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Physicians and Fertility Control in the Netherlands

The Netherlands, like many other European countries, began to experience a strong fertility decline during the last quarter of the nineteenth century. The annual values of the total fertility rate (TFR—the average number of children per woman) in Figure 1 show that after an initial rise, fertility started its decline in 1879. This decline continued until 1937, when the average number of children per woman had reached 2.57, three children less than in 1879. A further decline occurred from 1966 to 1975; during this period, TFR decreased from 2.90 to 1.65.¹

The transition that took place between 1880 and 1930 was recognized as crucial almost from its inception. Beaujon (1853–1890), the Dutch economist and statistician, for example, argued in 1888, using marital fertility rates for the period from 1860 to 1879, that “restriction of the fertility of marriages is not completely unfamiliar to our country.” In his opinion, indications of the “voluntary limitation of marital fertility” could be found in several provinces during the second half of the 1870s. He also noted, however, that “control of the number of births within marriage is a rare exception.”²

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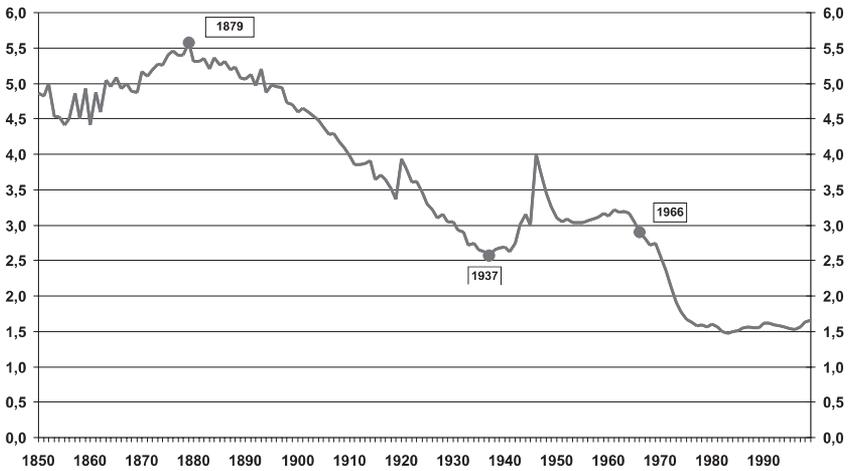
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1 Van Poppel, “Van vijf naar 16 miljoen. De groei van de Nederlandse bevolking in de afgelopen eeuw,” in J. G. S. J. van Maarseveen and P. K. Doorn (eds.), *Nederland een eeuw geleden geteld. Een terugblik op de samenleving rond 1900* (Amsterdam, 2001), 65–87.

2 Anthony Beaujon, “De vruchtbaarheid der huwelijken in Nederland, en de oorzaken die haar bevorderen of beperken,” *Bijdragen van het Statistisch Instituut*, IV (1888), 68–96; *idem*, “Bevolkingsstatistiek der Nederlandsche steden,” *ibid.*, VI (1890), 38–49.

Fig. 1 Average Number of Children per Woman (Total Fertility Rate), Netherlands 1850–1999



Verrijn Stuart (1865–1948), the first director of the Central Bureau of Statistics (now called Statistics Netherlands), registered no surprise that a strong and deliberate control of marital fertility appeared to be relatively uncommon in the 1870s. After all, Beaujon’s study “did not extend further than 1879, when propaganda in favor of Malthusianism and Neo-Malthusianism, coming from Britain, was still in its infancy.” Verrijn Stuart extended Beaujon’s study with data for the period from 1880 to 1890, and formulated a much stronger conclusion: “[T]he strong decrease in marital fertility since 1879 cannot be explained by the changing economic situation . . . but might with a high degree of certainty be attributed to the diffusion of neo-Malthusian practices. . . . It is possible that the neo-Malthusian doctrine preached here for the first time at the end of the 1870s, was gaining direct acceptance among a number of married women who only out of ignorance of the means advocated by this doctrine had hitherto refrained from applying them, whereas, after having been adopted by these groups at once, the idea had gradually won acceptance in wider circles of the population.” As early as the 1880s, medical doctors, such as Philip Kooperberg, a hospital director, also interpreted the decreasing birth rates as caused “by the principle of preventive

population, which is being put into practice by various groups of society.”³

The question addressed in this chapter is whether medical professionals comprised one of these groups. In theory, physicians could have been forerunners of family limitation, given their assumed superior knowledge of the reproductive process, their capacity to disseminate information, and their access to networks of other experts. Understanding the role of medical professionals in the fertility transition is not simply a matter of discovering their collective position in the birth-control debate. Their own reproductive histories are at least as important. To determine the relative fertility of physicians, we analyzed two contemporary studies and compared microlevel data about families of Dutch physicians in certain western municipalities from 1850 to 1920—the period during which the fertility transition took place in The Netherlands—with that about a control group of couples married between 1859 and 1900 in The Hague. The application of simple decomposition and standardization techniques reveals two distinct family-building strategies, one based on the “stopping” and the other on the “spacing” of births.

THE ROLE OF THE NEO-MALTHUSIAN LEAGUE IN THE DEBATE ABOUT CONTRACEPTION Public debate about contraception started in the Netherlands during the 1870s and left its tracks in numerous pamphlets, books, newspapers, and political and scientific journals. Much of the controversy was stirred by the translation of Drysdale’s *The Elements of Social Science* (London, 1854), in which several pages were devoted to the techniques of preventive sexual intercourse, and that of Knowlton’s *Fruits of Philosophy, or the Private Companion of Young Married People by a Physician* (London, 1832), which gave an overview and evaluation of contraceptives. Drysdale’s work appeared in Dutch in 1873 (Part 2) and 1875 (Part 1); a second print was published in 1878/79, and a third cheap edition in 1884. Knowlton’s book was translated in 1877. The book was reprinted in the same year, and a third and fourth edition appeared in 1878 and 1880. In 1878, Besant’s *The Law of Population* (London, 1878) was translated into Dutch. Critical reviews of

3 Coenraad Verrijn Stuart, “Een belangrijk feit op het gebied der Nederlandsche bevolkingsstatistiek,” *ibid.*, VIII (1892), 8–38; Philip Kooperberg, *Geneeskundige plaatsbeschrijving van Leeuwarden* (’s-Gravenhage, 1888), 179–180.

Drysdale's work, books by Dutch authors focusing on the theory of Robert Malthus and his proposed solutions to the population problem, discussions in *De Werkmansbode*—the journal of the liberal General Dutch Working Man's Organization (*Algemeen Nederlandsch Werklieden-Verbond* [ANWV])—and lectures about the population problem across the country for members of the ANWV added fuel to the growing fire.⁴

In 1879, the *Congrès périodique international des sciences médicales* met in Amsterdam. Drysdale, one of the speakers, was invited to give a public lecture in Amsterdam by Carel Victor Gerritsen (1850–1905), a radical liberal who had been in touch with prominent British reformers and who was the husband-to-be of Aletta Jacobs, the first Dutch woman physician. Soon afterward, Gerritsen, together with Bernardus H. Heldt, chairman of the General Dutch Working Man's Organization, and Jan M. Smit, teacher of mathematics, decided to found an organization to promote birth control as a solution to the population problem; they modeled it after Drysdale's Malthusian League. This Neo-Malthusian League (*Nieuw-Malthusiaansche Bond* or NMB) was founded in 1881 with Gerritsen as its first president, Heldt as first secretary, and Samuel van Houten, a liberal ex-minister, as vice president. Its aim was to reduce poverty by achieving a satisfactory balance between means of subsistence and family size, birth control regarded as a means to this end. The official program of the NMB was published in 1882. According to the minutes of the first general meeting, held in 1882, the NMB had 233 members (the number of married couples in the reproductive age span being around 479,000). This number grew to 385 in 1885 and to 603 in 1897. In 1904, the membership increased to 1,117, in 1910 to 2,217 (of 718,000 married couples),

