BUILDING THE NATION THROUGH WOMEN'S HEALTH: MODERN MIDWIFERY IN EARLY TWENTIETH-CENTURY CHINA

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Submitted to the Graduate Faculty of

Arts and Sciences in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

UNIVERSITY OF PITTSBURGH

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University of Pittsburgh, 2006

China's nation-building agenda in the early twentieth century embraced the causes of women's rights and medical modernization. Modernizers considered the poor health of the Chinese population to be a major impediment to progress. Specifically, modern midwifery would improve the health of the nation at its most fundamental level, both by lowering the high infant mortality rate and by securing the well-being of future generations. Amid growing interest in maternal and child health, women entered the Western medical profession as midwives, nurses, and obstetrician/gynecologists. Local and national governments in China supported midwife training and research for the health of future generations. China's central government established a National Midwifery Board in 1929 to create and oversee training programs and enact laws to regulate modern midwives and physicians. Medical professionals and associations had enough political clout to transform public health policy. They successfully lobbied for legislation and actively advocated adopting aspects of Western medicine for women.

Midwives engendered better and stronger generations by using new methods and equipment. Furthermore, midwife training allowed Chinese women to participate in modernization by joining the labor force, thus challenging traditional Chinese notions of female passivity and seclusion. At the same time, however, these modern midwives displaced the traditional old-style "birth grannies" who had served as social and ritual mediators within the

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family and community. This research examines midwifery and childbirth technologies introduced into China in the early twentieth century in relation to nation building, modernization, and changing gender ideologies. By using biographical data, legislation, and articles in the popular press, among other sources, I explore the changing notions of gender propriety that prompted Chinese women to utilize Western-trained midwives, read literature dealing with such intimate matters as childbirth and prenatal training, give birth in hospitals or maternity clinics, and enter the medical profession as midwives.

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PREFACE

This work would have not been completed without the help and support of numerous institutions and individuals. I am very grateful for the financial support provided by a Chiang Ching-kuo Foundation Fellowship, an Andrew Mellon Fellowship, U.S. Department of Education Foreign Language Area Studies Fellowships, a Rockefeller Archive Center grant, a University of Pittsburgh Nationality Rooms Scholarship, a University of Pittsburgh History Department C.Y. Hsu Fellowship, and grants from the University of Pittsburgh's China Council, Women's Studies Program, and Asian Studies Center.

I would especially like to thank Zhang Haihui of the University of Pittsburgh East Asian Library for facilitating research at home and abroad. I am grateful to the staff at the Rockefeller Archive Center, especially Tom Rosenbaum; the Philadelphia College of Physicians; the Number Two Archives in Nanjing; the Shanghai Municipal Archives; the Tianjin Municipal Archives; the Beijing Municipal Archives; the Guangzhou Municipal Archives; the Guangdong Provincial Archives; and the Guangzhou Cultural Library. I would also like to thank Zhongshan University in Guangzhou, which housed me for a significant portion of my research.

Friends and colleagues have helped me in so many ways throughout this journey. Ted Johnson, Diana Wood, Liu Shiyung, Elizabeth Remick, Michelle Renshaw, Stefani Pfeiffer, Rebecca Clothey, Frayda Cohen, Vanessa Sterling, and Eric and Carol Lynne Barto all graciously offered scholarly and emotional support. All of my friends in China who are not named, you know who you are, and I thank you wholeheartedly. Finally, my gratitude goes to Kelli Maloy for careful proofreading, though all mistakes are, of course, my own.

I have used the pinyin system of romanization throughout, except proper names in which alternate spellings are common, such as Chiang Kai-shek and Sun Yat-sen.

INTRODUCTION

Childbirth changed dramatically in early twentieth-century China. *Jieshengpo* (接生婆), or "birth grannies" (also called *wenpo* 稳婆, *chanpo* 产婆, or *laolao* 姥姥), were older, married, or widowed women, usually multiparas (women who had given birth to more than one child) with birth experience. Like European or American midwives of the time, they received their knowledge casually from older, experienced women. They wore traditional padded jackets, skirts, and slippers, with their long hair parted in the middle and bound or braided at the back. Over their doorways they hung a placard signifying their profession: "*shousheng laolao*" (收生 姥姥, granny who attends births) or "*jixiang laolao*" (吉祥姥姥, lucky granny). Some signs used more colorful language: "*kuai ma qing che, mou shi shou xi*" (快马轻车, 某氏收洗: fast horse and light cart [speedy birth], and cleanup afterwards).

