2 Medical Midwifery and Vital Statistics
For the Health of Japan's Population

The Essentials for Midwives and Nurses, published in the provincial city of Gifu (approx. 135 kilometers northeast of Kyoto) in April 1902, was a rather plain booklet.[1] The booklet taught local midwives about the latest state legislation regulating their professional conduct. It opened with the Midwives' Ordinance, the most important state regulation for midwives, issued as an imperial edict in 1899. In the middle of the booklet, twelve (out of the booklet's eighty) pages were dedicated to the new ministerial ordinance issued in 1910 by the Home Ministry, which was in charge of the central medical and public health administration. It instructed them on how to fill out a death certificate.[2] Just by looking at the booklet, midwives could tell exactly what the state expected from them during their everyday work.

The booklet, despite its sober appearance, tells us a lot about the state of midwifery in Japan at the turn of the twentieth century.[3] In particular, it shows the extent to which medical midwifery had become a state matter by this period. As the booklet indicates, the state provided the law defining midwives' expertise and also set up regulations dictating their

[1] Katsumu Katayama, *Sanba Kangofu Hikkei* (Gifu-shi, Japan, 1902), accessed June 1, 2022, https://ndlonline.ndl.go.jp/#!/detail/R300000001-I000000475584-00.

[2] Ibid., 16–27.

[3] Academic works on the history of modern midwifery in Japan abound. Those published in the last ten years include: Manami Abe, "Meijiki no Osaka niokeru sanba seido no hensen," *Nihon ishigaku zasshi* 65, no. 1 (2019): 3–18; Terazawa, *Knowledge, Power, and Women's Reproductive Health*; Chiaki Shirai, ed., *Umisodate to josan no rekishi: Kindaika no 200-nen wo furikaeru* (Igaku Shoin, 2016); Naoko Kimura, *Shussan to seishoku womeguru kōbō: Sanba, josanpu dantai to sankai no 100-nen* (Otsuki Shoten, 2013); Aya Homei, "Midwife and Public Health Nurse Tatsuyo Amari and a State-Endorsed Birth Control Campaign in 1950s Japan," *Nursing History Review* 24, no. 1 (January 2016): 41–64; Aya Homei, "Midwives and the Medical Marketplace in Modern Japan," *Japanese Studies (Australia)* 32, no. 2 (2012): 275–93. For an example of the canonical works, see Mugiko Nishikawa, *Aru kindai sanba no monogatari: Noto, Takeshima Mii no katari yori* (Toyama: Katsura shobo, 1997); Michiko Obayashi, *Josanpu no sengo* (Keiso Shobo, 1989).

everyday work. The state had an overpowering presence in the work lives of medical midwives, even in a provincial city like Gifu.

Indeed, the state was at the center of the creation of medical midwifery in Japan. In the 1870s, the nascent government proactively worked to replace "old midwives" – those perceived as outdated, vernacular, and superstitious granny midwives – with "modern midwives," licensed midwives familiar with the principles of medicine and hygiene derived from Western Europe. The government's enthusiasm for midwifery reform partly came from the consensus that modern medicine and public health – the areas midwifery was immediately associated with in the process of nation-building – were a critical foundation for making Japan a civilized modern state and empire.[4] To a great extent, due to the assigned role of medicine and public health within nation-building, the state was heavily involved in introducing medical midwifery into Japan and turning it into an auxiliary field of state-sanctioned modern medicine integral to the state public health system.

The elephant in the room in this narrative, which I argue was a defining factor in justifying state involvement in midwifery reform, was the specific concept of population that emerged in the process of constructing a modern state health administration. Similar to the idea of population presented by Sugi and his fellow statisticians, the notion of population that prevailed in the state health administration was a dynamic force that directly shaped "national power" (*kokuryoku*). However, compared to Sugi's conceptualization of population, this discourse stressed its corporeal aspect; population as an aggregate of biological bodies that reproduce, grow, fall ill, age, and perish. In the process of nation-building, this formulation of population made midwifery a concern of the state.[5] Midwives were associated with birth and death in childbirth, which were among the most important events for the population as a biological entity.

[4] Hoi-eun Kim, *Doctors of Empire: Medical and Cultural Encounters between Imperial Germany and Meiji Japan* (Toronto: University of Toronto Press, 2016); Masahira Anesaki, "History of Public Health in Modern Japan: The Road to Becoming the Healthiest Nation in the World," in *Public Health in Asia and the Pacific: Historical and Comparative Perspectives*, eds. Milton James Lewis and Kerrie L. Macpherson (London: Routledge, 2011), 55–58; Susan L. Burns, "Constructing the National Body: Public Health and the Body in Nineteenth-Century Japan," in *Nation Work: Asian Elites and National Identities*, eds. Timothy Brook and André Schmid (Ann Arbor: University of Michigan Press, 2000), 17–49.

[5] Ishizaki, *Kingendai nihon no*, 13–14, 70–77; Yuki Fujime, *Sei no rekishigaku: Kōshō seido, dataizai taisei kara baishun bōshihō, yūsei hogohō taisei e* (Fuji Shuppan, 1997), 117–18.

This chapter reappraises the history of medical midwifery and statecraft in modern Japan with this idea of population in mind. Specifically, it locates the development of medical midwifery within the making of a state health system predicated on this idea of population. Thus, I tell the story of medical midwifery alongside the government's endeavor to compile vital statistics.[6] Vital statistics – the collection, classification, recording, and preservation of the numerical facts about people's life events, such as birth, marriage, and death – is a great lens through which to see how the notion of a corporeal population buttressed the state health system, as well as negotiations for establishing the relationship between midwives and the modern state. In contrast to the population census, the government had already set up vital statistics in the state health administration in the 1870s.[7] This happened precisely because high-rank health officials quickly adopted the idea that the sum of people's bodily experiences represented the nation's health and wealth, and vital statistics, which quantified these experiences, was an effective tool for visualizing the actual state of the nation in tangible numbers. This idea of corporeal population also exhorted the government to take the lead in midwifery reform. The government acted, expecting that reformed midwives would consolidate the nation's power by improving women's bodily experiences during pregnancy and at birth through the application of modern, medical, and hygienic birth attendance methods. In the 1880s, the government once again reached out to midwives, this time including them in its effort to improve vital statistics.[8] Consequently, midwives became even more firmly entrenched in a state health system that aimed to promote the health of Japan's population.

Within vital statistics, death, especially infant mortality, was where medical midwifery and state health politics crossed paths the most.[9] The

[6] A common method in historical demography is to corroborate a hypothesis by comparing historical phenomena against a statistical trend of the time. Kyoko Miyamoto, "Meiji-ki kara no josanpu shoku no hatten to nyūji shibō no kanren: Shimane-ken no baai," *Shakai igaku kenkyū* 31, no. 2 (2014): 93–105; Osamu Saito, "Senzen nihon ni okeru nyūji shibō mondai to aiikuson jigyō," *Shakai keizaishigaku* 73, no. 6 (March 2008): 611–33. My interest, however, lies in the ways in which the professionalization of midwifery became integral to the process of building a modern statistical infrastructure within public health.

[7] The official effort to compile vital statistics commenced after Nagayo Sensai, introduced in this chapter, returned from the trip with the Iwakura Mission (see Chapter 1). Many thanks to Dr. Reiko Hayashi for this invaluable comment.

[8] Unfortunately, sources by midwives that reflect this aspect of their activities are hard to come by. This chapter therefore tries to compensate by consulting various other sources.

[9] Historical demographers generally agree that official mortality figures, until the issuing of the Graveyard and Burial Regulation Law in 1884, which will be discussed

politicization of infant death from abortion and infanticide – practices midwives had been implicated in for a long time – was another crucial reason the recently formed government instigated midwifery reform in the 1860s.[10] In the 1910s, government officials stressed medical midwives' role in protecting maternal and infant health, as official statisticians singled out child mortality as a cause of Japan's compromised "national power." Between these decades, during the process of midwifery reform, the government involved midwives in its efforts to improve mortality figures in vital statistics. The government officials identified midwives as a suitable group for producing more accurate data on deaths in pregnancy and childbirth. But, they were equally anxious that some "unreformed" midwives might still betray the government by illicitly *causing* infant death through their involvement in now illegal abortion and infanticide. To overcome this tension, the government did what was described in *The Essentials for Midwives and Nurse*: It mandated that midwives notify the government of every death in childbirth and regulated their professional conduct. These state actions represented an official strategy to place midwives within its reach at a time when midwives' allegiances to the state were tenuous. Through these state actions, the government hoped midwives would turn into a body of healthcare practitioners who wholeheartedly embraced their assigned roles and would facilitate the state's efforts to strengthen national power through active population management.[11] A significant result of this was that the state became even more present in the professional lives of midwives.

Midwives diligently responded to the government's demands; however, this compliance should not be read uncritically as a gesture of loyalty to the state. Behind it were ongoing struggles with obstetrician-gynecologists,

later, were not statistically authentic due to the inconsistent methods used to collect data. I respect this point, but I am more interested in the numerical representation of child mortality alongside the textual representation. For this reason, I will examine pre-1884 statistics in the same vein as post-1884 figures. Kazunori Murakoshi, "Meiji, Taisho, Showa zenki ni okeru shizan tōkei no shinraisei," *Jinkōgaku kenkyū*, no. 49 (June 2013): 1–16; Osamu Saito, "Jinkō tenkan izen no nihon ni okeru mortality: Patān to henka," *Keizai kenkyū* 43, no. 3 (July 1992): 248–67; Masato Takase, "1890nen–1920nen no wagakuni no jinkō dōtai to jinkō seitai," *Jinkōgaku kenkyū*, no. 14 (May 1991): 21–34.

[10] Shoko Ishizaki, "Meijiki no shussan wo meguru kokka seisaku," *Rekishi hyōron*, no. 600 (April 2000): 39–53; Shoko Ishizaki, "Kindai nihon no sanji chōsetsu to kokka seisaku," *Sōgō joseishi*, no. 15 (1998): 15–32.

[11] For recent works describing how these national-level attempts were translated into practice on the regional level, see, e.g., Kyoko Miyamoto, "Shimane-ken ni okeru kindai sanba seido unyō ni kansuru kenkyū," *Shakai bunka ronshū* 11 (March 2015): 37–54; Kahoru Sasaki, "Meiji-ki niokeru Gunma-ken no sanba yōsei no hajimari," *Gunma kenritsu kenmin kenkō kagaku daigaku kiyō* 4 (March 2009): 1–11.

whose professional domains often overlapped with those of midwives. From the 1920s on, as state public health and health activism collaborated to tackle the problem of infant mortality, midwives asserted their professional raison d'être even further. As this chapter shows through the case of Osaka, many actors used the narrative of infant death and the nation's health, as well as their privileged position within the state health system, to advance their cause.