4 George Drysdale, *De elementen der sociale wetenschap: de oplossing van het maatschappelijk vraagstuk door een Doctor der geneeskunde* (Rotterdam, 1873–1875), 2v.; Charles Knowlton, *Vruchten der filosofie: verhandeling over de bevolkings-kwestie en de sexueele moraal* (Rotterdam, 1877); Annie Besant, *De wet der bevolking uit het Engelsch vert. door C.V.G. (Barneveld, 1878)*; Gé Nabrink, *Seksuele hervorming in Nederland. Achtergronden en geschiedenis van de Nieuw-Malthusiaanse Bond (NMB) en de Nederlandse Vereniging voor Seksuele Hervorming (NVSH) 1881–1971* (Nijmegen, 1978), 48–54, 60–66; Röling, “*De tragedie van het geslachtsleven.*” *Dr. J. Rutgers (1850–1924) en de Nieuw-Malthusiaansche Bond (opgericht 1881)* (Amsterdam, 1987), 42–50. For a detailed review of the discussion in the ANWV, see Philip van Praag, “Het politieke debat over armoede en geboortenbeperking in het Algemeen Nederlandsch Werklieden-Verbond (1879–1882),” in Mies Campfens, Margreet Schrevel, and Fritjof Tichelman (eds.), *Op een beteren weg. Schetsen uit de geschiedenis van de arbeidersbeweging aangeboden aan mevrouw Dr. J. M. Welcker* (Amsterdam, 1985), 60–74.

in 1920 to 6,536 (888,000 married couples), and in 1930 to 9,096 (1,080,000 married couples).⁵

The League's board immediately published a series of small, inexpensive leaflets, many of which were reprinted several times. In 1882, the secretary announced that one of the planned issues in this series would be a physician's overview of available contraceptives, although "this doctor [had] not yet decided to put his name under the piece." The *Middelenboekje*, as this medical pamphlet came to be called, appeared in 1884, outlining contraceptive techniques in great detail. In no time, 2,000 copies had been sold; a second edition was published the same year. By 1933, more than 282,000 copies had been distributed, not to mention many clandestine reprints.⁶

Yet, opposition to Neo-Malthusianism was vehement and emotional, and it intensified when the NMB gained legal recognition in 1895. The crusade for moral reform in the Netherlands, which had started in the mid-nineteenth century, gained momentum at the end of the 1870s. The fight against contraceptives soon became one of its spearheads. In 1878, the orthodox Protestant Dutch Association for the Suppression of Prostitution (*Nederlandsche Vereeniging tegen de Prostitutie* or NVP) was founded to oppose measures designed to regulate prostitution, which were felt to discriminate against women. Women who grew up in the same religious and patrician circles soon established their own *Nederlandsche Vrouwenbond tot verhooging van het Zedelijk Bewustzijn* (Dutch Women's Union for Increased Moral Awareness). In 1892, lower middle-class orthodox Protestants organized the more practically oriented *Middernachtzending* (Midnight Mission). The year 1899 saw the foundation of the Society for Resistance to Neo-Malthusianism (*Vereeniging tot Bestrijding van het Nieuw-Malthusianisme*), which had its roots in the same orientation. Opposition to the use of contraceptives (and abortion) was based on their interference with the divine plan. Moreover, contraceptives were said to encourage vice by offering protection against the risk of extramarital sex. Unwanted pregnancy and venereal disease

5 Nabrink, *Seksuele hervorming*, 66, 67; Röling, *De tragedie*, 51. For membership data, see Nabrink, *Seksuele hervorming*, 66, 70, 99–100. For numbers of married couples at census dates, see Central Bureau of Statistics, *Bevolking van Nederland naar geslacht, leeftijd en burgerlijke staat 1830–1969* ('s-Gravenhage, 1970).

6 Nabrink, *Seksuele hervorming*, 69, 106–107.

were the wrath of God, the penalty paid for wrongdoing. Furthermore, birth control weakened reproductive capacity and thus the future of the nation.⁷

The formation of a political majority by religiously inspired political parties resulted in a program of moral reform. In 1911, when the Moral Offences Act (*Wet tot bestrijding van zedeloosheid*) came into effect, the Penal Code prohibited public display, unsolicited offering, and public advertising of contraceptives, as well as the sale of contraceptives to minors under sixteen years. At the same time, the abortion law of 1886 was amended to make abortion a crime not only against life but also against public morality. This situation gave the birth-control movement a problematical legal status. The national law designed to weaken the movement's influence was reinforced, particularly in the Catholic south, by more stringent local ordinances. From the second decade of the twentieth century onward, the Dutch birth-control movement became socially and intellectually more isolated. The general sentiment was that respectable people did not discuss birth control, in any terms or in any context.⁸

THE MEDICAL PROFESSION AND THE BIRTH-CONTROL DEBATE IN THE NETHERLANDS, 1870-1930 From 1880 to 1930, medical doctors probably confronted a variety of public and personal health problems that might have benefited from a change in sexual practices

7 Recognition was gained thanks to the efforts of Van Houten, who at the time held the post of minister for a short period. See Röling, *De tragedie*, 56-59. Pieter Koenders, *Tussen christelijk réveil en seksuele revolutie: bestrijding van de zedeloosheid in Nederland, met nadruk op de repressie van homoseksualiteit* (Amsterdam, 1996), 47, 60-93; Petra de Vries, *Kuisheid voor mannen, vrijheid voor vrouwen: de reglementering en bestrijding van prostitutie in Nederland 1850-1911* (Hilversum, 1997), 82-127; Röling, *De tragedie*, 135-141; Hanneke Westhoff, *Natuurlijk geboortenregelen in de twintigste eeuw. De ontwikkeling van de periodieke onthouding door de Nederlandse arts J. N. J. Smulders in de jaren dertig* (Baarn, 1986), 31-32. In 1918, the Dutch Roman Catholic Society for Large Families (*R.K. Bond voor Grote Gezinnen*) was founded to "oppose the lack of tolerance for larger families," which in the Society's view had become manifest in public opinion (Westhoff, *Natuurlijk geboortenregelen*, 39-41). See also Koenders, *Christelijk réveil*, 116-121.

8 For overviews of the political discussion, see Röling, *De tragedie*, 214-225; Koenders, *Christelijk réveil*, 137-170; Jan de Bruijn, *Geschiedenis van de abortus in Nederland. Een analyse van opvattingen en discussies 1600-1979* (Amsterdam, 1979), 79-94. Under the law of 1886, one had to prove in court that the foetus was still alive at the time of the operation. In accordance with the prevailing philosophy, no exception was made in the 1911 law to allow abortion on strictly medical grounds, since abortion on medical grounds could always be performed. Thus did the law safeguard abortions when the woman's life was in danger. See De Bruijn, *Geschiedenis*, 35-40, 83-112. William Petersen, "First impressions (1954) of Dutch society," in *idem*, *The Politics of Population* (Garden City, 1964), 149.

or the use of some form of birth control. Child spacing alleviated many of the medical problems of female patients. Birth control became an issue if pregnancy posed a threat to the health of the prospective mother, and in such cases, physicians had to inform their patients about the potential danger of sexual intercourse. Obstetricians and gynecologists, in particular, were confronted by patients who suffered from the aftereffects of illegal abortion. In the fight against infant mortality, physicians generally recommended the intensification and extension of breastfeeding, although some ridiculed the belief in the efficacy of prolonged lactation as a contraceptive strategy. Medical practitioners and medical committees suggested a variety of prophylactics designed to prevent venereal diseases, including the sheath and various vaginal and cervical caps.⁹

Routine medical intervention in pregnancy and birthing may also have had an impact, at least after the start of the twentieth century. Given that physicians delivered many live-born children, and that obstetric practitioners often attended pathological and protracted deliveries, a large percentage of women in the reproductive age group were in contact with the medical profession at a crucial moment in their lives. The medical profession also addressed the regulation of sexuality and contraception in the prevention, diagnosis, and treatment of sexually transmitted diseases. Patients with venereal disease belonged to the age group with the highest sexual activity, namely, between twenty and fifty years. Patients with genital-tract symptoms may have found it easier to discuss their sexual activities, including contraceptive matters than those seeking more traditional medical advice.

