official measures against the spread of cholera through Bahr-ı Ahmer and the Persian Gulf were discussed, with Turhan Bey representing the Ottoman state.⁸²

The conference identified protective measures against the disease that was spreading over Eastern Europe, and decided to set up another quarantine station in the Gulf Region because of the belief that the disease spread to Europe over Iran, Russia and the Red Sea. It also determined to dispense medication in the Hejaz through a health delegation during Ramadan every year, to bolster the regional sanitary organization, and create a “sanitary police” made up of three officials.⁸³

The proposal of the Italian delegates to improve the functioning of the İstanbul Supreme Sanitary Council by turning it into a hybrid body, or dispatch a separate delegation to Bahr-ı Ahmer and the Gulf for sanitary issues was rejected by Ottoman delegate Turhan Bey.⁸⁴

A document from 3 March 1894 indicates that the decisions of the conference were being implemented. Turhan Bey was instructed to oversee the construction of quarantine at Şeyhsaid near the Strait of Babülmendeb that was designed specifically of pilgrims of Indian origin.⁸⁵

The equipment with an autoclave of vessels carrying pilgrims from Ottoman ports to the Hejaz was a further reflection of a conference decision.⁸⁶ Furthermore, the “discretionary quarantine” on pilgrimage boats that was based on an earlier sanitary regulation from 1 February 1880 was amended on 3 April 1895, and the quarantine period was extended from five to ten days.⁸⁷ Following the outbreak of cholera in Mecca in 1895, measures regarding municipal cleaning, stricter compliance with hygiene rules in water distribution and the location of new constructions to out-of-town areas was enforced. Dr. İzzeddin reported that “a mission consisting of English delegate Dr. Clemow, German delegate Padel, Stekoulis, the delegate from Holland and myself was dispatched to the Hejaz

82 BOA., İ.HUS., 30/1311/B-22, 6/Receb/1311, 13/January/1894. This document is an imperial order about payments and directives of Turhan Bey.

83 Şehsuvaroğlu, “History of Quarantine in Turkey,” 338.

84 BOA., Y.A. HUS., 291/31, 20/Şaban/1311, 26/February/1894. This document is located in documents related to Prime Ministry and their notifications of the Sultan about instructions presented Turhan Bey concerning Paris Conference, (in Ottoman Turkish).

85 BOA., İ. HUS., 21/1311/Ş-085, 25/Şaban/1311, 3/March/1894. This document is an imperial order about construction to Turhan Bey related to quarantine at Şeyhsaid area.

86 Nuran Yıldırım, “Karantina” [Quarantina] in *The Encyclopedia of İstanbul from Past to Present*, (İstanbul: History Foundation Publications, 1994, Volume IV), p. 460, (in Turkish).

87 BOA., Meclis-i Umur-ı Sıhhiye Mazbataları, 27 Teşrin-i Sani 1900 tarihli oturum, nr: 19. This document is located in official reports of Supreme Council of Health, and it is dated the session on 3 April 1895.

railway, and hospitals that would admit patients in case of an epidemic were assessed.”⁸⁸ According to a report from 1896, there were 65 quarantine stations in Anatolia, 17 on the border with Iran and 12 in the Red Sea area and the Hejaz, which employed a total of 511 individuals.⁸⁹

Tenth International Sanitary Conference: Venice, 1897

The plague, which was the new threat especially for Europe, constituted the main theme of the tenth International Sanitary Conference in Venice in 1897, whose mandate was to develop preventive measures.⁹⁰ The Ottoman state was represented by a delegation consisting of Mr. Michel Cozzonis, who had succeeded Bartoletti as director general of quarantines, Dr. O. Vitolis and Dr. Mahmut Hakkı Bey. Dr. Cozzonis objected to the claim of the Italian delegate Fao that epidemics followed routes of pilgrimage, stating that “the disease appeared in Bombay five months prior to the last incidence of the plague, and the infection spread to Ottoman lands from the East.” Cozzonis noted that as the Ottomans met their responsibility in restricting the access of pilgrims, the primary responsibility rested with England, which needed to take further measures regarding Indian pilgrims. His view that England could prevent the spread of epidemics in Ottoman domains and Europe if it was committed marked the conference.⁹¹

Not only did an international sanitary regulation emerge during the Tenth International Sanitary Conference but the International Sanitary Convention was also signed during that year.⁹² The theme of the Convention in Venice was the plague.⁹³

At the beginning of the twentieth century, discoveries about bacteriological diseases highlighted the critical role of scientific research in fighting epidemics and led to a more scientific approach to International Sanitary Conferences.