The *jieshengpo*'s responsibilities centered around the birth itself, while pre- and postnatal care were the responsibility of the pregnant woman and her immediate family. During pregnancy, the mother-to-be was careful to follow proscriptions regarding her diet and daily activities, and she and her family members made offerings to various deities to ensure the safe birth of a male heir. The idea that the mother's actions could influence her unborn child had existed for centuries in China. *Taijiao*, translated as "fetal education" or "prenatal care," encouraged pregnant women to avoid quarreling, sudden movements, and certain food and drink. She instead should listen to soothing music, move slowly, and sit up straight in order to have

healthy, intelligent, male offspring. The characteristics and temperament of the infant and child were solely the mother-to-be's responsibility. Her mother-in-law oftentimes supervised her, and a *jieshengpo* may have given casual advice, but a midwife was usually not retained until the last few months of pregnancy. During the last month, the *jieshengpo* may have made a prenatal visit to the expectant mother to bless the house, to try to determine the sex of the baby, and to predict the commencement of labor. When labor began, a relative or friend called the *jieshengpo* to the patient's home, where she may have burned incense and made offerings to various spirits. Often the *jieshengpo* was very active in the labor process, especially if it was moving slowly, by manipulating the mother and infant. If the parturient (laboring) woman's labor was arrested or protracted, the *jieshengpo* may have made additional offerings and prayers to the deities, and the family may have called in other midwives to assist.

According to Mary Niles, an American missionary doctor in Canton (Guangzhou) in 1890, during a traditional Chinese birth,

"[s]uperstition reigns supreme. [During labor], the woman is placed in a sitting posture over a tub, and constantly urged from the first to bear down. In the case of a primipara [a woman giving birth to her first child], she may thus be deprived of rest and food for several days. The midwife is constantly shouting that the child is just ready to be born. She spends her time stretching the vulvar orifice [which may cause] excessive swelling. If there is any delay, the patient is kept in an excited state of mind by neighbors calling, and advising this and that, by constant invocations to Kun Yam [Guan Yin] to save, by burning incense, and drinking tea sent by the idols. A sword and fish net are laid upon the bed, to drive away the evil spirits."¹

¹ Mary W. Niles, MD, "Native Midwifery in Canton," *Chinese Medical Missionary Journal* (hereafter *CMMJ*) 4 (1890): 51-52.

Although Dr. Niles was undoubtedly influenced by her medical and religious missions to save "heathen" lives and souls, her description is comparable to other contemporary birth accounts. During the traditional birth, Chinese utilized various forms of medicine, folklore, and religion, according to what they believed would prove most efficacious.² The Chinese medical lineages that specialized in obstetrics and gynecology primarily dealt with infertility or producing male children, leaving childbirth to the midwives.³ In many cases, especially in remote regions and in poor families that could not afford a midwife's services, even midwives were not used. Sometimes women gave birth alone or with the help of neighbors, friends, or relatives. Furthermore, since birth was regarded as unclean, women frequently labored and gave birth in a stable or barn, isolated and removed from the main house.

After the birth, assuming the child was delivered alive, the midwife dressed the umbilicus with ash, mud, or dung. Then she cleaned up and sometimes stayed to attend the mother and infant. She may have performed social functions such as helping to prepare a feast for family and neighbors, ritual bathing and dressing of the child, and offering sacrifices to gods and family ancestors. The *jieshengpo* usually oversaw the ritual bathing ceremony on the child's third day of life called *xisan* (洗三). In this way, the child was officially installed as a new member of the family and the wider community. Families often used the same *jieshengpo* for several births, and the old-style midwife was an important part of local society. However, her duties within each family were brief, beginning in the last month of pregnancy and extending only to the third day after the birth. She was responsible for the period of labor and delivery, but she performed little or no prenatal or postnatal care of mother or infant.

² Ralph C. Croizier, *Traditional Medicine in Modern China: Science, Nationalism, and the Tensions of Cultural Change* (Cambridge, Mass: Harvard University Press, 1968), Connie Shemo, "'An Army of Women': The Medical Ministries of Kang Cheng and Shi Meiyu, 1873-1937" (PhD dissertation, SUNY Binghamton, 2002).