Furthermore, although particular medical doctors' knowledge about the various forms of contraception and the related psychological or medical costs may have been deficient, the medical profession as a whole was better-informed about these matters than the population at large. Of the methods in use during the late nineteenth and early twentieth centuries—extended nursing, coitus interruptus, abortion, jellies, condoms, safe periods, abstinence, douching, sponges, pessaries, and sterilization—a couple (abortion and sterilization) could only be safely applied by medical

9 Annemarie van Eekelen, *Naar een rationele zuigelingenvoeding: voedingsleer en kindergeneeskunde in Nederland (1840–1914)* (Nijmegen, 1984); De Vries, *Kuisheid*, 58; Annet Mooij, *Geslachtsziekten en besmettingsangst: een historisch-sociologische studie, 1850–1990* (Amsterdam, 1993), 46–47.

doctors. Other methods, such as the diaphragm, could only be effectively applied with some medical assistance. Several other methods certainly benefited from medical advice. Some contraceptive measures were simple applications of medical devices. The effectiveness of periodic abstinence, a method suggested by part of the medical profession, depended heavily on the degree to which fundamental discoveries in sexual physiology had permeated the profession.

The medical profession had a variety of means to distribute information on birth-control techniques—medical journals and instruction manuals for the medical world and the educated laymen, as well as courses, books, and pamphlets to teach new behavior. The high social standing and growing importance attached to the medical profession in general gave its advice more and more weight, not only with patients but also with editorial boards and newspaper owners on whom they could prevail for, say, a ban on advertisements of suspected abortionists or sellers of contraceptives.

A physician's own reproductive behavior might also have served as a model for other social groups—particularly university graduates. University-graduated doctors, usually from the upper middle class and in a high tax bracket, regarded themselves as bearers of a cultural tradition. Their status increased as a consequence of the hygienic and vaccination campaigns and from the 1890s onward, when Louis Pasteur's new techniques spread throughout the population and the discovery of the new antidotes seemed to justify the belief in medical progress. Their working conditions, earnings, and professional opportunities all improved, taking them to a higher rung of the social ladder.¹⁰

Physicians, however, were hardly positive about the potential health benefits of birth control. Mason used the term "violent criticism" to characterize the medical response to contraception in Britain until the 1870s. The attitudes of the Dutch medical profession were similar. As in Britain, medical attacks on contraception in the Netherlands had a variety of motives, based partly on the moral and religious objections to interfering with reproduction and partly on aversion to the mechanical operations of condoms

10 Jaap Goudsmit, *Anderhalve eeuw dokteren aan de arts. Geschiedenis van de medische opleiding in Nederland* (Amsterdam, 1978); Anita Fokkema, "Sociaal-economische verandering en demografische structuur te Amsterdam in de 19e eeuw," unpub. M.A. thesis (Utrecht Univ., 1981), 119–120.

and pessaries in the genital region. Yet, above all, physicians found birth control repellent. To give advice about, what's more prescribe, birth control was considered outside the therapeutic realm, tending toward an endorsement of sexual pleasure and nonmarital sex.¹¹

The first physicians in the Netherlands to comment on the Drysdale debate in Britain struck a note of alarm: "People want to marry and maintain a family moderate in number; they want the joys without the burden [of pregnancy]." These last words, a neat alliteration in Dutch, have remained a battle cry against contraception for almost a century. Coronel ended his instruction book for newlyweds by voicing his concern that contraception would degenerate sex life into the sheer satisfaction of animal drives.¹²

In 1879, Siegmund Samuel Rosenstein (1832–1906), a professor of internal medicine at the University of Leiden with an excellent reputation in the Netherlands, gave a lecture on sexual morality in which he rejected Neo-Malthusianism on all counts—economic, moral, and medical. He doubted whether limiting the family size of the poor would reduce child mortality: Most infants died in their first three months of life. Since they did not need much food at that age, poverty could not be the decisive factor in their high mortality. His worst fear with respect to contraception was that it would lead to the replacement of love by lust. Ironically, Johannes Rutgers, who was finishing his medical training at the time, wrote a report for a leading liberal Dutch daily newspaper that was full of admiration for this lecture. Between 1890 and 1920, Rutgers almost singlehandedly was responsible for the distribution of and propaganda about contraception in the Netherlands. He claimed later that his medical experience had changed his mind.¹³

The secretary of the NMB's report to the first general meeting of the organization stated that its 233 members included 17 medical doctors. Yet, none of them became a member of the executive

11 Michael Mason, *The Making of Victorian Sexual Attitudes* (Oxford, 1994), 186–187. For reviews of the medical profession's position in the debates, see Nabrink, *Seksuele hervorming*, 68–71, 80–96; Röling, *De tragedie*, 101–121; Westhoff, *Natuurlijk geboortenregelen*, 42–60; De Bruijn, *Geschiedenis*, 70–78; Lydi Schoon, *De gynaecologie als belichaming van vrouwen. Verloskunde en gynaecologie 1840–1920* (Zutphen, 1996), 150–158; Jan Noordman, *Om de kwaliteit van het nageslacht: eugenetica in Nederland, 1900–1950* (Nijmegen, 1989), 37–56.

12 Samuel Sr. Coronel, *De wittebroodsweken. Hygiënische wenken voor verloofden en jonggehuwden* (Amsterdam, 1889), 21–25.

13 Röling, *De tragedie*, 102.

committee, and only one sat on the general board. Furthermore, only one of the seventeen was an active member. Until 1891, only three physicians had been willing to do practical work for the NMB: Jacobs, Rutgers, and Romke de Waard. Jacobs (1854–1929) established her own practice in Amsterdam in 1879, focusing almost entirely on the health of women. A visit to England shortly after she had obtained her doctorate, during which she met Besant, Drysdale, and others, strengthened her interest in the theories of Neo-Malthusianism. In *Herinneringen* (Memories) (1924), she wrote, “When I worked at Amsterdam hospital, I was haunted by the suffering caused by frequent pregnancies, which, for various reasons, can have a disastrous effect on a woman’s life. In my long conversations with a variety of women in the delivery room, they explained to me that they found it impossible to prevent pregnancy when sexual abstinence was the only method available. I spent hours wrestling with this problem without any solution in sight. . . . [Then] I chanced upon an article . . . by Dr. W. P. J. Mensinga [who] recommended the use of a pessary for the kinds of cases I was dealing with.”¹⁴

An exchange of letters followed, and Mensinga sent Jacobs a number of specimens. After some experimenting, Jacobs announced that she could provide a safe and effective contraceptive. By openly dispensing birth-control devices in her private practice after 1881, Jacobs set herself apart from virtually all of her medical colleagues. “Not for one moment did I delude myself that I would be supported by many of my fellow doctors. I knew that they were deeply conventional and also that they were ignorant of society and social issues. Hence, I expected very little cooperation. On the other hand, I had never imagined that I would create such a furor.”¹⁵

After this negative early reception, some physicians of the 1880s and 1890s came to the defense of Neo-Malthusianism and contraception, but only cautiously. As the debate on sexuality intensified toward the end of the nineteenth century, the medical profession was drawn into it much against its will. The opponents, however, did not object to seeking publicity. One of them, Van Tussenbroek (1852–1925), the second woman physician but the first female gynecologist, in Holland, acted as a counterweight to Jacobs. She uncompromisingly championed sexual continence

14 Nabrink, *Seksuele hervorming*, 68–69, 81; Jacobs, *Herinneringen* (Amsterdam, 1924), 82.

15 Jacobs, *Herinneringen*, 83–84.

and appealed to her colleagues to give it their support, in order to overthrow the “twin sisters Prostitution and Neo-Malthusianism” that had survived because they were considered indispensable.¹⁶

But van Tussenbroek’s was clearly wishful thinking; most doctors were far too skeptical to adhere to this stand. The mainstream sought to avoid any public position. The Dutch medical association distanced itself from the issue and declared contraception a subject that did not belong to the field of medicine. In a debate in 1896, no physician defended Neo-Malthusianism on principle, as some had done earlier. Even Jacobs had withdrawn from the debate, probably because she had begun to give priority to the struggle for female suffrage.¹⁷

This reserve did not prevent an all-out attack on contraception in the *Nederlandsch Tijdschrift voor Geneeskunde*, the official journal of the Dutch Society for the Promotion of Medicine (*Nederlandsche Maatschappij tot Bevordering der Geneeskunst* [NMG]), the Dutch medical association in 1898. Pinkhof (1863–1943) argued that conflicts about contraception were no business of physicians. When Arthur M. Mendes de Leon (1856–1924), a gynecologist, discussed cases in which the pessaries distributed by the NMB had harmful effects, Treub (1856–1929), the most reputed professor of gynecology in Holland, also gave his views when challenged by van Tussenbroek. In his essay, “De geneesheer tegenover de facultatieve steriliteit,” which summarized the position of the Dutch medical profession of the previous year, Treub was pessimistic about the consequences of Neo-Malthusianism but even more averse to how opponents of Neo-Malthusianism mixed moral, social, and medical arguments. All moral objections were a matter of individual choice outside the realm of medicine.¹⁸

Concerning the matter of whether physicians ever had the duty to supply them, Treub wrote, “Everyone has the right to think as they wish about holy matrimony, but I cannot stomach

16 Catharina van Tussenbroek, “Bespreking van Het huwelijk van den gonorrhoeicus,” *Nederlands Tijdschrift voor Geneeskunde*, XXX (1894), 1196–1199.