Administering the Number of Deaths for the Meiji State

When Sugi began lobbying for a national population census, his colleagues in the Ministry of Finance Division of Household Registration (*Ōkurashō Kosekiryō*), which was in charge of the *koseki*, were diligently compiling "details such as the birth, death, entry, and exit of the members of a household, as well as the numbers in each," the kind of information that comprised vital statistics in later years.[12] In January 1873, the Home Ministry took over the task after it established the Division of Household Registration.[13] From 1875 on, the ministry had another office that collected vital statistics, with the foundation of the Sanitary Bureau (*Naimushō Eiseikyoku*) in that year, which consolidated the medical and public health administration.[14] Over the next few decades, this ministry acted as *the* government office in charge of vital statistics, until the responsibility moved to the Cabinet Bureau of Statistics in 1898.[15]

Behind the Home Ministry's engagement with vital statistics was the quickly forming consensus that people's health and physical constitutions were not just an individual matter but directly determined the nation's power; therefore, the government should invest in medicine and public

[12] Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 2: 9.

[13] Sadanori Nagayama, "Nihon no kanchō tōkei," 102. For the actual statistics, see Naimushō, ed., *Kokusei chōsa izen nihon jinkō tōkei shūsei 1 (Meiji 5-nen – 18-nen)*, vol. 1 (Tōyō Shorin, 1992).

[14] For recent and representative works on public health administration in the Meiji period, see Kazutaka Kojima, *Nagayo Sensai to naimushō no eisei gyōsei* (Keio Gijuku Daigaku Shuppankai, 2021); Yoko Yokota, *Gijutsu karamita nihon eisei gyōsei shi* (Kyoto: Kōyō Shobō, 2011); Anesaki, "History of Public Health in Modern Japan"; Hidehiko Kasahara and Kazutaka Kojima, *Meijiki iryō, eisei gyōsei no kenkyū: Nagayo Sensai kara Gotō Shinpei e* (Kyoto: Mineruva Shobō, 2011); Burns, "Constructing the National Body"; Hidehiko Kasahara, *Nihon no iryō gyōsei* (Keiō gijuku daigaku shuppankai, 1999); Shiro Oguri, *Chihō eisei gyōsei no sōsetsu katei* (Iryō Tosho Shuppansha, 1981).

[15] Takahashi, "Meijiki wo chūshin nimita," 20–21.

health in order to construct a strong nation.[16] Office statistician Kure Ayatoshi's brother, renowned psychiatrist Shūzō (1865–1932), once said that an individual's "sickness and health, robustness and weakness, are related to … the prosperity and decline of a nation," therefore, the fate of the new Japanese nation was now "in doctors' hands."[17] Arguments such as Kure's confirmed an official scheme already underway to implement European-derived modern medicine and public health in Japan. At the same time, it exhorted the government to adopt vital statistics. In this context, the high-rank health officials understood vital statistics as a highly useful device that could effectively guide the government to maneuver through the potentially tumultuous process of building a nationwide public health and medical system. By presenting the patterns of people's life events and bodily experiences in numbers and in an aggregate form, vital statistics helped the government identify personal factors that could lead to the "decline of a nation" and come up with countermeasures for the sake of the nation's "prosperity." The government, informed by this type of logic, assigned the vital statistical work to the Home Ministry, the government office in charge of public health and medical affairs.

While compiling vital statistics, the Home Ministry Sanitary Bureau privileged the death figure in its official publications.[18] The Sanitary Bureau's interest in death was initially driven by acute infectious diseases. Of those, cholera epidemics left the most profound demographic, social, and political impact.[19] According to the *Statistical Yearbook of Imperial Japan*, the devastating 1879 epidemic caused 105,789 deaths in that year alone.[20] The dramatic effect of the epidemics incited fear among people and the fact that they coincided with Japan opening up diplomatic relations shaped the public image of cholera as a monstrous foreign disease.[21] The epidemics quickly affected politics, too. Cumbersome negotiations over quarantining in the face of extraterritoriality gave

[16] Miyakawa, *Tōkeigaku no nihonshi*, 115–33.
[17] Shuzo Kure, "Keizai oyobi tōkei to igaku shakai," *Keizai oyobi tōkei*, no. 3 (March 1889): 128.
[18] Regarding statistics on birth, the number of births was added to the official spreadsheet in 1877, and it was not until 1905 that the crude birth rate began to be published in official vital statistics. Reiko Hayashi, "Perception and Response to the Population Dynamics – on Fertility (Pre-war Period)" [In Japanese], *Jinkō mondai kenkyū* 73, no. 4 (December 2017): 271.
[19] Shunichi Yamamoto, *Nihon korera shi* (Tokyo Daigaku Shuppankai, 1982).
[20] Naimushō, "Dainihon teikoku naimushō tōkei hōkoku dai 1-kai" (1886), 46–47.
[21] Miri Nakamura, *The Monstrous Bodies: The Rise of the Uncanny in Modern Japan* (Cambridge: Harvard University Asia Center, 2015), 13–20; Yoshiro Ono and Isao Somiya, "Meijiki nihon no kōshū eisei nikansuru jōhō kankyō," *Papers of the Research Meeting on the Civil Engineering History in Japan* 4 (1984): 41–48.

rise to the argument that Western powers were undermining the independence of Japan as a burgeoning nation-state.[22] Under these circumstances, cholera epidemics set the tone for the medical administration in the first years of its existence. Under its first director, Nagayo Sensai (1838–1902), the Sanitary Bureau orchestrated quarantine, isolation, and disinfection initiatives with the help of local sanitary health officers, doctors, police, and religious institutions.[23] The central government became keen to know about mortality and morbidity patterns, in addition to information about the disease's topographical profile.[24]

Against this backdrop, the government poured energy into collecting mortality figures. *Isei*, the first state medical policy issued in 1874, stipulated doctors should report "the name of the disease, the days in which the patient suffered from the disease, and the cause of death within three days of the death of the patient."[25] In February 1876, the Home Ministry issued an edict that mandated all prefectural authorities should fulfill the reporting duty stipulated in *Isei* and ordered the Sanitary Bureau to administer the mortality data sent by the prefectural offices.[26] Finally, in 1884, the Grand Council of State and Home Ministry jointly issued the Graveyard and Burial Regulation Law in 1884. Article 8 of the law made it compulsory for local authorities to report burials to the home minister. This law opened up another route for the central administrative office to obtain mortality figures.[27]

Consequently, death figures came to dominate vital statistics published in the *Report of the Sanitary Bureau* series in the 1870s and 1880s.

[22] Mark Harrison, "Health, Sovereignty and Imperialism: The Royal Navy and Infectious Disease in Japan's Treaty Ports," *Social Science Diliman* 14, no. 2 (2018): 49–75; Harald Fuess, "Informal Imperialism and the 1879 'Hesperia' Incident: Containing Cholera and Challenging Extraterritoriality in Japan," *Japan Review*, no. 27 (2014): 103–40; Tomoo Ichikawa, "Kindai nihon no kaikōchi niokeru densenbyō ryūkō to gaikokujin kyoryūchi: 1879-nen 'Kanagawa-ken chihō eiseikai niyoru korera taisaku," *Shigaku zasshi*, no. 117 (June 2008): 1–38.

[23] In addition to the works cited so far, for the mobilization of religion against cholera epidemics, see William D. Johnston, "Buddhism Contra Cholera: How the Meiji State Recruited Religion against Epidemic Disease," in *Science, Technology, and Medicine in the Modern Japanese Empire*, eds. David G. Wittner and Philip C. Brown (London: Routledge, 2016), 62–78.

[24] William Johnston, "Cholera and the Environment in Nineteenth-Century Japan," *Cross-Currents: East Asian History and Culture Review* 8, no. 1 (2019): 105–38.

[25] For the *Isei*, see Kasahara, *Nihon no iryō gyōsei*, 1–26.

[26] Naimushō Eiseikyoku, "Eiseikyoku hōkoku" (July 1877), 6.

[27] Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 2:28. The mortality and morbidity data collected as a result of the law have been used for analysis in historical demography. See, e.g., Murakoshi, "Meiji, Taisho, Showa zenki"; Hiroshi Iki, "Meiji, taishoki no maisō kyokashō ni miru yamai to shibō nenrei," *Nihon ishigaku zasshi* 45, no. 2 (1999): 246–47.

The first vital statistics introduced in *The First Report of the Sanitary Bureau*, published in 1877, was a death table that presented the number of deaths in Tokyo, Kyoto, and Osaka between July and December 1875 according to disease categories.[28] *The Third Report of the Sanitary Bureau*, published in November 1877, had a large statistical table dedicated to cholera in every prefecture, including Hokkaido, as well as among army soldiers, navy personnel, and those on the Mitsubishi ships.[29] Due to the Sanitary Bureau's prioritization of acute infectious diseases, the report ended up emphasizing death figures above all other vital statistics.

While this trend continued, in the 1880s, the Sanitary Bureau introduced a different kind of mortality: death from childbirth. *The Sixth Report of the Sanitary Bureau*, published in July 1880, had figures for "stillbirth" (*shizan*) for the first time, which were presented along with numbers for "live childbirth" (*seisan*) and "marriage" (*kekkon*) (Figure 2.1).[30] The report also showed the stillbirth figure next to the total population figure. Finally, it presented the ratios of stillbirths per 100 births, of the total population per stillbirth, of stillbirths per 100 births among married couples, and finally of married couples per stillbirth (Figure 2.2).[31] After this issue, stillbirth figures became a staple in the section on vital statistics until 1886, when the Sanitary Bureau ceased to be responsible for vital statistics.[32]

This trend in the *Report of the Sanitary Bureau* series coincided with the Home Ministry's effort to improve the existing administrative infrastructure to facilitate the collection of stillbirth figures.[33] In June 1883, it issued a ministerial notification to prefectures, informing them that it had set up separate forms for tabulating childbirth, marriage, and death figures, and mandating the prefectures to send these tables every month, beginning in July of that year.[34] For the birth table, it instructed

[28] Naimushō Eiseikyoku, "Eiseikyoku hōkoku," 16–17. See also Kazuo Takehara, "Meiji shoki no eisei seisaku kōsō: 'Naimushō eiseikyoku zasshi' wo chūshin ni," *Nihon ishigaku zasshi* 55, no. 4 (2009): 509–20.

[29] See table 3 inserted in Naimushō Eiseikyoku, "Eiseikyoku hōkoku dai 3-ji nenpō" (November 1877).