88 Hatemi, “Dr. Kasım İzzettin’s French Work,” 79–84.

89 Şehsuvaroğlu, “History of Quarantine in Turkey,” 335–338.

90 Myron Echenberg, “Pestis Redux: The Initial Years of the Third Bubonic Plague Pandemic, 1894–1901,” *Journal of World History* 13(2) (2002), 438.

91 Uludağ, *One of the Last Capitulations*, 459.

92 1897-EN. International Sanitary Convention for preventing the spread of the Plague, <http://iea.uoregon.edu/TreatyTexts/1897-Sanitary.EN.txt> (accessed November 26, 2007).

93 BOA., Yıldız Sadaret Resmî Maruzat Evrakı (Y. A. RES.), 96/63, 27/Receb/1316, 11/December/1898. This document located in documents related to Prime Ministry and their request authority from the Sultan, and it is about agreed precautions against plague in Venice Conference, (in Ottoman Turkish).

Eleventh International Sanitary Conference: Paris, 1903

At the time of the first conference of the twentieth century, the Ottomans had adopted a more scientific approach to the struggle against epidemic diseases. Twenty-one countries including the Ottoman state that was represented by Celal İsmail Paşa participated⁹⁴ at the Paris conference where scientific measures against cholera and the plague were discussed.⁹⁵ Proposals to lift the quarantine and to disinfect the hold of vessels were discussed,⁹⁶ and scientific principles in the fight against cholera, the plague and yellow fever were laid down.⁹⁷

The proposal of the French delegate for to establish an international office of public health, which may have been the most crucial aspect of the conference, was adopted through a majority vote.⁹⁸ This permanent organization was to monitor epidemiological data and introduce quarantine standards. Besides, the Italian delegation proposed that the current Convention be amended to include issues of public health, safeguarding of commercial interests, and the revision and update of scientific data.⁹⁹

Five years after the Eleventh International Sanitary Conference and Convention, representatives of twelve states assembled in Rome to set up a permanent office charged with enforcing the standards adopted at the conference.¹⁰⁰ On December 9, 1907, they signed the Rome Treaty establishing the International Office of Public Health (OIHP) with a permanent secretariat in Paris.¹⁰¹

Twelfth International Sanitary Conference: Paris, 1911–1912

An Ottoman decree dated 8 December 1909 required all physicians to inform local government authorities or quarantine physicians of cholera or plague inci-

94 BOA., İradeler, Sıhhiye, 4/1321/B-1, 14/Receb/1321, 6/October/1903. This document is an imperial order related to Ministry of Health and it is about whom to be sent to the Paris Conference, (in Ottoman Turkish).

95 Cueto, “International Public Health in the Americas,” 10.

96 François Apéry, “Osmanlı İmparatorluğu’nda Veba ile Savaşan bir Eczacı: Pierre Apéry” [A Pharmacist Who Fought the Plague in the Ottoman Empire: Pierre Apéry] *Studies in Ottoman Science* 6:1 (2004), 15–33, (in Turkish).

97 CMH Working Paper Series, The historical perspective, p. 10, <http://66.249.93.104/u/kou?q=cache:fRDki809cyIJ:www.whoindia.orgIEIP/CMH-Re> (accessed November 26, 2007).

98 Metin and Aydın, *WHO and Turkey*.

99 Cumming, “The International Sanitary Conference,” 976.

100 Ibid.

101 Minelli, “Origin and Development.”

dences.¹⁰² A further document from 20 February 1910 indicates that the Ottoman Empire had been invited by the director of the French School of Public Health M. Manyo to participate at the Congress of Schools of Public Health in Paris on August 2-10 August 1910, and had decided to send Adnan Bey and several other physicians.¹⁰³

Following this series of meetings, the Twelfth International Sanitary Conference was held in 1911 in Paris, which acted as host for the fifth time. The main theme of the conference was the method of bacteriological examination proposed by the French delegation and hygienic issues. Rejected at an earlier conference, the argument that mice played a role in the spread of the plague found support. The terms “healthy,” “suspect” and “infected” were defined accurately to standardize the scientific terminology.¹⁰⁴