17 Röling, *De tragedie*, 106.

18 Herman Pinkhof, “De geneeskunst en de willekeurige onvruchtbaarheid. (Naar een voordracht in de Eerste Medische Wijkvereniging te Amsterdam),” *Nederlandsch Tijdschrift voor Geneeskunde*, XXXIV (1898), 523–531; M. A. Mendes de Leon, “Geneeskundige beschouwingen—waarnemingen betreffende de meest gebruikte anti-conceptionele middelen,” *ibid.*, 532–547; Jacobs, “De strijd tegen de facultatieve steriliteit,” *ibid.*, 656–663; Hector Treub, “De geneesheer tegenover de facultatieve steriliteit,” *ibid.*

the opinion that the value of marriage is enhanced by the senseless production of children destined to an early death or an unhappy existence, or that the holiness of marriage would be diminished by the prevention of conception in such cases. . . . Who thinks—on account of prescriptions from the Bible or the Talmud—that he cannot give an advice on voluntary sterility, should have the courage of his conviction and should avow toward his patients that it is not his medical knowledge but his belief that is decisive here.” Recommending continence in such cases was “a result of the lamentable state of ignorance of the sexual instinct in which even medical doctors find themselves. In the textbooks of physiology, there is hardly a word on it; in the lessons it is not mentioned. To the future doctor, the physiology of sexual life, as far as it concerns the joining of the sexes, is a taboo that is upheld with the same care as young girls are kept away from pornography.” Sexual continence in marriage was injurious to health, he argued, and, as a result, more unnatural than contraception.¹⁹

Treub expressed misgivings about the social consequences of Neo-Malthusianism: The poor practiced it too little, the rich far too much. “It is my conviction that the bourgeoisie in the Netherlands are on their way to breaking their necks on Neo-Malthusianism.” Treub was unique in his dismissal of medical objections to birth control, which he considered a fraud, though he expected no benefits in general from contraception. It is unlikely that Treub convinced his colleagues, but hardly anyone dared contradict him in public. Thus did the medical profession retire from the debate about birth control. Whenever physicians were associated in public with Neo-Malthusianism, their organizations reacted with hostility.

The only two medical doctors besides Jacobs who were willing to do practical work for the NMB were Rutgers and de Waard. Rutgers (1850–1924) began his career in Rotterdam in 1879 and later became secretary of the NMB. In 1892, he started a free birth-control service, ten years after Jacobs had done so, following her advice to apply the new *pessarium oclusivum*. Public interest for his clinic was not overwhelming: “Office hours are not well-attended; the matter is still too unfamiliar,” he wrote in 1893. De Waard (1863–1940) was based in Groningen. He became a mem-

19 Treub, “De geneesheer tegenover,” 745–755.

ber of the NMB's general board in 1895, holding office hours in Groningen, probably starting in the late 1890s.²⁰

Publications of the NMB that appeared in the 1890s usually mentioned the names of nine or ten physicians who could provide "practical information." Given this small number, the dissemination of contraceptives remained limited. From 1892 onward, midwives were enlisted to distribute pessaries as an experiment. Yet, the number of midwives involved was also small. In 1897, Rutgers proposed that laywomen be trained to fit pessaries so that they could serve as "expert collaborators" with the NMB in different parts of the country. This new tactic of the NMB to make low-cost contraceptive aid available all over the country did not meet with general approval. The not unreasonable fear was that these women, working completely on their own, would also practice illegal abortions. The old supporters of the NMB strongly opposed the scheme. Rutgers' persistence with it caused an almost complete exodus of physicians from the NMB.²¹

Jacobs canceled her membership, too, but she did not change her mind about the benefits of contraception. Her view was that contraceptives, "just like any expedient against physical or social ills, must be openly prescribed by licensed practitioners, in this case doctors who should support their use." Rutgers felt that the distribution of contraceptives was so important that it warranted the risk of being associated with abortion. Mina Hoitsema, his wife, who was chairman of the NMB, argued in 1901 that the NMB's aim of offering practical assistance to the working classes made the decision inevitable: "Only 15 of the 2,400 doctors are in favor of the Neo-Malthusian League. The others are entirely against Neo-Malthusianism or the Neo-Malthusian League. They want to keep Neo-Malthusian assistance expensive and wish to make it a monopoly of doctors and the wealthy."²²

A last effort by the NMB to enlist physicians in the cause led to a complete rupture. The widely circulated NMB instruction manual, *De middelen ter voorkoming van groote gezinnen* (Means to Avoid Large Families), had always contained a list of physicians who

20 Rölöng, *De tragedie*, 183–184; Yvonne Prins, "Een vooruitstrevend Gronings arts. Dr. Romke de Waard (1863–1940)," *Jaarboek van het Centraal Bureau voor Genealogie*, LIII (1999), 110–153.

21 Rölöng, *De tragedie*, 189–190.

22 Jacobs, *Herinneringen*, 88; Rölöng, *De tragedie*, 190–193.

were willing to supply contraceptive aid, but several of these physicians claimed that their names had appeared in the more formal list of 1900 without their consent. The local medical organization in Amsterdam considered the manual's directory to be an infringement of the ban on advertising in the medical profession. The rationale for the ban was the concern that patients would be lured away from their physicians by colleagues who offered other, perhaps harmful, services. The Dutch Medical Association announced that the NMB's list was improper advertising and that henceforth the NMB was off limits for physicians. Furthermore, the organization's plans to train "expert collaborators" came under severe attack: "The fanatics behind these measures have shouldered a heavy responsibility." The medical profession publicly withdrew from the contraception battle almost completely; what happened privately is almost untraceable.²³

When Rutgers retired from the NMB in 1919, he had no successors. Only the elderly de Waard continued to instruct collaborators, who, with ominous regularity, were exposed as illegal abortionists. Commercial contraceptive services flourished, but they were marred by scandals, too. After this hostile period, however, birth control took an upward turn in the 1930s, when the NMB started to follow the example set by Marie Stopes in Britain. Stopes founded an advice center where contraceptives were distributed under strict medical control, guaranteeing the elimination of illegal abortion, which earned the cooperation of physicians. Bernard Premsele was the medical leader of the first such bureau in Amsterdam, aptly named after Jacobs. It opened its doors in 1932. By 1940, twelve such advice centers had spread across the Netherlands, staffed by a new generation of medical men, whose interest in the new medical specialization of sexology, was anathema to the Dutch Medical Association. But for the time being, their numbers were small.²⁴

A negative attitude toward contraception dominated the medical profession until the 1940s and 1950s. When the official journal of the Dutch Medical Association published a short article on birth control in December 1949, it was showered with cancellations and denunciatory letters. In some of these letters, the physi-

23 Röling, *De tragedie*, 114–118.

24 Röling, *De tragedie*, 229–230; Westhoff, *Natuurlijk geboortenregelen*, 53–58.

cian correspondents displayed gross ignorance of even the medical aspects of contraception. William Petersen, professor of sociology at the University of California, Berkeley, who visited the Netherlands in 1954, observed that “medical students in general are taught nothing of birth control; and even in Amsterdam, least hidebound of the universities, it was only recently, after a long uphill fight, that the local head of the planned–parenthood society was given permission to conduct free private classes for medical students interested enough to attend.”²⁵