[30] Naimushō Eiseikyoku, "Eiseikyoku nenpō dai 6-ji" (July 1880), 16–17. Initially, the definition or terminology referring to stillbirth that appeared in the statistics was not standardized. For instance, the *Isei* used the term *ryūzan*, today translated as "abortion" or "miscarriage," for stillbirths. As previously mentioned, the situation changed when the Sanitary Bureau gave a definition in 1883, which was applied to the bylaw of the Graveyard and Burial Regulation Law. Murakoshi, "Meiji, Taisho, Showa zenki," 2–3.

[31] Naimushō Eiseikyoku, "Eiseikyoku nenpō dai 6-ji," 23–25.

[32] The last Sanitary Bureau report that presented stillbirth figures was Naimushō Eiseikyoku, "Eiseikyoku nenpō Meiji 17-nen 7-gatsu – Meiji 20-nen 12-gatsu" (n.d., c.1887), 1–8.

[33] Naimushō Kosekikyoku, "Nihon zenkoku kokōhyō Meiji 10 nen, 11 nen," in *Kokusei chōsa izen*, ed. Naimushō, 1–3.

[34] Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 2:26.

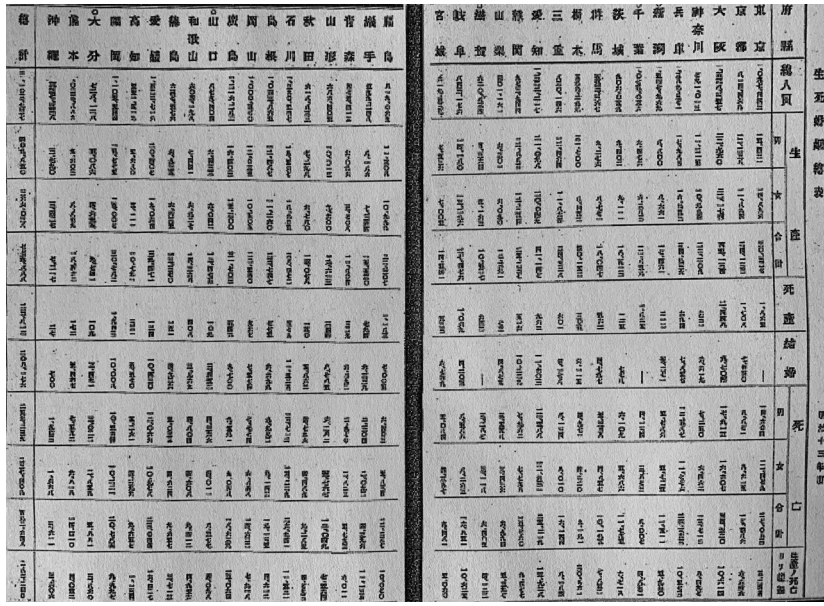

Figure 2.1 The number of births and deaths in each prefecture in 1880.
Source: Naimushō Eiseikyoku, "Eiseikyoku nenpō dai 6-ji" (July 1880), 16–17. From the National Diet Library Digital Collections (https://dl.ndl.go.jp/).

prefectures to specify whether or not each birth was living or dead, defining stillbirth as the birth of a dead fetus after the fourth month of pregnancy. Furthermore, the aforementioned Graveyard and Burial Regulation Law of 1884 endorsed the submission of a death certificate if a dead fetus in the fourth month of pregnancy or later was buried or cremated.[35] These government regulations enabled the production of stillbirth figures in the report.

Why did the Sanitary Bureau only start to systematically report on stillbirth figures in 1880, not in 1875, when it was established? In fact, prior to 1880, the Sanitary Bureau had acknowledged "the statistics for childbirth … is an urgent matter for the administration of public health" and had even begun entering childbirth figures in the statistical spreadsheet in 1877. If the Sanitary Bureau was so keen to collect the "statistics

[35] Murakoshi, "Meiji, Taisho, Showa zenki," 3.

https://doi.org/10.1017/9781009186827.003 Published online by Cambridge University Press

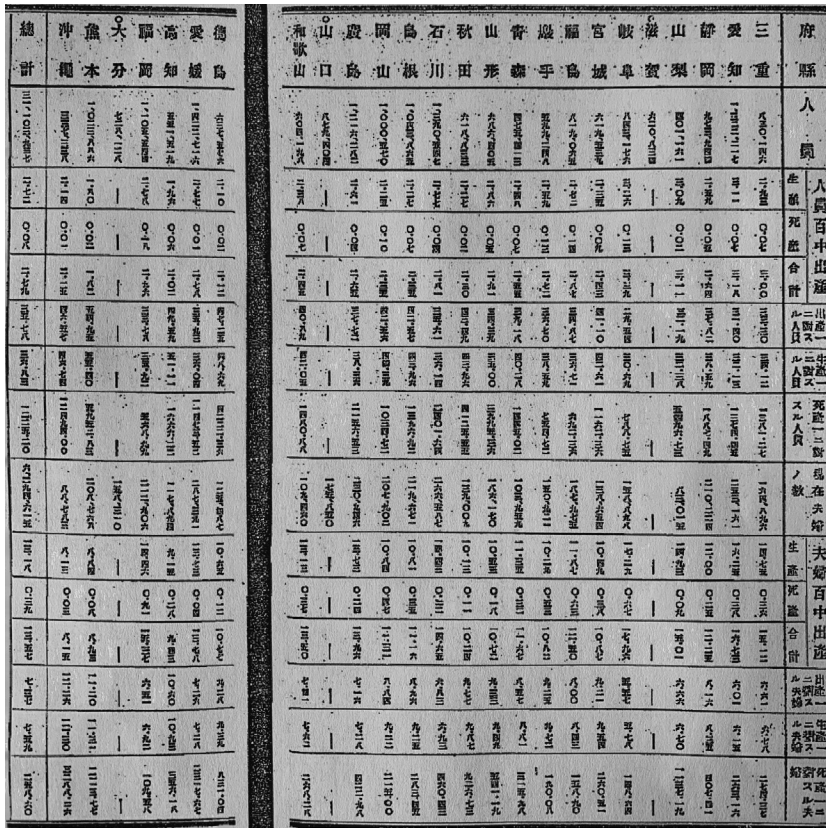

Figure 2.2 The number of live births and stillbirths, 1880.
Source: Naimushō Eiseikyoku, "Eiseikyoku nenpō dai 6-ji" (July 1880), 20–21. From the National Diet Library Digital Collections (https://dl.ndl.go.jp/).

for childbirth," why did it wait until 1880 to create an independent category for recording stillbirth figures?

While there is little conclusive evidence for answering these specific questions, the timing of the first mention of the stillbirth figure in *The Sixth Report of the Sanitary Bureau* (1880) is suggestive, especially considering abortion became illegal that year.[36] The visibility of

[36] Susan L. Burns, "Gender in the Arena of the Courts: The Prosecution of Abortion and Infanticide in Early Meiji Japan," in *Gender and Law in the Japanese Imperium*, eds. Susan L. Burns and Barbara J. Brooks (Honolulu: University of Hawai'i Press, 2014), 81–108; Shigenori Iwata, *"Inochi" wo meguru kindaishi: Datai kara jinkō ninshin*

stillbirth figures in the report, I argue, was connected to the process of criminalizing abortion, since the boundaries between stillbirth and abortion were often fuzzy. Specifically, it embodied the official effort to cultivate a discursive space that would facilitate state control over abortion – and more generally, reproductive bodies – under the name of public health.

Though it was only in 1880 that abortion became illegal, political oligarchs had been interested in controlling abortion and infanticide even before the Meiji period.[37] From the late 1860s onward, Meiji statesmen's aspirations to establish a civilized state compelled the nascent government to turn its attention to the practice of abortion and infanticide.[38] In October 1868, the Grand Council of State issued an edict that banned midwives from selling abortifacients and practicing infanticide. In 1869, the new Kochi governor proclaimed that abortion and infanticide would be banned, and soon after, the prefectural governments of Iwate, Hita, Kisarazu, Kagoshima, Wakamatsu, and Aomori followed suit.[39] On December 27, 1870, the central government issued the Outline of the New Criminal Code (*Shinritsu Kōryō*), modeled on the Chinese Ming and Qing codes, which stipulated that a man would be sentenced to third-degree exile if he committed adultery, conspired for abortion with his pregnant partner, and the partner died as a result of it.[40] Further, the Amended Criminal Regulations (*Kaitei Ritsurei*), issued on June 13, 1873, detailed other conditions under which abortion would become subject to punishment. Finally, modeled on the French law, in 1880 abortion became illegal under the new Criminal Code. The Criminal Code, which went into effect in 1882, stipulated that the pregnant woman, anyone conspiring abortion with her, and any doctors, midwives, or pharmacists who practiced abortion would face criminal charges.[41]

chūzetsu e (Yoshikawa Kobunsha, 2009); Hidemi Kanazu and Marjan Boogert, "The Criminalization of Abortion in Meiji Japan," *U.S.-Japan Women's Journal*, no. 24 (2003): 37–42; Shoko Ishizaki, "Nihon no dataizai no seiritsu," *Rekishi hyōron*, no. 571 (November 1997): 53–70; Fujime, *Sei no rekishigaku*.

[37] See Eiko Saeki, "Abortion, Infanticide, and a Return to the Gods: Politics of Pregnancy in Early Modern Japan," in *Transcending Borders*, eds. Shannon Stettner et al. (New York: Palgrave Macmillan, 2017), 19–33; Drixler, *Mabiki*; Motoko Ota, *Kodakara to kogaeshi: Kinsei nōson to kazoku seikatsu to kosodate* (Fujiwara Shoten, 2007); Mikako Sawayama, *Sei to seishoku no kinsei* (Keiso Shobo, 2005); Taku Shinmura, *Shussan to seishokukan no rekishi* (Hosei Daigaku Shuppankyoku, 1996).

[38] For the debate over the reasons why the Meiji government criminalized abortion and infanticide, see Burns, "Gender in the Arena of the Courts," 85; Drixler, *Mabiki*, 199; Ishizaki, "Nihon no dataizai no seiritsu"; Fujime, *Sei no rekishigaku*.

[39] Burns, "Gender in the Arena of the Courts," 85.

[40] Kanazu and Boogert, "The Criminalization of Abortion," 37.

[41] Ibid., 37–45.

The Sanitary Bureau began publishing stillbirth figures at the time as the government was preparing to implement the law. Stillbirth was associated with abortion and infanticide, and the report showing the stillbirth figures symbolized the state's attempt to regulate these now illicit acts. However, the way the report supported the attempt was subtle. Instead of offering the data on stillbirths for a punitive purpose, for example, the report facilitated the state's abortion control effort by providing an epistemological ground for such control. First, by mentioning stillbirth, the report transformed it into a public matter, specifically a matter of public health. Second, by assigning an independent category to stillbirth in the vital statistic chart, it broadcast the view that death from childbirth was a national fact, just like other demographic phenomena. Finally, by presenting stillbirth in numbers, the report portrayed it as following regular patterns, thus suggesting the state could analyze and predict it. In other words, the report projected the idea that stillbirth was a nationwide, statistical phenomenon that could be, and needed to be, managed by the state public health authorities. By portraying stillbirth this way, the report laid a rhetorical foundation justifying state intervention in stillbirth/abortion via public health. The visibility of stillbirth statistics in the report, therefore, represented public health officials' heightened interest in creating an apparatus that would support the state effort to regulate reproductive bodies – at the time when abortion, a form of death in childbirth, came under state jurisdiction.