³ Yi-li Wu, "Transmitted Secrets: Doctors of the Lower Yangzi Region and Popular Gynecology in Late Imperial China" (PhD dissertation, Yale University, 1998).

New midwives (zhuchanshi 助产士, lit. "birth helper") who came out of institutions like the First National Midwifery School in Beiping⁴ were young, unmarried, and educated. They wore makeup, bobbed or permed their hair, and dressed in medical uniforms. Graduation photographs show very stylish women in modern dress, very much unlike the traditional *jieshengpo*. In their starched white uniforms, these midwives provided a relatively sanitary birthing environment by using antiseptic solutions and sterile instruments. The *zhuchanshi* ideally began her relationship with her patient as soon as the pregnancy was discovered. They provided monthly, and later weekly, prenatal health examinations to ensure that the expectant woman was following dietary and exercise guidelines, as well as to anticipate any problems that might arise during labor or birth. At each examination, the *zhuchanshi* weighed the patient, measured her uterine dimensions, and performed a vaginal exam. She kept records of these measurements and any unusual symptoms. She also prescribed moderate exercise, fresh air, and protein-rich foods like meat and dairy products. Fetal education was still utilized. The new *taijiao* included similar prohibitions to quarreling and vigorous movement, but this time it was reinforced with scientific explanations (e.g. quarreling will raise blood pressure, which is not healthy for mother or fetus). If the patient had any abnormal conditions, such as syphilis or a narrow or contracted pelvis, she may have been admitted to the hospital for observation several days before the commencement of labor.

However, the majority of births still took place in the patients' homes, and the *zhuchanshi* was called in when labor began. Her duties at the birth were highly routinized, measuring cervical dilation, timing contractions, and taking blood pressure and temperature readings. If problems arose, the patient may have been sent to the hospital, or a physician called to the home

⁴ Beiping ("northern peace") was the name given to Beijing ("northern capital") when the Guomindang government established its capital in Nanjing ("southern capital") in 1927.

to assist the midwife. In the hospital, a physician may have performed a caesarian section or used forceps to deliver the infant. After the birth, the *zhuchanshi* bathed the baby, clipped its nails, administered silver nitrate drops to curb eye infections, cut the umbilical cord with sterile scissors, and tied and wrapped the cord with sterile gauze. Afterwards, the *zhuchanshi* continued to make weekly, and later monthly, postnatal visits to the mother and infant, with more weighing and measuring involved to make sure the mother was recovering well and the infant was growing properly. Afterwards, the mother could read modern parenting books and articles and attend well-baby clinics to learn the most modern methods of childrearing. When the child began school, he or she submitted to examinations by the new school nurses who continued the collection of data. The *zhuchanshi* were responsible for the entire length of pregnancy, labor and delivery, the postnatal period, and beyond.

I have described a dichotomy between the *jieshengpo* and the *zhuchanshi*, the traditional and the modern during this period of change. The latter were regulated and supported by the Republican and Nationalist governments, while the former were vilified and denounced as dirty, disease-carrying, superstitious old women. Of course, such a stark dichotomy did not exist. The new midwives perhaps took over some of the social roles of the *jieshengpo*. In addition, modern midwifery schools trained *jieshengpo* in short courses to mold them into hygienic, modern birth attendants, who undoubtedly continued to perform their ritual services. Furthermore, many families utilized both old-style and modern midwives. The function of both types of birth attendants was to deliver safe and healthy children.

Although the *jieshengpo* were necessary in childbirth, not least for ritual functions, Western and traditional Chinese physicians alike criticized them. However, no one proposed that women should cease being the primary birth helpers. Midwifery was distrusted within the

traditional Chinese medical profession, as evidenced in the obstetrics manual *Da Sheng Pian* (达 生篇), published around 1661 CE. Its anonymous author warns against using these "fools [who] know little about obstetrics."⁵ The manual advised its readers not to follow all of the *jieshengpo*'s advice or directions, for "occasionally both mother and child die from the treatment."⁶ English-language publications like the *China Medical Missionary Journal* (later called the *China Medical Journal*) denounced the old-style midwives as greedy charlatans who had no idea how to deliver babies. Several Western physicians recounted their stories of attending women who had been in labor for days; in many cases, the midwives had already dismembered the infant. The Western physician was called in to try to save the mother (usually unsuccessfully). In the early 1900s, family members rarely called for Western physicians, and when they did it was typically only after the parturient woman had spent several days in labor. By this time, many birth helpers had already unsanitarily bare-handedly manipulated the parturient woman. As a result, maternal puerperal fever, or "childbed fever," had set in.