A survey held in the 1960s showed that 87 percent of all general practitioners had acquired their knowledge of the medical aspects of sexuality by self-teaching. Birth control was still considered to be beyond the medical sphere of relieving pain and curing disease; the legal and religious issues involved were found to be troublesome; and the moral issues involved were not physicians’ to resolve. Family planning was not considered a proper task for the physician because contraception was unreliable and nonmedical and because family–planning ideology was thought to be a major cause of induced abortion. Physicians who took responsibility for family planning were thought automatically to share responsibility for unwanted pregnancies in the event of failure. Not until oral contraceptives were introduced in the 1960s was the problem of birth control brought within the familiar framework of prescribing medicines, a much more neutral task than discussing, touching, and manipulating genitals.²⁶

During the German occupation of the Netherlands, the NMB was forbidden, but it reorganized immediately after 1945 as *Nederlandse Vereniging voor Sexuele Hervorming* (NVSH, Dutch League for Sexual Reform). The bureaus for advice on sexual matters were restored and began a period of spectacular growth. Demand was booming. So long as the medical associations and agencies of public health kept their distance, the NVSH had a monopoly. During the 1960s, the NVSH achieved a membership of more than 200,000 and, for a short period, had wide influence in the Netherlands. But the restrictions on the free distribution of contraceptives remained in force until 1967, and relations with government representatives remained strained. NVSH officials insisted that their work would prevent illegal abortion, but they

25 Petersen, “First Impressions,” 149.

26 Frank Wibaut, *Anticonceptie en seksualiteit* (Amsterdam, 1975), 8.

were seriously compromised when Wim Storm, the chairman of the NVSH, a doctor himself, was sent to prison for a year in 1953 after conviction for practicing abortion on social instead of medical grounds. This incident possibly explains why the medical profession still hesitated to support the NVSH, though individual doctors participated in the advice bureaus and in discussions on sexual reform.

THE FAMILY SIZE OF PHYSICIANS: EARLY STUDIES Although a large majority of Dutch medical doctors publicly distanced themselves from Neo-Malthusianism, contemporaries, as well as present-day authors, have suggested that medical professionals did not refrain from applying birth control in their own families. In the first decade of the twentieth century, the principal opponents of Neo-Malthusianism drew attention to the half-heartedness and unreliability of most physicians in the fight for purity, and Rutgers considered physicians' hypocritical private use of contraception a scandalous treason. The discrepancy between physicians' public statements about birth control and their beliefs and practices is also the thrust of a recent study on the history of gynecology in the Netherlands. According to Schoon, "their opposition to prescribing contraceptives is curious in light of the fact that biographical research shows that the generation of gynecologists at the turn of the century were of the opinion that for themselves two children sufficed. Their small families contrasted with the large families of the first generation of gynecologists that did credit to their profession."²⁷

Although Röling did not find statistical data to substantiate Rutgers' suggestion for the Netherlands, he had little reason to doubt that Dutch physicians were any different from those in other countries. Yet, international statistical data on fertility in physicians' families during the period in which fertility started to decline are difficult to find. Crude statistical data for the Dutch city of Rotterdam, referring to all surviving marriages on January 1, 1929, show that the 228 physicians had an average of 2.32 children, almost the same as that of lawyers and solicitors (2.27), accountants (2.25), notaries and chemists (2.44), municipal officers above the rank of departmental clerk (2.19), and secondary school

27 Röling, *De tragedie*, 117; Schoon, *De gynaecologie*, 19–20. Unfortunately, the first generation studied by Schoon consisted of only four doctors, as did the second and third generations.

teachers (2.7), but clearly more than that of members of the Neo-Malthusian League, who had an average of only 1.70 children. Fourteen percent of the physicians' marriages had remained childless, compared to 19 percent for lawyers and solicitors, 18 percent for notaries and chemists, and 16 percent for Neo-Malthusian League members. The modal physician's family had two children; only 20 percent had four or more. For the Neo-Malthusians, the modal family had only one child; 9 percent had four or more.²⁸

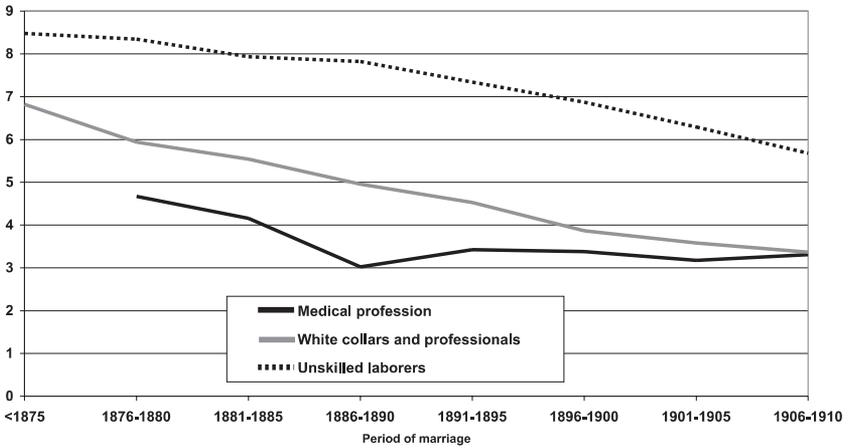
Since Sanders did not differentiate between periods of marriage, the fertility of nineteenth-century cohorts could not be studied. In the Dutch census of 1930, women who were still married at the time of the census were asked retrospective questions about their number of children born alive. Data were published only for marriages in which the women had married before age twenty-five and for marriage cohorts that had already completed their fertility at the time of the census. Figure 2 gives the average number of children per marriage for the medical profession, for white-collar workers and professionals as a whole, and for casual and unskilled laborers.²⁹

Figure 2 shows that medical professionals who married in the last quarter of the nineteenth century had one to one-and-a-half fewer children than people with a comparable social status and educational level. Fertility among doctors decreased to less than five children as early as the period from 1876 to 1880 and declined further in the decades that followed, reaching just over three children for cohorts who married in the late 1880s. Thenceforth, the level remained more or less the same. Other highly educated groups

28 Röling, *De tragedie*, 117. Angus McLaren, *A History of Contraception: From Antiquity to the Present Day* (Oxford, 1990), 196, also argued that notwithstanding their negative attitudes toward birth control, physicians clearly limited the size of their own families, but he did not present statistical data either. The same point applies to other studies focusing on the role of medical doctors. See, for example, John Peel, "Contraception and the Medical Profession," *Population Studies*, XVIII (1964), 133–145; Joyce M. Ray and F. G. Gosling, "American Physicians and Birth Control, 1936–1947," *Journal of Social History*, XVIII (1985), 399–411; Linda Gordon, "The Politics of Birth Control, 1920–1940: The Impact of Professionals," *International Journal of Health Services*, V (1975), 253–277. Jacob Sanders, *The Declining Birth Rate in Rotterdam; A Statistical Analysis of the Drop in the Number of Children in 24644 Families during the Last 50 Years* (The Hague, 1931).

29 Central Bureau of Statistics, *Volkstelling 31 december 1930. Inleiding tot de uitkomsten der elfde algemeene volkstelling, van de woningstatistiek en gezinsstatistiek, van de statistiek der huwelijksvruchtbaarheid en van de statistiek der academisch gegradueerden. Deel IX* ('s-Gravenhage, 1934). Because the data refer only to marriages surviving until the census date, the results may be influenced by selection. Medical doctors made up around 75% of all medical professionals.