The process of making infant mortality visible in the Sanitary Bureau's official report coincided not only with the criminalization of abortions but also with the state regulation of midwives. Over the Meiji period, midwifery developed into an officially recognized medical field and a socially respected profession for women, in part due to its position vis-à-vis the newly formed nation-state.

Medical Midwifery: Specialists in "Normal" Birth and Advocating Public Health

In the 1870s, the vital statistical figures calculated from the *koseki* register were incomplete, and this was a serious headache for official statisticians. The Household Registration Law mostly relied on voluntary notification, and without an effective system of communication in place, people tended to take lax attitudes toward reporting deaths and births to the government office. As a result, vital statistics hardly captured the demographic reality of the entire population. One way to tackle this issue was to employ individuals within the local community as informants. In this context, midwives, along with doctors, were identified as particularly suitable for the task.

Yet, during this period, midwives were regarded as in need of official control rather than as appropriate for this informant task. To start with, a dominant popular image of midwives was as pernicious practitioners of abortion and infanticide.[42] Thus, the Meiji government tried to control midwives' practices in the aforementioned edict issued in October 1868. Furthermore, the 1880 Criminal Code stated that midwives would receive a degree of punishment one higher than the pregnant woman committing abortion, carrying a prison sentence of two months to two years as well as a fine of between two and twenty yen.[43] Government officials subjugated midwives to state control because of their popular image, which put them in close proximity to the shady business of infant death.

While the aforementioned image persisted, starting in the 1870s, a competing perception gradually prevailed within the state administration, which portrayed midwives as trained healthcare professionals.[44] This image came with the new government's effort to reform medicine, modeled primarily on the traditions of Prussian Germany.[45] In 1873, the provincial Gunma Prefecture defined midwifery as an officially licensed occupation in its Outline of the Rules of Medical Administration (*Imu gaisoku*). In 1874, the *Isei* included midwifery in the list of eleven major medical fields to go through government reforms. It defined a midwife as a person forty years old or over who must be familiar with the general anatomy, physiology, and pathology of women and children. The midwife must have a license, which would be granted after demonstrating at least ten normal births and two difficult births in front of obstetricians.[46] In 1899, the Home Ministry issued the Midwives' Ordinance as an imperial edict, which was followed by the Legislation for Midwives' Examination and the Legislation for the Licensing of Midwives. The Midwives' Ordinance defined midwifery as a profession reserved for women. It also

[42] See, for instance, the front cover of Drixler, *Mabiki*. For the textual representation, see the works of Hidemi Kanazu and Eiko Saeki; Eiko Saeki, "Abortion, Infanticide, and a Return to the Gods"; Hidemi Kanazu, "Edo sankasho ni mirareru seishokuron: 'Umu Shintai' towa dareno Shintai ka," *Nihon shisōshi kenkyūkai kaihō*, no. 20 (2003): 152–64.

[43] Kanazu and Boogert, "The Criminalization of Abortion in Meiji Japan," 44.

[44] Shirai, *Umisodate to josan no rekishi*; Homei, Aya. "Birth Attendants in Meiji Japan: The Rise of the Biomedical Birth Model and a New Division of Labour," *Social History of Medicine* 19, no. 3 (2006): 407–24; Terazawa, "The State, Midwives, and Reproductive Surveillance"; Brigitte Steger, "From Impurity to Hygiene: The Role of Midwives in the Modernisation of Japan," *Japan Forum* 2 (1994): 175–87.

[45] Keiko Ogawa, "Seiyō kindai igaku no dōnyū to sanba no yōsei," in *Umisodate to josan no rekishi*, ed. Shirai (Igaku Shoin, 2016), 26–46.

[46] The rule was originally applied only in Osaka and Tokyo. In other areas, prefectural authorities set up their own education and licensing schemes following *Isei*.

lowered the minimum age of eligibility to twenty years old and mandated a midwife to complete at least a year's academic training and pass the nationwide licensing examination.[47] The government regulations issued throughout the Meiji period were intended to generate female healthcare professionals who could replace the aforementioned granny midwives who were complicit with abortion and infanticide.

The government was not the sole player in the construction of medical midwifery. The new generation of doctors forming the modern field of "obstetrics-gynecology" (*sanfujinka*) also aided in turning midwifery into a medical subdivision.[48] In the 1880s, as obstetrics-gynecology was being established as a medical discipline within universities, obstetric specialists began to engage in midwifery education.[49] In 1880, Sakurai Ikujirō opened a private midwifery training school, Kōkyōjuku, in Tokyo. In April 1890, Hamada Gen'tatsu (1854–1915), the second Japanese professor of obstetrics-gynecology at the University of Tokyo, established a midwifery training school affiliated with his Section of Obstetrics-Gynecology at the University of Tokyo.[50] In Osaka, Ogata Masakiyo (1864–1919), the most renowned obstetric specialist in the city at the time, set up the Ogata Midwifery Training School in October 1892 in his family-owned Ogata Hospital.[51] In subsequent years, the disciples of these first-generation obstetrician-gynecologists built midwifery schools in provincial prefectures such as Yamagata, Niigata, and Miyagi.[52] After the Midwives' Ordinance, there was a boom in midwifery schools across the nation, by both private benefactors and local authorities. By the early 1910s, there was at least one midwifery training school in each prefecture.[53]

For the obstetrician-gynecologists, training midwives was a strategy to establish their position in the crowded market of childbirth medicine. Despite practicing government-approved orthodox medicine, the status of obstetrician-gynecologists in the 1880s was not stable. First, obstetricians and gynecologists trained under the old regime were still practicing,

[47] Shirai, *Umisodate to josan no rekishi*, 24.
[48] Masakiyo Ogata, *Nihon sanka gakushi* (Kyoto: Maruzen, 1919), 1164–65.
[49] Prior to these doctors, local authorities – especially in cities – engaged in midwifery training following *Isei*. Keiko Ogawa, "Seiyō kindai igaku no dōnyū," 27–29; Kimura, *Shussan to seishoku*, 19–29.
[50] For Hamada, see Riichiro Saeki, "Hamada Gen'tatsu sensei no omoide banashi Hamada Gen'tatsu sensei no nijukkaiki wo shinobite," *Sanka to fujinka* 2, no. 2 (1934): 63–69.
[51] Ogata, *Nihon sanka gakushi*, 1328–29.
[52] Ogawa, "Seiyō kindai igaku no dōnyū," 26–37.
[53] Kiyoko Okamoto, "Josanpu katsudō no rekishiteki igi: Meiji jidai wo chūshin ni," in *Nippon no josanpu Showa no shigoto*, ed. Reborn Henshūbu (Reborn, 2009), 182–84.

although the government had been trying to disqualify their practices through regulations that privileged German-derived medicine.[54] Second, during this period, the number of female doctors trained under the new regime was on the rise.[55] Many of them specialized in areas of medicine linked to women's health, so their existence was threatening to (male) obstetrician-gynecologists. Finally, under the government's protection, more and more midwives were trained in modern medicine, and some seemed to practice medicine just like the obstetrician-gynecologists. Under these circumstances, obstetrician-gynecologists propagated a German model based on the gendered division of labor in their midwifery training: Female midwives were specialists in low-tech "normal" birth and male obstetrician-gynecologists specialized in "abnormal" birth requiring surgical procedures.[56] Furthermore, in the 1890s, they lobbied for the official implementation of the gendered division of labor; they succeeded when the Midwives' Ordinance of 1899 was issued. Male obstetrician-gynecologists thought this model would allow them to cultivate their own niche from which they could compete against their rivals. In particular, it was an effective way to bring their closest rivals, medically au fait licensed midwives, under their control. This was the rationale behind the male obstetrician-gynecologists' involvement in midwifery training.

In part, due to the efforts of the government and obstetrician-gynecologists, the number of certified midwives specializing in "normal" birth rose over the course of the Meiji period. In 1878, there were only 12,007 certified midwives, but within a decade, the number grew to 30,862. After 1899, and until the end of the Meiji period, the number was greatly reduced (25,000–30,000) due to the restructuring of the licensing scheme and the categorization of different groups of midwives.[57] In 1913, the number of midwives licensed under the 1899 ordinance surpassed those certified under the old regime for the first time. At least in

[54] Yuko Misaki, "Jūrai kaigyō joi nitsuite no ichi kōsatsu," *Nihon ishigaku zasshi* 65, no. 3 (September 2019): 301–13.

[55] Hiro Fujimoto, "Women, Missionaries, and Medical Professions: The History of Overseas Female Students in Meiji Japan," *Japan Forum* 32, no. 2 (2020): 185–208; Ellen Nakamura, "Ogino Ginko's Vision: 'The Past and Future of Women Doctors in Japan' (1893)," *U.S.-Japan Women's Journal*, no. 34 (2008): 3–18.

[56] Kimura, *Shussan to seishoku*, 19–42; Homei, "Birth Attendants in Meiji Japan." A similar type of struggle took place in Prussian Germany, the place where Japanese obstetrician-gynecologists learned about medical midwifery. Lynne Anne Fallwell, *Modern German Midwifery, 1885–1960* (London: Routledge, 2015).

[57] The new licensing scheme introduced three categories of midwives. The first was the "passing the examination" category (*shiken kyūdai*), referring to midwives who passed the midwifery exam after a year's training at a formal school or under a midwife or

numerical terms, the effort to generate midwives who specialized in "normal" births seemed to have succeeded by the mid-1910s.

From the government's point of view, this development represented a shift in midwives' positions vis-à-vis the state. At the beginning of the Meiji period, midwives were subject to state control because of their association with abortion and infanticide. As a new generation of midwives went through the reform and became integrated into state-endorsed medicine and public health, government officials came to trust them more. They now expected these midwives to partake in the government's efforts to reform people's reproductive practices. At the same time, through teaching, obstetrician-gynecologists instilled a sense of nationalism in their student midwives. The obstetrician-gynecologists calculated that midwives would help strengthen the imperial state by promoting hygienic childbirth.[58] The reform, therefore, intended to transform midwives into loyal agents of the state.