The high maternal and infant mortality rates resulting from unsanitary birthing environments prompted Westerners and Chinese alike to reform childbirth practices in China, beginning with training and regulating old and new midwives. Puerperal fever and tetanus neonatorum ravaged populations of women and children worldwide in the early twentieth century. Countries around the world were struggling with high maternal and infant mortality rates due to these diseases, which are easily prevented by using aseptic methods. In the twentyfirst century these diseases remain serious problems in developing countries that lack adequate sanitation. Puerperal fever is caused by *Streptococcus* bacteria entering wounds in the vaginal

⁵ J. Preston Maxwell and J.L. Liu, "Ta Sheng P'ian: A Chinese Household Manual of Obstetrics," *Annals of Medical History* 5, no. 2 (1923): 95-99, 96.

canal or through the urinary tract, and was one of the main causes of maternal mortality worldwide. The development of aseptic techniques like sterilizing instruments and washing hands minimized this risk. Old-style midwives in China commonly had long fingernails with which to rupture the amnion, or bag of waters, and they stretched and tore the perineum (the area between the vagina and anus) and cervix in order to "give the infant an open way" (*gei ying 'er kai lu* 给婴儿开路). The *jieshengpo*'s unwashed hands and frequent manipulation of the mother greatly contributed to the transmission of this disease. If the woman did not die of sepsis, she may have had to live with crippling disabilities resulting from these practices, such as perineal tears, infertility, painful scarring, and vesico-vaginal fistulas, in which a hole is present between the bladder and the vaginal wall, resulting in constant urine leakage.

Infant mortality rates were also very high due to unsanitary measures causing death from tetanus neonatorum (neonatal tetanus), a bacterial infection that enters the body through an open wound. The primary mode of neonatal tetanus transmission is through the severed umbilical cord. The *jieshengpo* used a household knife or pair of scissors, sometimes wiped clean on her clothing, to cut the cord. Then she dressed the cord with mud gathered from the ground, sawdust from the stable, or animal dung. Rusty metal, animal dung, and soil all host *Clostridium tetani*, the bacterium that causes tetanus neonatorum. As germ theory became more widely accepted in the late 1800s, Westerners adopted aseptic childbirth techniques and spread their methods to other countries as part of modernizing projects to improve public health and ultimately lower mortality rates.

MODERNITY

This work examines the development of modern midwifery in early twentieth-century China, beginning with early missionary endeavors in the late 1800s and continuing through the

Republican and Nationalist eras (1912-1949), with a special focus on the themes of modernity, gender, and imperialism. "Modern medicine" and "scientific medicine" are terms used somewhat interchangeably to designate the particular set of practices and theories about the body, health, and disease that emerged in Europe beginning in the 1800s and subsequently in the United States. Scientific medicine is associated with the Enlightenment ideal of human progress and the scientific method of investigating, observing, measuring, and recording empirical phenomena. Especially important to scientific medicine was the pathogenic theory of medicine (germ theory) developed by Louis Pasteur and Robert Koch in the mid-1800s. This theory states that germs are the cause of disease and illness, and that disease and illness can be prevented with proper aseptic, or sterile, methods. Specific to childbirth, in the 1840s Ignaz Semmelweis found that physicians' hands left unwashed after performing autopsies caused high rates of puerperal fever in hospitals.⁷ These theories and their related practices also greatly advanced the fields of surgery (as fewer people died of post-surgical infections), public health and hygiene, bacteriology, epidemiology, and the development of antibiotics. All of these fields are part of scientific medicine.