The quarantine measures implemented by the Ministry of Health of the Ottoman State to prevent the spread of the cholera epidemic that broke out in Russia in 1910 and 1911, and methods for the sanitation of contaminated objects were improved.¹⁰⁵ In addition an Ottoman document from 1911/1912 requested that funds be allocated for mobile quarantine stations in the Ottoman Empire.¹⁰⁶ Participating states objected to tightening the quarantine despite clear indications that the Ottoman state sought to prevent the outbreak of a new epidemic through measures of which the major beneficiary would be West Europe, and the USA declined to sign the final declaration. The conference was adjourned and the focus shifted to the International Sanitary Convention, which was scheduled to be signed in Paris on 17 January 1912.¹⁰⁷

102 BOA., Dahiliye Nezareti Muhaberat-ı Umumiye İdaresi Belgeleri (DH. MUI.), 41/-1/ 35, 25/Zilkade/1327, 8/December/1909. This document located in documents of correspondence of the Cabinet of Ministry of Interior Affairs, and it is about necessity of the doctors' notification of all cholera and plague cases to authorities, (in Ottoman Turkish).

103 BOA., A. DH. MUI., 67/16, 9/Safer/1328, 20/February/1910. This document located in documents of correspondence of the Cabinet of Ministry of Interior Affairs, and it is about the doctors who would be sent to the Congress of Schools of Public Health in Paris, (in Ottoman Turkish).

104 Cumming, “The International Sanitary Conference,” 976.

105 BOA., Tahrirat Kalemi Belgeleri (DH. EUM. THR.), 46/18, 10/Şaban/1328, 15/October/1910. This document located in documents of Editorial Office of Ministry of Interior Affairs, and it is about precautions of cholera contagion from Russia, (in Ottoman Turkish).

106 BOA, Umur-ı Mahalliye-i Vilayat Müdüriyeti Belgeleri (DH. UMVM.), 127/63, 11/Şaban/1332, 2/September/1914. This document located in documents of Budget Directory of Provinces of Ministry of Interior Affairs, and it is about funds for mobile quarantine stations, (in Ottoman Turkish).

107 Cumming, “The International Sanitary Conference,” 977.

Following the International Sanitary Convention of 1912, the conferences were interrupted until 1926 due to the outbreak of the First World War.¹⁰⁸ International efforts to prevent and control disease were resumed after the war, triggered by epidemics of typhus and the flu. Claiming 15 million lives in 1918–1919, the flu revealed the imperative to set up an international organization spanning Europe, America, Asia and Africa.¹⁰⁹ Furthermore, due to the severity of the malaria epidemics during the same period, an international conference was held in Warsaw in 1922,¹¹⁰ and the International Malaria Commission was set up (1923).¹¹¹ The public health measures proposed at the Warsaw Conference, the first occasion on which European states met after the war, were partially adopted during the Paris Sanitary Conference in 1926.¹¹²

Thirteenth International Sanitary Conference: Paris, 1926

The conference began on 3 May 1926 and culminated in a new Sanitary Convention that was signed by delegates of over sixty states. The French Minister of Health opened the conference that took place at the Palais d'Orsay, and M. Barriere was elected chairman. Committees were set up on two main issues, which were the organization chart of the International Office of Public Health and its permanent secretariat, and the standardization of the definition of an infected port or region and necessary measures. The responsibility of the newly founded Republic of Turkey to report on quarantine in the ports of the Dardanelles was defined and a joint protocol was signed. New regulations regarding maritime transport and quarantines were introduced to prevent the spread of the plague, cholera, yellow fever and other epidemics, and an exchange of information on the sanitary conditions in the Hejaz took place.¹¹³

During the International Sanitary Conventions in Paris in 1903, 1912 and 1926, the main themes were maritime transport and the condition of sanitary stations, and the responsibility of Arab states in the prevention of the spread of cholera from the holy sites through the pilgrims. At the International Sanitary Convention on 21 June 1926, states were represented at the level of plenipotentiaries and prime ministers, and measures to prevent the spread of typhus and

108 Ibid., 977–78.

109 Metin and Aydın, *WHO and Turkey*.

110 Marta Alexandra Balinska, “The National Institute of Hygiene and Public Health in Poland 1918–1939,” *Social History of Medicine* 9(3) (1996), 431–432.