While the effect of the midwifery reform varied across different classes and regions, on the whole, the midwives licensed from the 1890s on diligently internalized the role ascribed to them. First, they tried to implement new cultures of childbirth that were informed by the state-sanctioned modern medicine and hygiene inculcated in them by their teachers. For instance, applying western germ theory, midwife Morita Mariko from Hiroshima washed her hands in a saponated cresol solution before internal examinations to avoid puerperal fever.[59] Second, responding to the obstetrician-gynecologists' call for a clearer division of labor, midwives publicly confirmed their specialism in "normal" births. In *Josan no shiori* (*Midwives' Leaflet*), the midwifery journal launched by Ogata, midwives who contributed clinical case reports time and again stressed that they attended childbirth labor only in so far as it was "normal" and called in medical doctors as soon as they detected signs of abnormality.[60] Thus, midwifery reform succeeded not only in numbers but also in practice.

Yet, these midwives never blindly followed the government regulations or the obstetrician-gynecologists' teachings; many did so to improve

obstetrician. The second was the "locally limited practice" category, in which midwives in areas experiencing a shortage of midwives were given a limited five-year license based on their career record. The final category was the "existing midwives," who had already been licensed either by the Home Ministry or by prefectural governments under the scheme implemented by the 1874 medical regulation.

[58] Terazawa, *Knowledge, Power, and Women's Reproductive Health*, 138–43.

[59] Makiko Morita, "Zenchi taiban no ichijikken," *Josan no shiori*, no. 40 (September 1899): 226–27. Also see Terazawa, *Knowledge, Power, and Women's Reproductive Health*, 143–57.

[60] Homei, "Birth Attendants in Meiji Japan."

their otherwise precarious status in the local birth culture. Although modern midwives were sanctioned by state authority and armed with cutting-edge knowledge and techniques in medical childbirth, in many communities, people hardly recognized these qualities because they preferred to adhere to the existing birth customs. In many places, this meant hiring existing birth attendants in their neighborhood instead of qualified midwives.[61] To tackle this situation, new midwives stressed their unique attribute as experts in "normal" childbirth as well as medical professionals able to *recognize* "abnormal" births.[62] This position enabled midwives to establish their status within the local community. By asserting this position, they were, on the one hand, able to show doctors that they were conforming to their assigned role. On the other, under the circumstances in which many villages lacked doctors, midwives could sell themselves as the only available medically trained practitioners and thereby carve out a niche in the local birth culture that the existing birth attendants, who lacked medical knowledge, were unable to enter.

Another strategy modern midwives took to consolidate their status was to actively distance themselves from abortion. Beginning around the late 1890s, some midwives tirelessly produced case reports to expose the wrongdoings of the "old midwives" (*kyūsanba*) and how their abhorrent illegal practices caused suffering to the families that received their care.[63] On the one hand, this tactic could be risky for modern midwives. In many places, people were still practicing abortion even after they were made illegal.[64] Under these circumstances, this attitude could alienate midwives from their local communities. On the other, the same tactic could work in their favor. By adopting this tactic, medical midwives could create another niche in local birth culture: a local watchperson ensuring, on behalf of the state, that people would not engage in abortion. In other words, midwives denounced the practice of abortion primarily to survive in this competitive environment, but in so doing, they ended up attaching themselves to the government's effort to lay a nationwide reproductive surveillance system. Consequently, midwives became even more entwined in the state's effort to control reproductive bodies.

[61] Aya Homei, "Sanba and Their Clients: Midwives and the Medicalization of Childbirth in Japan," in *New Directions in History of Nursing: International Perspectives*, eds. Barbara Mortimer and Susan McGann (London: Routledge, 2005), 68–85.
[62] Kimura, *Shussan to seishoku*, 59–63.
[63] Homei, "Sanba and Their Clients."
[64] Iwata, *"Inochi" wo meguru kindaishi*, 2.

It was against this backdrop that the government included midwives in its effort to improve statistics on infant mortality. While reforming midwives, the government assigned them the task of officially notifying the state of any stillbirths. However, the official process for doing this was gradual. The *Isei* of 1874 allowed midwives to record "birth or death, male or female, and the date of birth" as well as "any incidence of spontaneous abortion or stillbirth occurring in the three months of pregnancy and later" and submit the birth or death certificate to the respective medical office. But it also set conditions: Midwives were able to undertake these tasks only in case of emergency and in the absence of obstetric doctors.[65] Later, Article 11 of the 1884 Graveyard and Burial Regulation Law's bylaw stipulated that persons dealing with the burial of dead fetuses of four months or older would have to seek a certificate from doctors or midwives prior to the burial and that these medical practitioners must report the stillbirth if they were asked to produce a certificate. The bylaw was not compulsory, and the decision to entrust midwives with this task was made on the prefectural level; however, with the Midwives' Ordinance, the midwives' notification duty became compulsory. The ordinance stated that midwives must certify every stillbirth they witnessed, and the Home Ministry made an official template to this effect.[66] This template appeared in *The Essentials for Midwives and Female Nurses* – introduced at the beginning of this chapter.

The notification of stillbirth on the local level was an important first step for compiling infant mortality data on the national level, and these legislations indicate how the government gradually came to trust midwives as data collectors. From a statistical point of view, what was particularly significant about these legislations, in particular the bylaw of the Graveyard and Burial Regulation Law, was that they laid a foundation for improving statistical accuracy by standardizing the notification procedure. Prior to the bylaw, every prefecture adopted its own mechanisms for reporting deaths, and this was causing errors in vital statistics at the central level. The bylaw was a tactic to minimize statistical errors by streamlining the collection method. The fact that the government included midwives in the effort to improve statistics suggests policymakers thought that a sufficient number of midwives were reformed and could carry out this important task for official statistics.

The new procedure for infant death notifications involving midwives seemed to improve official vital statistics. The demographers Takase

[65] Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 2: 93.
[66] Murakoshi, "Meiji, Taisho, Showa zenki," 3–4.

Makoto and Murakoshi Kazunori pointed out that the infant mortality rate in Japan became more accurate beginning in the late 1890s. Takase attributes this to the Graveyard and Burial Regulation Law, while Murakoshi went further and suggests that the reporting duty assigned to midwives under the Midwives' Ordinance, in addition to the bylaw, might have contributed to the changing profile of the data.[67] These studies indicate that midwives, in particular after the issuing of the Midwives' Ordinance, internalized their professional duty as ascribed by the state and diligently submitted death certificates to their local authorities when they witnessed deaths in childbirth.

The official understanding of death in childbirth – or infant death, more generally – changed in the early twentieth century as Japan went through an epidemiological transition. Health officials began to perceive the infant as a self-contained, age-specific population group and infant death as a demographic phenomenon that had a significant impact on Japan's economic and political future. In this context, medical midwifery was also mobilized for maternal and infant health.

Problematizing the Infant as a Population Group

After inheriting vital statistical work from the Home Ministry in 1898, from 1899 onward, the Cabinet Bureau of Statistics (CBS) published official vital statistics annually, as well as, from 1906 on, statistics on the cause of death. In the 1910s, these data clarified that the morbidity and mortality rates from acute infectious diseases had significantly dropped at the turn of the century, while the morbidity rate of chronic infections, most conspicuously tuberculosis, venereal diseases, and cancer, remained high.

Patterns in mortality and morbidity changed the contours of public health administration significantly. Until the turn of the twentieth century, the question of how to counter acute infectious diseases dominated policy discussions within the Home Ministry. In the 1910s, it began to proactively explore measures for raising the general standard of health and hygiene, since it deemed that many of the emerging epidemiological challenges stemmed from everyday health and hygiene practices.[68] As a tangible first step, the Home Ministry launched the Health and

[67] Murakoshi, "Meiji, Taisho, Showa zenki," 1–16; Takase, "1890nen–1920nen no wagakuni."

[68] Kōseishō Gojūnenshi Henshū Iinkai, ed., *Kōseishō gojūnenshi* (Kōseishō Mondai Kenkyūkai and Chūō Hōki Shuppan, May 1988).

Hygiene Survey Group (*Hoken Eisei Chōsakai*, HHSG) on June 27, 1916 to investigate the state of health and hygiene across the country. Under the supervision of the home minister, thirty-four members, consisting of academics, members of the half-government, half-private Central Hygiene Association, and high-rank officials from the Home Ministry, Metropolitan Police Department, and army were tasked with investigating and making official recommendations on eight topics related to health and hygiene practices.[69]

From the perspective of population history, the HHSG is highly important because it highlights that, by this period, the mortality trend in vital statistics had come to occupy a special position within the state public health administration due to its perceived significance for Japan as a nation-state. The preamble of the first HHSG report, published in 1917, was about Japan's high mortality rates compared to the "civilized" nations of France, England, and Germany.[70] The report claimed that this trend represented a "national scandal," and the government should tackle the problem to shield the "nation's fortune and power."[71] The report mirrored the burgeoning understanding within the government that high death rates symbolized Japan's lack of "fortune and power" and its internationally crumbling status.[72]

Among many other mortality categories, the HHSG report singled out the high mortality rate among children under the age of five, who were referred to as *nyūji* (infant) and *yōji* (small children), as particularly problematic.[73] Echoing high-rank health officials' anxieties about Japan's inferior health vis-à-vis "civilized" countries in Europe, the report explained how the phenomenon of high child mortality was disturbing precisely because the reverse was the case in Europe. In Germany, for instance, the figure had recently decreased from 250–300 to less than 160 per 1,000 births. In contrast, in Japan, the mortality rate among children under one year old increased from 110 per 1,000 births in 1888 to over 160 per 1,000 births in recent years. The mortality rate of children over the age of one was so high that it could "not be compared to any other civilized nations."[74] The report stated that "if we do

[69] Hoken Eisei Chōsakai, "Hoken eisei chōsakai dai ikkai hōkokusho" (Naimushō Hoken Eisei Chōsakai, April 1917).
[70] Hoken Eisei Chōsakai, "Hoken eisei chōsakai dai ikkai," 1–4.
[71] Ibid., 3.
[72] Ibid. This understanding came to buttress more routinized statistical work during the period: Kenichi Ohmi, "Dainijisekaitaisen izen no wagakuni niokeru jinkō dōtai tōkei," *Nihon kōshū eisei zasshi* 51, no. 6 (2004): 452–60.
[73] Another was the mortality of young men, which I will touch on in Chapter 4.
[74] Hoken Eisei Chōsakai, "Hoken eisei chōsakai dai ikkai," 3.

not explore and investigate its cause and do not set appropriate measures against infant mortality, we will … fail to establish a solid foundation for the health of young men," another important population group the report characterized as the "nucleus of our nation [who] … shoulder the burden of national security.. and the driving force for [the nation's] industry."[75] The report reflected the widely held view within the government office that the infant, along with adult men, was an independent demographic subject. As infants eventually become adults and play a pivotal role in the nation's economy and military capability, the demographic behavior of the infant as a population group was a state matter. This was why the report expressed concerns about high child mortality.