Fig. 2 Average Number of Live Born Children in Surviving Marriages, by Period of Marriage and Social Group, Women Married before Age Twenty-five



reached this threshold fifteen to twenty years later. The fertility of unskilled laborers did not reach a comparable low level until the cohorts who married in the period 1950 to 1954—sixty-five years later than medical professionals. Marriages that remained childless tended to be much more common among medical professionals than among unskilled laborers, but the medical profession did not deviate much in this respect from other married intellectuals and white-collar workers.³⁰

An unpublished small-scale study by Fokkema, based on a family reconstitution study for Amsterdam cohorts married in the period 1850 to 1894, also contained information on the fertility of medical doctors. Fokkema made use of population registers, but because these registers were accessible only until 1892 at the time of this writing, it was impossible to follow all cohorts until the end of their reproductive periods. The analysis was limited to marriages that had lasted at least five years, and these marriages were followed until the wife reached age fifty, whenever possible. Only women who married before age thirty were included in the analy-

30 Van Poppel, *14e Algemene Volkstelling annex woningtelling*, 28 februari 1971. Serie A. Deel 2. *Bestaande huwelijken en vruchtbaarheid van gehuwde en gehuwd geweest zijnde vrouwen* ('s-Gravenhage, 1981), 136–142.

sis. In addition to studying a group considered to be representative of Amsterdam's marriages as a whole, Fokkema selected members of the ANWV, members of the *Sociaal Democratische Bond* (Social Democratic League, SDB, a socialist labor organization), teachers, representatives of higher social classes (municipal councilors, bankers, and brokers) and physicians, of whom only a small number (twenty-seven) were included.³¹

Fokkema's data have the advantage of providing information on an important factor determining fertility levels that must be taken into account when studying the fertility decline comparatively—namely, age. Medical doctors were clearly distinguished from other social groups in this respect. Due to the long period of educational preparation, the median age at marriage among medical doctors was 31.5 years, higher than that of any other Dutch social group (the sample as a whole married at age 25.8). The median age at marriage of upper-class wives was lower than that in other groups: Women married medical doctors at median age 24.5, bankers at 23.0, and councilors at 23.9, whereas Amsterdam women as a whole had a median age at marriage of 24.7 years.³²

Prenuptial births and prenuptial conceptions were uncommon among medical doctors: 4 percent of women gave birth to a child before marriage, and another 4 percent had a first birth interval of less than eight months. For teachers and other members of the upper class, these figures were almost the same, but in the Amsterdam sample as a whole, between 20 and 40 percent of first children were conceived before marriage. According to Fokkema, these lower percentages were a consequence of stricter norms regarding prenuptial sexual intercourse and the more restricted movement of upper-class girls. The interval between marriage and first birth when the first child was born at least eight months after marriage was 15.3 months among medical doctors, clearly longer than among the complete Amsterdam sample (between 12.8 and

31 Fokkema, "Sociaal-economische verandering." The ANWV and SDB had been actively involved in the debates on birth control during the 1870s and 1880s.

32 Data on age at marriage during the period 1812–1970 for a number of Dutch municipalities confirm this trend. The age at marriage of physicians was around the same as that of other professionals but two to three years older than that of the petty bourgeoisie and four years older than that of clerks. Physicians' wives were relatively young at the time of marriage. See van Poppel, Aart Liefbroer, and Wendy Post, "Vers une plus grande homogamie d'âge entre conjoints: différences entre les classes sociales et différences régionales aux Pays-Bas, 1812–1912," *Annales de Démographie Historique* (Paris, 1998), 73–111.

13.5 months) but no different from women married to teachers, union members, and upper-class men. The interval between first and second births was 20.7 months, almost the same as among the entire population. In the Amsterdam sample as a whole, the age at last birth for women married between 1850 and 1884 was 39.2 years and for women married between 1885 and 1897, 35.5 years. For medical doctors, however, the average age was only 32.9 years.

The data clearly show that compared with the Amsterdam sample, the selected upper- and middle-class groups had begun applying birth control earlier, and that “medical doctors, in spite of their aversion to Neo-Malthusian methods, evidently engaged in family planning.” Fokkema warned that the results could be biased because of the small numbers of observations and late or accidental pregnancies—not improbable given the imperfect knowledge and practice of contraception—but she concluded nevertheless that the use of contraception was an obvious factor explaining low fertility among medical doctors.

Fokkema’s data, although better suited to answering questions about the use of birth control among doctors than the published (census) data, still have their shortcomings. Like the census data, they focus only on the last decade of the nineteenth century and the first decade of the twentieth century when only small numbers of observations were available. Furthermore, Amsterdam, as the capital city and metropolis, is perhaps not a representative locality. Information on crucial characteristics of physicians’ fertility patterns, allowing for more detailed insight into the mechanisms driving the fertility decline, does not exist. To find out whether Dutch doctors began restricting their family size earlier, and to a greater degree, than other social groups requires a more detailed database for additional communities with individual-level data collected specifically for this purpose.

DATA AND METHOD We collected information on the complete reproductive histories of those medical professionals who received a formal medical education and started their professional and marital career after 1850. Using 1850 as a starting point permitted inclusion of marriage cohorts that had started reproduction before the onset of the general fertility decline. A disadvantage of this sample is the large variety of medical professionals in it: university

and non-university-trained practitioners (differentiated according to theoretical and practical training, branch of medicine [internal medicine, obstetrics, and surgery], and location [town, countryside or ship]) and military health officers, who, after a certain period, could serve as country or city healing-masters. From 1865 onward, all medical students had to pass a state examination consisting of a theoretical and a clinical part, which conveyed the right to the title of *arts* (doctor) and the authority to practice in all fields of medicine. Because examination entailed a university education, the careers and marriages of medical professionals tended to commence later than those of non-university-trained professionals.³³

Data collection was restricted to those medical professionals who started practicing during the period from 1850 to 1902 in the cities of The Hague, Leiden, Gouda, Delft, Amsterdam, or Rotterdam, as well as in the village of Rijswijk, all of which are located in the western Netherlands not far from one another. Their population size varied between 2,517 and 224,035 in 1850 and 3,405 and 520,602 in 1900. All of the physicians who practiced in these areas and who had passed their medical examination between 1850 and 1902 were eligible initially, though, in the end, the analysis was confined to those married in 1909 or earlier and under continuous observation ever since. The final sample consisted of 375 medical professionals, most of whom practiced in The Hague and Amsterdam.³⁴

Population registers and registration data were sources of information on the complete reproductive histories of physicians from the moment of marriage until their wives reached age fifty. Continuous population registers enforced by a Royal Decree of December 22, 1849, recorded information about residents of the municipality in question between 1850 and 1910 or 1920, after which a new form of continuous registration was introduced (family cards). Population registers recorded each individual household member's date and place of birth, relation to the head

33 Anja Hiddinga, "Obstetrical Research in the Netherlands in the 19th Century," *Medical History*, XXXI (1987), 281-305.

34 Beginning in 1867, the *Lijst van geneeskundigen, tandmeesters, apothekers drogisten en vroedvrouwen in de provincie . . .*, an annual state medical register, listed all officially recognized medical practitioners on January 1 of each year for each municipality. The Christian names, initials, university and non-university degrees, and date and place of examination, were given for each individual.

of household, sex, marital status, occupation, and religion. Household members who arrived after the registration had started were added to the list, and those who died or migrated were deleted (with reference to the place and date of migration or date of death). The registers are our main source of information on children born in the household, though information on stillbirths does not appear in them.

Finding out whether physicians' special knowledge and skill had an effect on their fertility levels meant comparing the reproductive histories of their families with that of other professional groups, at least some of which had to be of similar socioeconomic and educational status. For this purpose, we used information from a random sample of 1,600 couples from all walks of life, married in The Hague between 1859 and 1902. Their socioeconomic status was indicated by the following classification: upper class (employers in industry, professionals, and high-ranking civil servants and military personnel), petty bourgeoisie (shopkeepers, small entrepreneurs/merchants, and self-employed craftsmen), white-collar middle class (lower-level professionals and civil servants, foremen, and supervisors), farmers, skilled manual workers (craftsmen/skilled laborers in small business/industry, service employees, and lower-ranking military), and casual and unskilled laborers, including agricultural laborers.³⁵

The information on the life histories of the families in the medical-professional and random sample is not yet complete. In some cases, events that took place before arrival of the medical professionals in the selected cities were not recorded. For example, not all of the children who were born and died before arrival of the families in the cities have been included in the database. As a result, information on child parity, birth interval, and interval between marriage and first birth may be biased. The main implication of this bias on our results would be an underestimation of fertility level, in particular parity data. This bias affects only doctors, since our control group consists only of people who married and stayed in The Hague. To limit its effect, only medical professionals whose dates of marriage, entry, and children's birth permitted their reproductive career to be followed from the start were included in the final sample.

35 We used a slightly adapted version of a classification discussed in Jacq J. Giele and Gert-Jan van Oenen, "De sociale structuur van de Nederlandse samenleving rond 1850," *Mededelingen van de Nederlandse Vereniging voor Sociale Geschiedenis*, XLV (1974), 2–32.