The term "modern medicine," more than the phrase "scientific medicine," captures the ideal of striving for improvement that so many Chinese identified with during this period. "Modern" connotes intangible characteristics of progress, enlightenment, and truth, all characteristics of the new midwives. Therefore, I use "modern midwife" and "modern physician" to denote those who had received training in scientific medicine, whether in China or abroad. If we contrast modern and traditional midwives by looking at early twentieth-century government documents alone, we would find that modern midwives were examined, licensed,

⁷ Semmelweis's theory was initially rejected by the medical community, as germ theory had not yet been adapted at that time. He died in an insane asylum in 1865.

and given a somewhat uniform training curriculum. They worked in cleaner environments like hospitals or clinics, or in homes with sterile instruments. They had to follow rules and procedural regulations. On the other hand, according to modern midwives and physicians, traditional Chinese midwives were uncontrollable and dangerous swindlers with no formal training. Anyone could "hang up a shingle" and distribute medical advice and medicines without regulation.

In the early twentieth century, many people considered modernity to be an inevitable force. According to Laurence Schneider, modernity is "the product of a universal process of social and cultural evolution that all societies would experience unless they were blocked from following their natural proclivities."⁸ China had a destiny to fulfill or else risk being swallowed up by the nations that were already modern, those same nations whose actions had resulted in China's "century of humiliation" through lost wars and unequal treaties. In China, modernity signified a break with traditional social, political, and economic structures, including dissolving the dynastic system and establishing a Western-style government, revamping the educational system, reforming marriage and gender customs, eliminating superstitious beliefs, and so on. Many of these ideas were presented during the New Culture Movement (roughly 1915 to 1923), and medical modernization was an integral part of the changes that were sought. Intellectual reformers during this time produced an astounding array of popular materials on public health, childrearing, and nutrition. They called upon women to have healthy pregnancies and modern births in order to improve the health of China's citizens.

In the first decades of the twentieth century, science began to quickly replace religion as the primary ideology and driving force of modernization. This is evidenced within the ranks of

⁸ Laurence Schneider, *Biology and Revolution in Twentieth-Century China*, (Lanham, MD: Rowman and Littlefield Publishers, Inc., 2003), p. 6.

the Rockefeller Foundation, one of the primary financial contributers to public health modernization in China. Frederick T. Gates, the Rockefeller Foundation's chief philanthropic officer for more than twenty years, made his goals in China very clear: "...The mere commercial results of missionary efforts to our own land is [sic] worth ...almost 1000 fold every year."⁹ Gates' faith in Jesus Christ was replaced, however, by a conviction that medicine was the ultimate savior.¹⁰ He turned his attention to public health and medicine as the way to save mankind, and he devoted millions of Rockefeller dollars to that end. The Rockefeller Foundation took the Peking Union Medical College from under missionary control and made it into a secular, thus modern and progressive, organization. Professional organizations in China also became more secular in the twentieth century. The Chinese Medical Association was originally called the Chinese Medical Missionary Association, but in the 1930s "Missionary" was dropped as it transformed from a social publication into a rigorous scientific journal.

Because of China's recent humiliations at the hands of Western powers, many Chinese were ambivalent about what kinds of ideas and inventions to take from the West. Joseph Esherick has noted the tension between nationalism and modernity that arose as a developing nation like China searched for its own identity while aiming to make itself more like developed countries.¹¹ Although science was believed to be what made America strong, the science and medicine that came from the United States and Europe was deemed "modern" instead of "Western." Therefore, China could, in fact *should*, modernize, without necessarily westernizing. In its modernizing process, the Guomindang government was devoted to utilizing science,

⁹ E. Richard Brown, *Rockefeller Medicine Men: Medicine and Capitalism in America* (Berkeley: University of California Press, 1981).

¹⁰ According to Brown, Gates had been a Baptist minister but left the church when he decided that the Baptist religion was built on faulty documentation and that Jesus had no intention of ever baptizing anyone.

¹¹ Joseph W. Esherick, "Modernity and Nation in the Chinese City," in *Remaking the Chinese City: Modernity and National Identity, 1900-1950*, ed. Joseph W. Esherick (Honolulu: University of Hawai'i Press, 1999): 1-16.

including modern medicine, to improve the lives of its people as well as to compete with Western powers. This is evident in Chiang Kai-shek's New Life Movement, and also in the establishment of science academies like Academia Sinica, research institutions, hospitals, and school curricula that included a considerable science component.¹²