However, the idea of the infant comprising an independent category in official vital statistics was not always self-evident. It gradually formed over the course of the Meiji period, along with the conceptualization of age categories for mortality figures in the statistics.[76] A critical moment came in the late 1890s, when the CBS took over official vital statistics. The first vital statistics published by the CBS in 1899 had a table showing the number and rate of deaths categorized by sex and age. Compared to the earlier tables presented by the Sanitary Bureau, the age range was more fine-tuned and included the age range of zero to five years old. From then on, the infant, as with other age-specific population categories, was a standard part of the statistical tables showing mortality figures.[77]

This trend corresponded with the burgeoning interest among official statisticians for a thorough death table. At the turn of the twentieth century, the CBS employed statistician Yano Kōta to compile a death table.[78] Following his mission, Yano created death tables that had mortality figures for each year of age, starting from zero.[79] A table

[75] Ibid., 2–3.

[76] Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 2:13. However, in 1880, the population table made by the Home Ministry Division of Household Registration introduced the classification of living people by age. Naimushō Eiseikyoku, "Meiji 13-nen 1-gatsu 1-nichi shirabe nihon zenkoku jinkōhyō," in *Kokusei chōsa izen*, ed. Naimushō.

[77] Naikaku tōkeikyoku, "Nihon teikoku jinkō tōkei Meiji 31-nen" (March 1901), https://dl.ndl.go.jp/info:ndljp/pid/805976.

[78] Sōrifu Tōkeikyoku, *Sōrifu tōkeikyoku hyakunenshi*, 2: 992. The original term for "death table" is *shibōhyō*. It correlates with today's "life table" *(seimeihyō)*. For the etymology of *shibōhyō* in Japanese, see Kiichi Yamaguchi et al., *Seimeihyō kenkyū* (Tokyo: Kokon Shoin, 1995), 3–6. I would like to thank Professor Ryuzaburo Sato for giving me advice on this.

[79] Kōta Yano, "Nihonjin no seimei ni kansuru kenkyū," in *Sōrifu tōkeikyoku hyakunenshi*, Sōrifu Tōkeikyoku, 339.

in one of his publications had a detailed description of infant mortality. It even showed mortality figures for the neonate, down to days (zero, five, ten, fifteen days) and months (one, two, three, six, twelve months) in the first year after birth, in addition to the figures for each year of age.[80]

While Yano was working on a death table, a consensus was forming among the CBS statisticians that infant mortality was a noticeable demographic phenomenon and thus should be regarded as a critical factor in the composition of general mortality. Kure Ayatoshi, now serving in the CBS, was among the first to seek a link between infant and general mortality.[81] While "observing stillbirths and other child deaths across the country" for the CBS's first annual statistics published in 1899, he also "calculated a percentage of childhood death to total death … in order to study what kind of relationships there are between child mortality and general mortality [*ippan shibō*]."[82] Following Kure, in 1904, Aihara Shigemasa (1846–1914), another prominent CBS statistician published "Child Mortality in Japan."[83] In the paper, Aihara introduced the results of vital statistics in 1899 and 1900, pointing out that 64.6 percent and 68.4 percent of the children between the ages of zero and five, in 1899 and 1900 respectively, died before their first birthday.[84] By the mid-1900s, official statisticians had seen the correlation between child mortality and the trend in general mortality.

However, it was only in the mid-1910s that official statisticians began to characterize infant mortality explicitly as a *cause* for the rising mortality rate of the Japanese population. The senior official statistician Nikaidō Yasunori (1865–1925) played a pivotal role in the popularization of this view within the government.[85] While compiling vital statistics at the CBS, Nikaidō observed the Japanese population exhibited some disturbing signs, compared to the demographic trend in Western Europe. In Europe, particularly in England and Germany, fertility rates were decreasing in recent years. However, mortality was

[80] Ibid., 350–51.
[81] Ayatoshi Kure, "Meiji 32-nen nihon teikoku jinkō dōtai tōkei gaikyō," in *Sōrifu tōkeikyoku hyakunenshi*, ed. Sōrifu Tōkeikyoku, 384–97.
[82] Ibid., 389.
[83] Shigemasa Aihara, "Nihon ni okeru shōni no shibō," *Tōkei shūshi*, no. 284 (November 1904): 568–71; Shigemasa Aihara, "Nihon ni okeru shōni no shibō (dai 284 gō no tsuzuki)," *Tōkei shūshi*, no. 289 (April 1905): 151–54. For Aihara's biography, see Toshiyasu Kawai, "Aa Aihara Shigemasa kun ikeri," *Tōkei shūshi*, no. 339 (July 1914): 252.
[84] Aihara, "Nihon ni okeru shōni no shibō," 568–69.
[85] For Nikaidō, see Ai Chuman, "Hoken eisei chōsakai hossoku eno michi: Nyūji shibōritsu modai no shiten kara," *Rekishigaku kenkyū*, no. 788 (2004): 16–26.

also in decline, so the population overall was still expanding. In turn, in Japan, while fertility rates were still high, mortality rates were even higher. Even more disturbing, what he called "civilization" seemed to lower marriage and fertility rates, but not mortality, in Japan. In demographic terms, this phenomenon heralded a doomsday picture: a contracting population caused by declining fertility and rising mortality. Looking at the current demographic trend, Nikaidō judged that Japan was lagging behind Western Europe by half a century.[86] He concluded that the increasing mortality rate in particular was a "serious problem [to which] the Japanese hygiene [administration] must pay the utmost attention."[87]

For this reason, sometime in 1913–14, Nikaidō investigated child mortality in Japan and found three unique features.[88] First, it went against the general trend in Western Europe, where infant mortality was in sharp decline in recent years.[89] Second, in Japan, the mortality rate among children between one and two years old was rising the most, while in other countries, the rate was typically the highest among babies before their first birthdays.[90] Third, the most common cause of death among children between one and two years old differed from the trend in Europe; in Europe, it was typically respiratory disease, while in Japan it was gastrointestinal disease.[91] From these observations, Nikaidō concluded that the high infant mortality in Japan was due to the nutrition disorder children experienced after they were weaned off mother's milk, and that the "changing societal structure" that compelled women to engage in the waged work, coupled with the "uneducated people" who used artificial formula incorrectly, were causing the nutrition disorder.[92]

[86] Yasunori Nikaidō, "Honpōjin no seishi ni kansuru tōkeiteki hihan no gaiyō," *Tōkei shūshi*, no. 413 (July 1915): 337.
[87] Ibid., 340.
[88] Yasunori Nikaidō, "Honpō shōni shibō no sūsei," *Nihon gakkō eisei* 2, no. 8 (1914): 567–68; Yasunori Nikaidō, "Honpō shōni shibō no tokuchō (ichi)," *Tōkei shūshi*, no. 404 (1914): 473–80; Yasunori Nikaidō, "Honpō shōni shibō no tokuchō (ni)," *Tōkei shūshi*, no. 411 (May 1915): 237–45; Yasunori Nikaidō, "Honpō shōni shibō no tokuchō (san)," *Tōkei shūshi*, no. 412 (June 1915): 289–300.
[89] Nikaidō, "Honpō shōni shibō no tokuchō (ichi)."
[90] Nikaidō, "Honpō shōni shibō no tokuchō (ni)."
[91] Ibid.
[92] Nikaidō, "Honpō shōni shibō no tokuchō (ni)," 442. Nikaidō's argument resonates with the narrative stressing the superiority of mother's milk over formula, which emerged during this period as women's reproductive role vis-à-vis the state was being naturalized. Izumi Nakayama, "Moral Responsibility for Nutritional Milk: Motherhood and Breastfeeding in Modern Japan," in *Moral Foods* eds. Angela Ki Che Leung et al. (Honolulu: University of Hawai'i Press, 2020), 66–88.

Nikaidō's studies mobilized the government. In the 1910s, children's health also surged as a subject of debate within the government after the influential navy doctor, Takagi Kanehiro (1849–1920), argued that the nation's physical capability had been "lowered" in recent years due to the compromised ability of mothers to care for their children.[93] Responding to Takagi's warning, on February 5, 1915, the Sanitary Bureau invited Nikaidō to provide statistical evidence that could verify Takagi's claim.[94] On May 7, Nikaidō submitted a report to the Sanitary Bureau. The Bureau immediately forwarded it to the prime minister, with a note urging the government to organize research on the rising mortality rate.[95] Thereafter, the Home Ministry secured a government budget for the research, which was used to launch the HHSG. At the launch meeting, Home Minister Ichiki Tokurō (1867–1944) publicly acknowledged that one of the main objectives of the HHSG was to identify the reasons for the rising mortality rate, with a special focus on the high infant mortality.

The HHSG report, which presented the problem of infant mortality in numbers, paved the way for social movements and policies promoting maternal and infant health from the 1920s onward. As healthcare professionals linked to maternal and infant health, midwives enthusiastically took part in the movements. For these midwives, participation in the movements was a strategy to secure their position within the broader arena of infant health, where the state politics and health activism coalesced. Under the circumstances, the statistical rationale buttressed midwives' struggles.

Midwives and the Discourse of Infant Care

The HHSG was significant not only because it consolidated the official narrative that infant mortality was damaging the nation's health but also because the narrative borne out of it catalyzed a number of initiatives promoting maternal and infant health. The discussion of infant mortality within the HHSG paved a way for the establishment of the Bureau of Social Affairs (*Shakaikyoku*) in 1920, which listed maternal and infant health as a priority area for its child protection administration.[96] Social policy intellectuals submitted a proposal requesting government

[93] Chuman, "Hoken eisei chōsakai," 21.
[94] Ibid., 18.
[95] Ibid.
[96] For the social policy debate on infant and maternal protection during this period, see Naho Sugita, *"Yūsei," "yūkyō" to shakai seisaku: Jinkō mondai no nihonteki tenkai* (Kyoto: Horitsu Bunka Sha, 2013), 179–80; Naho Sugita, *Jinkō, kazoku, seimei to shakai seisaku: Nihon no keiken* (Kyoto: Hōritsu Bunka Sha, 2010), 86–107.

subsidies for building maternal and childcare consultation clinics.[97] At the same time, this period's thriving feminist, labor, and socialist movements demanded state subsidies for childbirth and childrearing for the "protection of motherhood" (*bosei hogo*).[98] Finally, pediatricians and department stores jumped at the opportunity created by the burgeoning discourse of child protection.[99] They authored prescriptive literature teaching childcare techniques and organized exhibitions on the theme of hygiene in childbirth and childcare, which primarily targeted middle-class consumers.[100] The discourse of infant mortality broadcast by the HHSG resonated with the rising public consciousness of child and motherhood protection, and triggered cooperation between social and official movements to promote maternal and infant health during the 1920s.