111 Metin and Aydın, *WHO and Turkey*.

112 Balinska, “Public Health in Poland,” 432.

113 1926-Sanitary_EN. International Sanitary Convention, and Protocol of Signature. <http://darkwing.uoregon.edu/~iea/TreatyTexts/1926-Sanitary.EN.txt> (accessed November 26, 2007).

smallpox were discussed.¹¹⁴ The convention was signed by Afghanistan, Albania, Argentina, Belgium, Brazil, Bulgaria, Czechoslovakia, Chile, China, Cuba, Denmark, the Dominican Republic, Ecuador, Egypt, England, Finland, France, Germany, Guatemala, Haiti, the Kingdom of the Hejaz, India, Greece, Habeshistan, Honduras, Hungary, Iran, Ireland, Italy, Japan, Liberia, Lithuania, Luxembourg, Mexico, Monaco, Morocco, the Netherlands, Norway, Paraguay, Peru, Poland, Portugal, Rumania, San Marino, Spain, Switzerland, Sudan, the USSR, Tunisia, Turkey, the USA, Uruguay and Venezuela.¹¹⁵

A new round of meetings to amend the resolutions of the Thirteenth International Sanitary Conference and the Convention began on 12 April 1933. Signed by the leading politicians of England, Ireland, the Commonwealth, India and France, the resolutions were based on the convention of 2 January 1902. The objective of the International Sanitary Convention of 1 August 1935 was to regulate air traffic and navigation.¹¹⁶

Fourteenth and Final International Sanitary Conference: Paris, 1938

Last but not least, the fourteenth International Sanitary Conference in Paris in 1938 attempted to review and update the decisions of the earlier conferences of 1926 and 1933, and to exchange knowledge on the most recent advances in bacteriology.¹¹⁷

Quarantine regulations were revised and it was underlined that a sanitary observer had to be present during all travel. Diseases were classified, and the methods of epidemic control and laboratory tests were standardized. Egypt was assigned with setting up an International Sanitary Council in Alexandria to regulate and supervise the quarantines in the Mediterranean region, to meet standards of hygiene and regulate maritime transport. This organization was later turned into the Eastern Mediterranean Regional Office.¹¹⁸

On 31 October 1938, Germany, the Dominican Republic, Egypt, the USA, France, England, Ireland, India, Greece, Italy, Ethiopia, Japan, the Netherlands, Rumania and Sweden met to discuss the sanitary condition at the borders with

114 McCarthy, "A brief history," 1111–1112.

115 1926-Sanitary_EN.

116 France-Great Britain: Convention providing for the Reciprocal Enforcement of Judgments in Civil and Commercial Matters, with Protocol, *The American Journal of International Law* 31:1 (1937), 18–28

<http://www.jstor.org/view/00029300/di982716/98p0227s/0> (accessed November 26, 2007).

117 McCarthy, "A brief history," 1111–1112.

118 Minelli, "Origin and Development."

Egypt, its ports and quarantines. A set of procedures for access to Egyptian ports, the Red Sea and Suez Canal were drafted and submitted for signature.¹¹⁹

Conclusion

The search for international measures to prevent and control epidemics of cholera, the plague, yellow fever, malaria and typhus which ravaged the world throughout the 19th century, led to a series of International Sanitary Conferences under the leadership of European states. The conferences began in 1851 and ended in 1938. The International Sanitary Conferences, also called quarantine, health and sanitary conferences, took place in Paris in 1851 and 1859, İstanbul in 1866, Vienna in 1874, Washington D.C. in 1881, Rome in 1885, Venice in 1892, Dresden in 1893, Paris in 1894, Venice in 1897, and Paris in 1903, 1911, 1926 and 1938.

During these conferences, key concepts such as sanitation, disease and epidemics were defined and developed according to the most recent advances in microbiology, and methods to fight epidemics, quarantine techniques, prevention methods and rules of personal hygiene were debated. The critical importance of keeping towns and their drinking waters clean was recognized. Statistics on morbidity and mortality were kept, and the victims of epidemics were buried after disinfection. Although the basic objective of the conferences was to protect Europe from lethal diseases such as cholera and the plague and prevent damage to trade and transport from, they were also instrumental in reducing the frequency and severity of epidemics.

Complementing the International Sanitary Conferences of 1851–1938, a series of International Sanitary Conventions to establish international rules of quarantine regarding cholera, the plague and yellow fever, to enforce them, to develop travel and immigration policies and safeguard trade routes were ratified. The International Sanitary Conferences and Conventions laid the groundwork of the World Health Organization and current international legislation on the control of epidemics.