I use the term "Western medicine" to denote medicine brought to China and elsewhere by Western medical personnel, especially medical missionaries prior to the 1900s. It is contrasted with the term "modern medicine" in that it is more limited in scope and may connote imperialist actions, for example, many medical missionaries' complete disregard of traditional Chinese medicine and corresponding hegemonic intentions for scientific medicine. By the 1920s, however, Chinese were being trained in Western medicine in their own country, and they opened modern hospitals and medical schools on their own. Hence, the "Westernness" of the new medical techniques became secondary as China's political leaders and intellectuals attempted to modernize their country with *scientific* or *modern* medicine. Furthermore, Western medicine was never adopted wholesale without change from West to East; the Chinese made considerable adjustments to, for example, modern midwifery programs to better cope with China's specific needs. Except when referring specifically to medical actions of Westerners, such as in the discussion on Western medical and philanthropic imperialism, I have avoided the term "Western medicine" in this work.

The Chinese terms for traditional and modern medicine do not define distinctly different methods or ideas, and these medical ideologies are fluid within and across time. For example, in the 1920s, most medical modernizers considered traditional Chinese medicine to be a ridiculous,

¹² Schneider, *Biology and Revolution*, Ka-che Yip, *Health and National Reconstruction in Nationalist China: The Development of Modern Health Services*, *1928-1937*, Monograph and Occasional Paper Series (Ann Arbor: Association for Asian Studies, Inc., 1995).

unscientific jumble of superstitions and rituals created to appease the spirits, while today many consider traditional Chinese medicine a viable (at least potentially) alternative or complement to Western medicine. The ambiguity between modernizing and Westernizing is evident in the Chinese terminology for medicine. The general Chinese word for medicine is *vivao* (医药), literally "doctor medicine." Western medicine and Chinese medicine are further distinguished by the terms xiyao (西药) and zhongyao (中药), respectively. In the 1920s, the distinction between the two types of medicine was brought into sharp focus in the struggle between Chinese and Western-trained physicians for legitimacy and government patronage.¹³ Modern physicians wished to eliminate Chinese physicians on the grounds that they were unscientific, superstitious, unregulated, and harmful. Modern physicians also sought medical hegemony and argued that modern medicine was the only valid form of medicine based on the idea that science equaled truth. At this time, fearful and angry at the attack on their livelihood, traditional Chinese physicians organized and lobbied (eventually successfully) for official recognition. Within this struggle, Chinese medicine was rigidly defined against Western medicine as being more holistic, while Western medicine only treated the symptoms.

Both forms of medicine can be modern, however, and again this alludes to the fluidity of the terms. In fact, Western anatomy was adopted into the traditional Chinese medical canon early on, with resulting changes in some acupuncture meridians. Moreover, some knowledge of Western medicine among medical elites was common, even necessary, by the turn of the twentieth century.¹⁴ I believe that, in essence, *xiyao* denotes "modern," not necessarily

¹³ Xu Xiaoqun, *Chinese Professionals and the Republican State: The Rise of Professional Associations in Shanghai, 1912-1937* (Cambridge: Cambridge University Press, 2001).

¹⁴ Bridie Andrews, "Tailoring Tradition: The Impact of Modern Medicine on Traditional Chinese Medicine, 1887-1937," in *Notions et perceptions du changement en Chine*, eds. Viviane Alleton and Alexeï Volkov (Paris: Collège du France Institute des Hautes Études Chinoises, 1994): 149-166.

"Western," medicine. "Modern medicine" is a more neutral term that accurately portrays the *scientific* nature of the field and does not allude to an inherent Westernness.

All over the world, a crucial part of the modern medicine movement was the legitimation of, and in many cases the hegemony of, scientific medicine, which spread to encompass nearly all aspects of human life. This included the transformation of hospitals from dens of disease and illness, where indigent people went to die, to sanitary houses of healing, the place of choice for the most modern treatments. Beginning in the early twentieth century, medical specialization also emerged as fields of medicine became too complex for one person to master. Thus the medical fields of ophthalmology, surgery, obstetrics and gynecology, and so on, were developed.