In large cities, bureaucrats and reformers in Osaka were among those taking up the discourse of infant mortality most actively in order to implement social work for poor working mothers and their babies.[101] Osaka, a long-standing merchant city that quickly became industrialized in the early Meiji period, attracted teenage girls from impoverished neighboring villages who were looking for opportunities to work as factory workers or maids.[102] Well into the 1910s, their living conditions were harsh, far from being conducive to raising healthy babies.[103] Working long hours was common, and these girls were often assigned to night shifts. Even if they became pregnant, many could not afford nutritious meals due to their low wages. After they gave birth, they had to return to work immediately so

[97] Chuman, "Hoken eisei chōsakai," 26.

[98] Vera C. Mackie, *Feminism in Modern Japan: Citizenship, Embodiment, and Sexuality* (Cambridge: Cambridge University Press, 2003); Barbara Molony, "Equality Versus Difference: The Japanese Debate over 'Motherhood Protection', 1915–50," in *Japanese Women Working*, ed. Janet Hunter (London and New York: Routledge, 1993), 123–48; Hiroko Tomida, "The Controversy over the Protection of Motherhood and its impact upon the Japanese Women's Movement," *European Journal of East Asian Studies* 3, no. 2 (2004): 243–71.

[99] Mikako Sawayama, *Kindai kazoku to kosodate* (Yoshikawa Kobunkan, 2013), 128–55.

[100] Mark A. Jones, *Children as Treasures: Childhood and the Middle Class in Early Twentieth Century Japan* (Cambridge, MA and London: Harvard University Press, 2010); Louise Young, "Marketing the Modern: Department Stores, Consumer Culture, and the New Middle Class in Interwar Japan," *International Labor and Working-Class History* 55 (April 1999): 52–70.

[101] Below, I rely on the description in Higami Emiko's impressive work on the subject. Emiko Higami, *Kindai Osaka no nyūji shibō to shakai jigyō* (Osaka: Osaka Daigaku Shuppankai, 2016).

[102] Jeffrey E. Hanes, *The City as Subject: Seki Hajime and the Reinvention of Modern Osaka*, Twentieth-Century Japan (Berkeley: University of California Press, 2002); James L. McClain and Osamu Wakita, eds., in *Osaka: the Merchant's Capital of Early Modern Japan* (Ithaca: Cornell University Press, 1999).

[103] Higami, *Kindai Osaka no nyūji shibō*, 5–6.

they could earn a living. This situation did not allow the young mothers to nurse their babies, and in many cases, the babies received less than standard formula milk.[104] These circumstances surrounding poor mothers and their young children were directly reflected in the child mortality trend. From 1913 on, the city's infant mortality rate increased significantly, to as high as 238.6 per 1,000 births in 1919. Thus, when the HHSG was launched in 1916, the infant mortality rate in Osaka was alarmingly high.[105]

Responding to the demographic trend, in the early 1910s, local governments, reformers, philanthropists, and volunteers organized social work activities with the specific aim of improving maternal and infant health, especially in the areas where people with the lowest socioeconomic status lived. In 1911, the president of Osaka Mainichi Newspaper Publishing Company, Yamamoto Hikoichi, authorized the launch of the Osaka Mainichi Newspaper Charity Group, which dispatched mobile clinics for people who could not afford medical care.[106] In July 1919, the Osaka Municipal Government also set up the Osaka City Child Consultation Station (*Osaka-shi Jidō Sōdanjo*) and offered a wide range of services, such as infant and childcare guidance, medical consultation, diagnosis of disabled children, and consultation for a child's education.[107] These activities in the 1910s led to the rapid growth of maternal and infant welfare schemes in the following decade.

An important organization running such schemes in the 1920s was the half-private, half-public Osaka Infant Protection Society (*Osaka Nyūyōji Hogo Kyōkai*, hereafter OIPS).[108] The OIPS, launched in July 1927 with the mayor of Osaka at the helm, was based on the collaboration between the Osaka Municipal Government Social Section's supervisor, Kawakami Kan'ichi (1888–1961), and Okubo Naomutsu, Medical Director of the Department of Pediatrics at the Osaka branch of the Japan Red Cross.[109] The OIPS not only worked with medical professionals but also with the commercial sector, most notably with the department stores Mitsukoshi, Takashimaya, Matsuzakaya, and Sogō to set up free, temporary infant consultation clinics.[110]

Significantly, when activists and local authorities promoted maternal and infant protection work, they used a statistical rationale and

[104] Ibid.
[105] For more detail, see Higami, *Kindai Osaka no nyūji shibō*, 80–83.
[106] Ibid., 94.
[107] Ibid., 141–44.
[108] Ibid., 178–81.
[109] Ibid., 179.
[110] Ibid., 180.

the perspective of the nation's health as if they were a prerequisite for advancing their cause. *The Guideline for Infant Protection* published by the OIPS opened with the sentence: "It is one of the most serious national problems in recent years: how to decrease infant mortality rates. In particular, in cities like Osaka where the infant mortality rate is high … this problem should not be neglected for even one day."[111] The statement was followed by statistical tables showing infant mortality rates in Japan, and then in Osaka. Similar to official publications of this kind, the first table showed the Japanese infant mortality rate as compared to the "civilized nations," in this case British Empire, the United States, Germany, France, Italy, Austria, Holland, and New Zealand (Figure 2.3). It showed that the mortality rate in Japan in 1905–24 hovered between 15.6 and 18.9 deaths per 100 births, while in other countries the rates showed a downward trend – one-digit numbers in most cases. This table was followed by two others (see e.g., Figure 2.4) that indicated the rates in Osaka were by far higher than the national average.[112] Together, these tables made it clear that infant death in Osaka was not a local incidence but a national affair that, like general mortality, had ramifications for Japan's self-identity as a member of the "civilized" nations. Social reformers used this narrative of infant mortality and nationhood to justify their cause, which clearly shows how much faith people grew to have in vital statistics and statistical reasoning.

Midwives were a major player in maternal and infant healthcare schemes organized by the aforementioned social work organizations.[113] In 1914, the Osaka Mainichi Newspaper Charity Group employed five midwives to run a free birth attendance scheme.[114] In the 1920s, the group collaborated with the OIPS to expand the scheme, and in 1921, it increased the number of commissioned midwives to seven. In 1923, it stationed a commissioned midwife in every designated district – forty in total – and employed Inoue Matsuyo as a special home visitor. In 1925, there were fifty commissioned midwives in the city, which expanded to

[111] Naomutsu Okubo and Yoshitoshi Misugi, *Nyūyōji hogo shishin* (Osaka: Osaka Nyūyōji Hogo Kyōkai, 1928), 1.

[112] Ibid., 1–3.

[113] For more details about the campaign to offer free midwifery services in Osaka and Tokyo during this period, see Terazawa, *Knowledge, Power, and Women's Reproductive Health*, 228–34.

[114] Mayumi Wada, "Osaka mainichi shinbun jizendan no nyūyōji hogo katsudō to katei eno shien: Muryō josan jigyō to hoiku gakuen no sōsetsu wo chūshin ni," *Himeji daigaku kyōiku gakubu kiyō*, no. 11 (2018): 171–74; Osaka Mainichi Shinbun Jizendan, *Osaka mainichi shinbun jizendan nijūnen-shi* (Osaka: Osaka Mainichi Shinbun Jizendan, 1931), 178–79.

各國の乳児死亡率（社會事業講座生江氏）

年次 / 國別	一九〇五 一九一〇	一九一五	一九一六	一九一七	一九一八	一九一九	一九二〇	一九二一	一九二二	一九二三	一九二四
	明治三十八年 明治三十九年	（大正四年）	（大正五年）	（大正六年）	（大正七年）	（大正八年）	（大正九年）	（大正十年）	（大正十一年）	（大正十二年）	（大正十三年）
英威	一一·七	一一·〇	九·一	九·六	九·七	八·九	八·〇	八·三	七·七	六·九	七·五
米國	—	一一·〇	一〇·一	九·四	一〇·一	八·七	八·六	七·六	七·六	七·七	七·二
獨逸	一七·四	一五·四	一三·六	一五·〇	一五·八	一四·四	一三·一	一四·一	一三·四	—	一〇·八
佛國	一二·七	一四·一	一二·二	一二·五	一四·一	一二·二	九·八	一一·八	一二·四	一	八·五
伊國	一五·三	一四·六	一八·七	二一·一	—	—	—	—	—	—	—
墺國	二〇·二	二二·一	二二·〇	一八·六	一九·三	一五·六	一五·七	一五·七	—	—	—
和蘭	一一·四	八·七	八·三	八·九	九·三	五·〇	七·三	七·六	六·七	六·七	五·一
ニュジーランド	六·九	五·〇	五·〇	四·八	四·八	四·五	五·〇	四·七	四·一	四·三	四·〇
日本	一五·七	一六·〇	一七·〇	一七·三	一八·九	一七·一	一六·六	一六·八	一六·六	一六·三	一五·六

Figure 2.3 Comparison of infant mortality rates: British Empire, United States, Germany, France, Italy, Austria, Holland, New Zealand, Japan, 1905–24
Reproduced from Naomutsu Okubo and Yoshitoshi Misugi, *Nyūyōji hogo shishin* (Osaka: Osaka Nyūyōji Hogo Kyōkai, 1928), 30.