The sample is not representative of all medical professionals who practiced in the Netherlands during the period in question. The focus on cities excludes almost all less-qualified country surgeons, naval surgeons, and rural man-midwives and, in general, overrepresents university-trained medical professionals. The large majority of the university-trained medical professionals in the sample had graduated at two of the four universities, Leiden and Amsterdam. The religious denomination of the doctors in our sample deviated considerably from that of the population as a whole: Jews, members of liberal Protestant groups (Mennonites, Remonstrants, and Lutherans), and nonpracticing people were overrepresented, whereas Catholics were underrepresented. However, this proportional over- and underrepresentation of the various religious denominations applied to all university-trained professionals until far into the twentieth century. Given the known differences between religious groups in their willingness to accept contraception, this imbalance might have had consequences regarding the adoption of new reproductive behavior in the medical profession.

FERTILITY DECLINE AMONG PHYSICIANS: UNDERLYING MECHANISMS
 In recent decades, a variety of methods have been proposed to study the extent of fertility control within marriages. All of these methods seek to identify how different factors affect fertility behavior. In addition to the Coale-Trussell model used to detect the transition from a parity-invariant to a parity-variant fertility pattern, cohort parity analysis and McDonald's model should be mentioned. The benefit of McDonald's method is that it provides simple measures of fertility control that enable a determination of which strategy the physicians and the control group used to build their families, particularly as it relates to "stopping" and "spacing." Stopping is characterized by a parity-specific control in which births are allowed to arrive without any "attention to timing until a maximum sustainable number has been reached . . . at which parity-specific point there is an absolute cessation of childbearing." Spacing as a strategy is meant to slow "the rate at which births arrive throughout much, if not all, of the reproductive union."³⁶

36 See Ansley J. Coale and T. James Trussell, "Model Fertility Schedules: Variations in the Age Structure of Childbearing in Human Populations," *Population Index*, XL (1974), 185-258; Paul A. David and Warren C. Sanderson, "Measuring Marital Fertility Control with CPA," *ibid.*, LIV (1988), 691-713; Peter McDonald, *Nuptiality and Completed Fertility: A Study of*

McDonald proposed a simple descriptive tool to distinguish patterns of starting births, stopping births, and spacing the intervals between births by writing the average completed fertility of ever-married women (B) as a function of five variables: the proportion of the group who have at least one child (S), the mean age at last birth (L), the mean age at marriage among women who ever had a birth (M), the mean length of the interval between marriage and the first birth (F), and the mean length of interbirth intervals (I):

$$B = S \left(1 + \frac{L - M - F}{I} \right).$$

In this formula, starting is represented by $(M + F)$, stopping by L and, spacing by I . The component S is an indicator of childlessness or the prevalence of sterility. According to this formula, the effects of starting, stopping, and spacing can be seen simultaneously.

Information for the medical profession and for the control group involving (almost) all of the components of this equation is given in Table 1. Median values were used instead of mean values to avoid a strong influence of outliers. The control group for The Hague and the medical-professional sample were divided into three marriage cohorts (1850–1879, 1880–1889, and 1890–1909). Information concerning the control group is available for five social categories—upper class, white-collar middle class, petty bourgeoisie, manual workers, and unskilled and casual workers.

Since the end year, 1879, of the first marriage cohort is the latest point considered to mark the start of the fertility decline at the national level, the fertility transition might already have been underway even by 1850. As a consequence, the effect of certain components of the fertility decline might have been underestimated, in particular age at last birth.

Table 1 gives an indication of the age at which the medical profession, vis-à-vis the control group, started family building. Compared with groups of higher social status, wives of medical professionals in the first two cohorts started childbearing early—the difference being on the order of two years. Whereas the upper class in the more recent cohort tended to marry younger, medical professionals generally wed later. This situation might have been

Table 1 Components of the Average Completed Fertility of Medical Professionals and a Random Sample from The Hague, by Marriage Cohort

	PERIOD OF MARRIAGE								
	1850-79			1880-89			1890-1909		
	MEDIAN	N	MEDIAN	N	MEDIAN	N	MEDIAN	N	
Upper class	26.97	51	24.05	25	24.21	36			
Petty bourgeoisie	24.99	111	24.78	119	24.32	158			
White-collar middle class	26.89	44	24.42	29	24.87	55			
Manual workers	25.53	203	24.49	200	24.56	219			
Casual/unskilled workers	24.50	45	24.59	37	24.72	83			
Medical profession	24.86	130	24.62	82	26.15	171			
	MEDIAN INTERVAL IN MONTHS BETWEEN MARRIAGE AND FIRST BIRTHS								
	MEDIAN	N	MEDIAN	N	MEDIAN	N	MEDIAN	N	
Upper class	11.80	40	12.22	23	12.78	30			
Petty bourgeoisie	10.78	87	10.02	101	10.35	136			
White-collar middle class	10.51	33	9.66	23	9.59	44			
Manual workers	10.71	158	9.20	147	9.72	187			
Casual/unskilled workers	10.28	26	10.15	24	7.69	65			
Medical profession	12.05	121	12.00	80	13.04	168			
	MEDIAN INTERVAL IN MONTHS BETWEEN NON-FIRST BIRTHS								
	MEDIAN	N	MEDIAN	N	MEDIAN	N	MEDIAN	N	
Upper class	24.90	155	24.08	61	22.82	90			
Petty bourgeoisie	20.17	486	21.42	395	22.67	455			
White-collar middle class	23.79	106	25.23	45	21.50	151			
Manual workers	23.65	892	21.91	785	21.85	711			
Casual/unskilled workers	23.98	207	26.30	158	22.28	326			
Medical profession	21.90	394	22.40	191	24.00	302			

Table 1 Continued

	PERIOD OF MARRIAGE								
	1850-79			1880-89			1890-1909		
	AVERAGE NUMBER OF CHILDREN IN MARRIAGES WITH CHILDREN		N	AVERAGE NUMBER OF CHILDREN IN MARRIAGES WITH CHILDREN		N	AVERAGE NUMBER OF CHILDREN IN MARRIAGES WITH CHILDREN		N
Upper class	4.76	43	3.95	21	4.65	26			
Petty bourgeoisie	6.19	101	4.96	101	4.58	129			
White-collar middle class	4.83	29	3.23	22	4.42	45			
Manual workers	6.04	181	5.85	168	4.88	187			
Casual/unskilled workers	6.25	40	6.59	29	5.45	74			
Medical profession	4.42	103	3.41	71	2.87	147			
	MEDIAN AGE AT LAST BIRTH								
	MEDIAN		MEDIAN		MEDIAN		MEDIAN		N
Upper class	34.82	43	31.53	21	33.48	36			
Petty bourgeoisie	37.13	101	33.49	101	33.39	129			
White-collar middle class	33.82	29	31.10	22	33.60	45			
Manual workers	39.30	180	36.19	168	34.20	187			
Casual/unskilled workers	37.15	39	38.34	29	35.36	74			
Medical profession	35.86	102	30.91	70	32.41	146			

due to the physicians' prolonged university training. The consequence was that, in this cohort, the medical professionals were able to restrict their family size more easily.

The differences in exposure time deriving from differentials in the age at marriage do not make allowance for age-specific fecundity during the decreased exposure time. This factor is, however, taken into account when attention is directed at the length of the first birth interval. This variable also includes such factors as delay of marriage consummation, irregularity of sexual intercourse early in marriage, and premarital pregnancies. Table 1 shows that the medical profession saw its first child arrive rather late after marriage; the median interval was more than twelve months. In the more recent cohort, the birth of the first child was postponed for even a longer time; the median interval had increased by one month. Compared with other social groups, physicians had their first child late, and the difference even increased over time, particularly relative to the working class.³⁷

Together, the median age at marriage and the median length of the first birth interval constitute the median age at first birth. The combination of those two factors significantly reduced the length of the reproductive period among doctors by almost two years. In other social groups, childbearing tended to start earlier, mainly because of the younger age at marriage.