However the decisions made in International Sanitary Conferences were also means intervention in domestic affairs of Ottoman State and lots of decisions which made through 1851–1926 were extension of capitulations through the health care area. The Republic of Turkey which was born through Turkish War of Independence have been approached health care issues as a national issue and

119 Australian Treaty Series. 1939, No 4. Department of Foreign Affairs and Trade Canberra. Convention Amending the International Sanitary Convention of 21 June 1926, <http://www.austlii.edu.au/au/other/dfat/treaties/1939/4.htm>

all capitulations included health were abolished in Lausanne agreement in 1923.¹²⁰ In Turkey, after the Republic was constituted, the National Medical Congress convened in 1925. Especially first three congresses aimed to struggle against epidemics such as tuberculosis, malaria and syphilis. The health policies of the new Republic were shaped by the reports of these national congresses.¹²¹

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120 Uludağ, *One of the Last Capitulations*, 459.

121 Murat Aksu, “Türkiye’de tüberküloz mücadelesinde II. Milli Türk Tıp Kongresi’nin yeri” [Importance of Second National Medical Congress in struggle of tuberculosis in Turkey] Proceeding book of IXth Congress of Turkish History of Medicine (Ankara: Nobel Publishing, 2006), pp. 323–2, (in Turkish).

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Obituary

Juan Antonio Paniagua (1920-2010), Medical Historian

Pedro Gil-Sotres¹

The Spanish medical historian Juan Antonio Paniagua Arellano (Artajona, Navarre, 1920) passed away in Pamplona on 11th February. He read medicine at the University of Valladolid (1945) and received his PhD at the Complutense University of Madrid (1948). For thirty years he was Professor of History of Medicine and Pharmacy at the University of Navarra (Spain), where he carried out research into Medieval Latin Medicine and trained many students.

In 1948 he began his studies on the History of Medicine in Madrid under the guidance of Professor Pedro Laín Entralgo (1908-2001) who, since 1942, had held the only Chair for the History of Medicine existing then in Spain. While working with Laín Entralgo, Paniagua was the editorial secretary of the journal *Archivos Iberoamericanos de Historia de la Medicina y Antropología Médica* (founded in 1949, and published now under the title *Asclepio*), and a founder member of the Spanish Society for the History of Medicine. It was Laín who encouraged him to study the life and work of the physician and professor at de Montpellier's University, Arnau de Vilanova (c.1240-1311), a field of study which was to bring Paniagua international recognition.

As he was convinced that, in order to strip the written works of Arnau de Vilanova of any dubious ascriptions, it was necessary to become familiar with them at first hand, in 1956 he moved to Paris to study the manuscripts kept in the French libraries. There he made acquaintance of other European medieval historians, who, in the post-WWII period, were constructing the subject on new documentary foundations. His research proved that many of the works attributed to the medieval physician, particularly those dealing with alchemy and magic, were apocryphal.

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Paniagua's scientific production was, and still is, an obligatory reference for historians of medieval medicine. Outstanding among his works are: *Vida de Arnau de Vilanova* (Valencia, 1969), the critical edition in two volumes of Arnau's aphoristic work (Barcelona, 1990 y 1993), the publication of his own Spanish version of *Régimen para el rey de Aragón* (Jaime II), Saragossa, 1980; and the monograph *El doctor Chanca y su obra médica: vida y escritos del primer médico del Nuevo Mundo* (Madrid, 1977) which won him a Spanish award. After his retirement from teaching tasks, his most important articles on Arnau were collected in the volume *Studia Arnaldiana: trabajos en torno a la obra médica de Arnau de Vilanova, c.1240-1311* (Barcelona, 1994).

From 1975 to 2000, Juan Antonio Paniagua, together with Luis García Ballester and Michael McVaugh, directed the *Arnaldi de Villanova Opera Medica Omnia (AVOMO)*, an international project for the criticism and study of the medical works of Arnau de Vilanova. To date 13 volumes have been published, authored by a broad interdisciplinary panel of European and American researchers.

Juan Antonio Paniagua combined a great intellectual stature with a deep human sensitivity. His kind, frank nature made discussion the most grateful and significant element of his lectures. The opinions of his audience, even if they were far from what he thought or uphold, attracted always his kind attention and interest. His open-mindedness was proof of the true wisdom of those few who are always willing and ready to learn.