全國及六大都市乳児死亡率（人口動態統計）

年次	大正三年（一九一四年）	大正四年（一九一五年）	大正五年（一九一六年）	大正六年（一九一七年）	大正七年（一九一八年）	大正八年（一九一九年）	大正九年（一九二〇年）	大正十年（一九二一年）	大正十一年（一九二二年）	大正十二年（一九二三年）	大正十三年（一九二四年）
東京	一五·四	一七·八	一七·二	一七·七	一七·九	一六·六	一五·九	一五·五	一五·二	一七·五	—
大阪	二三·五	二五·八	二三·八	二五·四	二五·七	二二·五	二三·一	二三·一	二三·八	二一·三	一九·七
京都	二一·三	二〇·八	二〇·八	二〇·一	二五·〇	一八·二	二〇·九	二三·五	一八·六	二一·三	一六·四
神戸	一九·九	二一·一	一九·三	二一·五	一九·五	二一·四	一九·七	一九·八	二二·六	二〇·五	二〇·三
名古屋	一五·六	一四·七	一八·六	一六·四	二〇·六	一五·四	一七·〇	二一·〇	一七·七	二〇·四	一七·五
横濱	一六·九	一九·九	一九·五	一九·九	二〇·五	一八·〇	一八·三	一六·三	一六·七	一九·九	一六·六
市區	一七·六	一八·七	一九·〇	一九·三	二〇·六	一八·〇	一七·六	一八·四	一七·七	一九·三	一六·二
全國	一五·九	一五·七	一七·一	一七·三	一八·九	一七·〇	一六·六	一六·八	一六·六	一六·七	一五·六

Figure 2.4 Comparison of infant mortality rates: Tokyo, Osaka, Kyoto, Kobe, Nagoya, Yokohama, 1905–24
Reproduced from Naomutsu Okubo and Yoshitoshi Misugi, *Nyūyōji hogo shishin* (Osaka: Osaka Nyūyōji Hogo Kyōkai, 1928), 31

https://doi.org/10.1017/9781009186827.003 Published online by Cambridge University Press

100 by the end of the decade. By the mid-1930s, 110 commissioned midwives had been registered to work under the scheme.[115]

The commissioned midwife played a key role in the scheme's day-to-day maternity and neonatal care work, which was provided primarily for less affluent households. They did prenatal check-ups, attended childbirth labor, bathed and disinfected the baby for the first week after childbirth, and did the home visit for postnatal care. In addition, the commissioned midwife helped to arrange for formula feeding if requested. On behalf of the mother, they ordered a bottle and arranged for her to be able to purchase cow milk at a wholesale price.[116] Finally, the midwife administered eye drops at the time of birth and during home visits and checked for any deformity or dislocation of bones, etc. so babies could be treated early.[117]

However, midwives were not passively co-opted into the social work scheme. In fact, starting in the 1920s, local midwifery organizations actively participated in the booming social work initiatives. For instance, just after a year of its existence, the Osaka City Midwives' Association (OCMA, est. May 31, 1920) decided to issue 600 free birth attendant vouchers, which were distributed to "the proletariats" via the Social and Hygiene Sections of the Osaka Municipal and Prefectural Governments.[118] Between 1927 and June 1929, midwives affiliated with the Awabori, Honjō, and Imamiya birth clinics funded by the Osaka Municipal Government attended an average of 87, 124, and 56 unpaid childbirths, respectively.[119] Finally, at an emergency meeting among the senior councilors on January 14, 1930, the OCMA decided to establish its own "social birth clinics" (*shakaiteki san'in*).[120] The midwives as a collective took up their assigned role with fervor.

Why did the Osaka midwives take up this social work with fervor?[121] In the 1920s and early 1930s, midwives had plenty of reasons. The most crucial was the struggle to expand their area of expertise vis-à-vis

[115] Osaka Mainichi Shinbun Jizendan, *Osaka mainichi shinbun jizendan nijūnen-shi*, 179–81.
[116] Wada, "Osaka mainichi shinbun jizendan."
[117] Osaka Mainichi Shinbun Shakai Jigyōdan, *Osaka no sanba wa kataru taisetsu na osan no hanashi* (Osaka: Osaka Mainichi Shinbun Shakai Jigyōdan, 1936), 121.
[118] Hidetora Aoki, *Osaka-shi sanba dantaishi* (Osaka: Osaka-shi Sanbakai, 1935), 174.
[119] Ibid., 238.
[120] Ibid., 238–42.
[121] It must be stressed that not all midwives characterized their cause in relation to the state. Some were urged by the sense of a cause, similar to how the famous midwife Shibahara Urako from Onomichi became an advocate of birth control activism as part of the proletariat liberation movement unfolding in Osaka. For Shibaura, see Fujime, *Sei no rekishigaku*, 125–29, 136–39, 247–52.

obstetrician-gynecologists. From the 1910s onward, midwives' interests shifted from establishing their professional domain by excluding their then closest rivals – the old generation of experienced but "unlicensed" midwives – to becoming the equals of obstetrician-gynecologists.[122] In the 1920s, midwives acted on their interests, requesting the government to amend the Health Insurance Law (est. 1922), which privileged obstetrician-gynecologists over midwives as insured childbirth attendants. To counter the government's argument in support of its partnership with obstetrician-gynecologists – it was administratively easier because they belonged to a nationwide organization (i.e., the Japan Medical Association) – in April 1927, locally-based midwives' groups (including the Osaka Midwives League formed in 1925) established the nationwide Greater Japan Midwives Association. Through the nationwide organization, midwives would be able to sign a contract with the state, and they would be insured, exactly like the obstetrician-gynecologists. Furthermore, in 1931, through politicians, midwives submitted a "Midwives Law" bill in order to become as competitive as the obstetrician-gynecologists. If passed, the bill would have mandated midwives to raise the standard of their medical education and to form a Midwives Association through an imperial edict. It would also reserve for midwives the sole right to practice "normal" births. The political campaign did not materialize in the end, but it clearly demonstrated that midwives tried to establish their professional territory by borrowing state authority, just as the obstetrician-gynecologists did in the 1890s.[123]

In turn, obstetrician-gynecologists were not passive observers of the midwives' moves. Obstetrician-gynecologists opposed the proposal to raise the educational standard for midwives, arguing it would lead to a shortage of midwives in rural areas.[124] On a more discursive level, obstetrician-gynecologists tried to protect their vested interests by creating another model of the gendered division of labor that would not threaten their position. One model they explored in the 1930s, as the government was strengthening the maternal and infant health provisions in preparation for war, was to let midwives be the experts in "motherhood protection," while obstetrician-gynecologists took over the domain of medical midwifery altogether.[125]

[122] Kimura, *Shussan to seishoku*, 75.
[123] Harue Oide suggests that these moves jumpstarted the process to institutionalize childbirth. Harue Oide, "Byōin shussan no seiritsu to kasoku: Seijōsan wo meguru kōbō to sanshihō seitei wo undō wo chūshin toshite," *Ningenkankeigaku kenkyū*, no. 7 (2006): 25–39.
[124] Kimura, *Shussan to seishoku*, 129.
[125] Ibid., 138–39.

Against this backdrop, midwives in Osaka participated in social work and enthusiastically affirmed their roles within it. In so doing, midwives expressed devotion to the imperial state, as midwife Watanabe Tomoe did when she talked of her work:

> The reason why I chose this profession was because I, as a child of the Emperor, desperately wished to contribute to … the nation. In this sense, to engage with the birth attendance work … is a truly responsible work, especially in times of emergency such as today, because the infant is the foundation for the rise or fall of the nation in the future. For this reason, whenever I attend childbirth labor, I go to the [woman] imagining as if I was running toward a war front, wishing that the baby, as a future national subject, would be born with both the baby and mother intact.[126]

How should we read Osaka midwives' enthusiastic enactment of their identities as "children of the Emperor" and their assigned roles in maternal and infant healthcare, especially in a context where their local and national representatives were struggling to fend off pressure from the obstetrician-gynecologists, who were trying to confine them to the domain of "motherhood protection"? I argue that the specific way midwives portrayed their role in infant and maternal care work embodied their strategy to further secure their professional domain. Through constant negotiations with obstetrician-gynecologists to demarcate professional boundaries, midwives turned their opponent's demands to their own advantage. While, in the minds of obstetrician-gynecologists, it might have been their professional strategy to reduce the midwives' field of expertise to "motherhood protection," midwives saw this as an *additional* opportunity they could exploit to expand their area of expertise. Furthermore, in order to maximize the benefits of this opportunity, midwives mobilized the oft-used narrative about their service to the imperial state. They stressed how their work, ensuring the healthy growth of babies, was directly contributing to the prosperity of the nation-state and empire by ensuring a constant supply of future workers and soldiers.[127] This logic, in addition to the sense of professional duty, buttressed the Osaka midwives' participation in infant and maternal care work and the characterization of their work as a national and imperial mission.

Significantly, when expressing their devotion to the imperial state, these midwives also incorporated the argument of high infant mortality. According to midwife Kishida Tome:

[126] Tomoe Watanabe, "Josanpu de nakereba ajienai shokugyōjō no taiken ninshiki nitsuite," in *Osaka no sanba wa kataru*, 55.
[127] Kimura, *Shussan to seishoku*, 109–74.

It is a shame that Japan's mortality rate is still embarrassingly high, although it seems it has been decreasing somewhat with the development and popularization of hygiene knowledge. Japan, a world's first-class nation. Our Japan is aggressively striding forward, to the land, to the sea, and to the sky. But, when we hear we are falling far behind European and American nations when it comes to infant issues, we, as Japanese women, and as someone engaging in the field, cannot condone it.[128]

Kishida's claim indicates the extent to which statistical rationale had spread in society: A rank-and-file midwife felt comfortable using it to describe her cause. It also vividly illustrates how much authority was conferred upon vital statistics as a rhetorical tool to uphold the existence of Japan as a nation-state and empire.

Conclusion

Medical midwifery and vital statistics, today regarded as coterminous yet separate fields, were once intimately intertwined, as they were both formed in modern Japan. In the 1870s, the development of both fields was guided by the nascent government's interest in managing aspects of the corporeal population for nation-building. Medical midwifery was promoted by the government, in part to reduce the number of deaths during pregnancy and childbirth. Alongside this, the Meiji government readily implemented vital statistics as part of state bureaucracy, because the government saw death as a pressing national issue and vital statistics as an effective tool for visualizing the actual state of the nation's health in numbers. From the 1880s onward, the two fields crossed paths in the government's decision to involve midwives in the official effort to improve the quality of vital statistics. From the 1910s onward, when infant death became singled out as a critical factor in the health of the nation, vital statistics generated relevant data that mobilized medical midwifery for official and public actions to improve maternal and infant health. In turn, midwives capitalized on the power of statistical rationale to advance their professional position.

Ultimately, this story, constructed by weaving together the histories of official vital statistics and midwifery, highlights the centrality of the state's population-governing exercises for the formation of medical midwifery as a modern healthcare profession. It points out that the idea of a corporeal population and the statistical rationale that were behind the government's quick adoption of vital statistics were indispensable

[128] Tome Kishida, "Sanba dē ni saishite," in *Osaka no sanba wa kataru*, 93.

for the establishment of the link between midwifery and statecraft. Yet, in the context of Japan in the last quarter of the nineteenth century, when state actors consciously abolished old customs and implemented new knowledge and practices for the construction of a modern state, this had to be explored while the key concepts for the link – individual bodies, population, health, medicine, and even the modern state – were still being formed. This meant that negotiations of different kinds, with various foci, were required, and in the case of medical midwifery, they manifested in, for instance, making the infant a statistical subject or the struggles between obstetrician-gynecologists and midwives.

In the 1920s, as administrative work on vital statistics became routinized, the population itself became regarded as a source of concern. The rising discourse of Japan's "population problem" mirrored anxieties that prevailed in the government office and among the burgeoning communities of population experts over a number of social issues that were emerging as Japan was confronted with new political challenges.