An important factor determining the fertility of women who married is the age at which they stopped childbearing. As Table 1 shows, in the oldest cohort, wives of medical professionals stopped childbearing, on average, at around the same age as women in other privileged social groups; in cohorts married after 1879, the age reduced dramatically to thirty-one. In the cohort who married from 1890 to 1909, the age remained low. The range between starting and stopping was small for physicians' families and decreased as the nineteenth century advanced. Physicians' differences from other social groups, with the exception of the upper class, were pronounced in the marriage cohort of 1880–1889; the median age at last birth for their wives was five to seven years lower than for working-class women. Only in the last decade of the nineteenth century did the age limit for childbearing in these social groups start to decrease. However, it never plummeted to the levels among physicians.

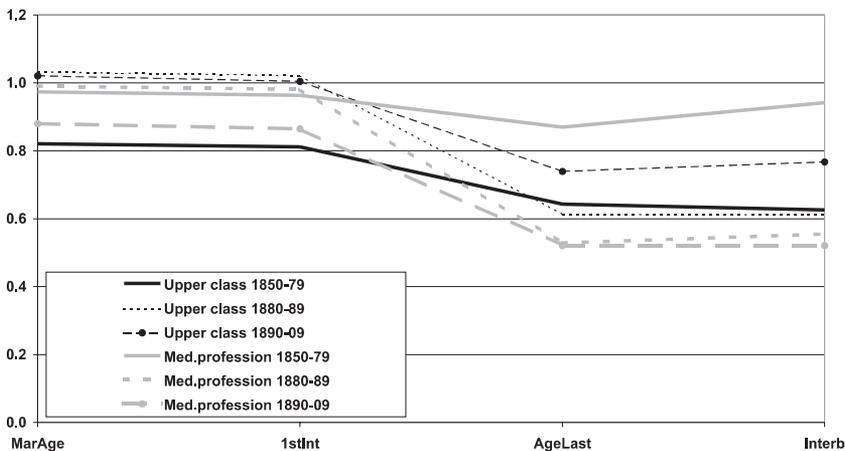
37 Negative birth intervals have been excluded.

Table 1 also shows the spacing of births between the first one and the age at which childbearing stopped. The inter-birth interval for medical doctors was short in the first cohort—on average, less than two years. In the more recent marriage cohorts, their children came in slightly slower succession. In other social groups (Table 1), especially in the oldest cohorts, the intervals between consecutive births were longer than physicians'. In the most recent cohort, the median birth interval was longest among the medical professions.

Childlessness was an exception among physicians. Between 6 and 7 percent of women who married before 1890 never gave birth to a child; the percentage increased to eight in the later cohort. As a result of the different patterns of family building, the average number of children in physicians' families began to differ considerably from that of married couples in the control group. A comparison with the random sample is possible only by excluding childless marriages. Table 1 shows that in the oldest cohorts, family size among physicians was almost the same as among upper class and white-collar middle-class couples. In the most recent cohort, physicians succeeded in restricting their family size more than any other group.

The impact of particular patterns of starting, stopping, and spacing can be roughly compared by applying a method of step-wise standardization, in which values of each component are substituted in the formula given above. The pattern followed by casual and unskilled laborers in the earliest cohort served as the standard. Since information about childless couples was not available for the control group, we compared only the effect of age at first marriage, length of the first birth interval, age at last birth, and length of inter-birth interval on the mean number of children of couples with children. Figure 3 compares the behavior of upper-class women and wives of medical doctors in three marriage cohorts with that of women in the reference group. The figure shows the relative effect on the mean number of children of the medical profession, assuming that they had combined their own average age at marriage with the length of the first birth interval, the age at last birth, and the length of inter-birth intervals of the casual and unskilled workers.³⁸

Fig. 3 Contributions of Starting, Spacing, and Stopping to Mean Numbers of Births, Standard Casual and Unskilled Laborers, 1850–1879



The effect would have been a 3 percent decrease in their average number of children. The impact of the particular pattern of starting, stopping, and spacing is shown by the slope of the line preceding the plotted point. If the line has an upward slope, the parameter in question contributes to higher fertility than the standard; the reverse is true for a downward slope. A horizontal line indicates little variation from the standard. The extent to which starting behavior (“MarAge” and “1stInt”) is modified by stopping (“AgeLast”) and spacing behavior (“Interb”) can also be examined. For physicians, age at marriage and the first interval are almost the same in the first two cohorts, but the effect on fertility is totally offset by a younger age at last birth. The steep slope between “1stInt” and “AgeLast” in the two more recent marriage cohorts indicates that medical doctors’ wives were much younger when they last gave birth. This short childbearing period is the primary cause of their lower fertility in comparison with both casual workers and other members of the upper class.³⁹

The results of this study clearly suggest that physicians adopted birth control relatively early. The wives of medical professionals

39 *Ibid.*

stopped childbearing at a much younger age than any other social group. Physicians apparently resorted to birth control once a desired total number of children had been reached. Rutgers, himself a doctor and secretary of the NMB since 1901, may well have been right when he wrote, “As far as medical doctors are concerned, most of them strongly dislike the Neo-Malthusian League, and see it as a highly improper interference in their monopoly; yet the best practical proof that they do not consider the matter at hand in any way harmful is that they themselves, almost without exception, have very modest family sizes.”⁴⁰

Direct evidence that Dutch physicians applied methods of birth control during the period discussed herein is almost nonexistent. Diaries and letters contain indications that abstinence was popular, which is in line with Szreter’s findings about the fertility decline in Britain. Szreter convincingly argued that Britain’s lower fertility was the result of reduced coital frequency, which was partly an unintended consequence of a new negative view of sexuality and partly a consequence of couples’ deliberate, negotiated birth regulation. These explanations may have applied to the medical profession in particular. Strong negative or ambivalent feelings towards sex, “associated with life-threatening and dishonoring diseases and with the literally dirty parts of the body,” and a concern about the health hazards of pregnancy for some women could have led to low coital frequency, which was seen as normal or civilized behavior.⁴¹

The large age differences between men and women, often considered an indication of a low frequency of, and satisfaction with, marital sex, may further have strengthened this effect. Around 24 percent of all physicians’ wives in the sample were more than ten years younger than their husbands, and another 26 percent were between five and ten years younger. These figures are much higher than those among the general population. To the extent that medical doctors restricted the size of their families by abstinence only, the accusation that medical professionals’

40 Rutgers, “Een en ander over het Nieuw-Malthusianisme. Gehuwd samenleven. (Ingezonden),” *Rein Leven*, III (1904), 55–56.

41 On the abstinence of the medical doctor Frederik van Eeden, see Jan Fontijn, *Tweespalt. Het leven van Frederik van Eeden tot 1901* (Amsterdam, 1990); on that of the medical doctor Arnold Aletrino, see Kees Jooisse, *Arnold Aletrino: pessimist met perspectief* (Amsterdam, 1986), 139–142. Szreter, *Fertility*, 398–424.

private behavior and public position regarding birth control were contradictory becomes less dramatic.⁴²

Considerations about the legitimacy and normative acceptability of birth control prevented the medical profession from being forerunners in family planning. The internalization of traditional beliefs and codes of conduct and the severity of sanctions attached to transgressions of normative behavior were the most important factors in explaining nineteenth-century medical doctors' distaste of contraception. In 1848, their general dissatisfaction with their position in Dutch society and with the poor state of the population's health led to the establishment of the NMG, which introduced new regulations to the medical profession in 1865. This exercise of medical authority and education was more than a victory of graduates over non-graduates; it was the victory of a "modern" approach toward medicine over a conservative one. The emphasis on education, the claim to expert knowledge, and the demands for control over education and licensing were characteristic elements in the process of professionalization that took place in Dutch medicine at the time.

After 1865, the medical profession played a prominent role in national and local medical, social, and political associations and committees. Physicians did not wish to imperil this recently acquired respectability through involvement in an issue that had such an improper image. Medical doctors who took a high profile in the public debate were viewed with mistrust. Those who openly met their patients' wishes for contraception could count on the same treatment that Jacobs received in the 1880s—slander and gossip, particularly from colleagues. Against this background, physicians' attempt to keep their experiences with birth control, in both their families and their practices, a secret is understandable.⁴³

42 Michael Mitterauer and Reinhard Sieder, *The European Family* (Chicago, 1982), 126–127.

43 Eddie S. Houwaart, *De hygiënist. Artsen, staat en volksgezondheid in Nederland 1840–1890* (Groningen, 1991).