As scientific medical theories became widely accepted and hospitals underwent transformations, first in Europe and the United States and later elsewhere, the field of public health emerged to incorporate modern medical ideas and spread them to the masses. The focus of much of these efforts was on cleanliness. Measures to improve public health date back centuries, for example, the creation of Roman aqueducts, religious dietary proscriptions, and the burning of cities during the Black Death. However, public health gained greater importance in the mid-1800s with John Snow's discovery that a London cholera outbreak was caused by a contaminated public well. This discovery, combined with germ theory, spurred greater interest in improving public health, especially in the areas of sanitation and water supply, in order to curb the spread of infectious disease. Fears of disease caused by dank, dark spaces mobilized Americans to clean up their homes, use disinfectants, boil drinking water, and improve ventilation to relieve the buildup of "sewer gases."¹⁵ Governments created public health departments to further the local cause, such as the American Sheppard-Towner Act to establish

¹⁵ Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge: Harvard University Press, 1999).

maternal and child health care centers, with a special concentration on providing clean milk to infants and children. Maternal and infant mortality could be lowered relatively easily by utilizing aseptic techniques during childbirth. Philanthropists and sanitarians spread their gospel of cleanliness to other countries.

By examining the ideals and motivations of public health modernizers and the results of their efforts, we can gain a clearer understanding of how public health, and in particular, maternal and child health, shapes ideas of modernization and progress. By the early twentieth century, public health had become a crucial part of any locale's plan to modernize, and improvements in public health were a crucial part of the modernization process in cities worldwide.¹⁶ Ruth Rogaski, in fact, translates the Chinese word for hygiene, *weisheng* (卫生), as "hygienic *modernity*."¹⁷ Spurred by ideas of modernism, social Darwinism, eugenics, and public health movements in the United States, Japan, and Europe, many Chinese intellectuals and political leaders in the early twentieth century reshaped their cities and governments in order to survive and become more competitive globally. China's "sick man of Asia" image would be remedied through public health initiatives like street sweeping, night soil removal, and sanitary house inspections. The spread of many parasitic and infectious diseases in China, like waterborne cholera, typhoid, and schistosomiasis; and insect-borne malaria, typhus, and bubonic plague were halted with a clean water supply and a clean environment.

Efforts to push through changes in grassroots public health journals as well as in state-run public health initiatives in China affected nearly every part of a person's life in the early

¹⁶ David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in 19th-Century India* (Berkeley: University of California Press, 1993), Judith Walzer Leavitt and Ronald L. Numbers, eds., *Sickness & Health in America: Readings in the History of Medicine and Public Health*, 3rd ed. (Madison: University of Wisconsin Press, 1997), Kerrie L. MacPherson, *A Wilderness of Marshes: The Origins of Public Health in Shanghai*, *1843-1943* (Hong Kong and New York: Oxford University Press, 1987), Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China* (Berkeley: University of California Press, 2004).

¹⁷ Rogaski, *Hygienic Modernity*.

twentieth century. These initiatives played a crucial role in city planning and were the cornerstone of China's modernization process in the "administration of space and populations in order to eliminate dirt and prevent disease."¹⁸ A strong state pursues control of people, resources, and information. One of the Guomindang's main public health goals was improved collection processes for vital statistics. The Guomindang regulated the recording and submission of birth and death statistics to the central government in order to more effectively collect taxes, plan cities and towns, and make policies. Hygenic modernization is also evident in Chiang Kaishek's New Life Movement that included bans on public spitting and urination. Furthermore, some public health advocates called for fundamental changes in Chinese living and eating habits, such as eliminating the family bed and promoting the use of individual eating utensils in place of traditional family-style dining.¹⁹

The development of modern midwifery in China was inextricably tied to this modernization process. Changes in childbirth under the National Midwifery Board were part of a greater effort to modernize the country. The molding of a modern city necessitated creating a modern public health program that began at birth and focused on women both as reproducers and as active participants – as midwives – in the building of a new nation. There was little formal medical training in China prior to this time, but by the late 1920s the Nationalist government had planned a system of regulated and standardized medical schools, nursing schools, and midwifery training programs. Although many of these medical programs were never put into place or were only partially completed, they are indicative of increasing interest in modernization and nation-

¹⁸ Ruth Rogaski, "Hygenic Modernity in Tianjin," in *Remaking the Chinese City: Modernity and National Identity, 1900-1950*, ed. Joseph W. Esherick (Honolulu: University of Hawai'i Press, 1999): 30-46.

¹⁹ Chinese meals are usually served "family style," in which each person uses his or her own chopsticks to serve food from communal dishes. For dining reform, see Sean Lei, "Habituate Individuality: Framing of Tuberculosis and Its Material Solutions in Republican China," paper presented at the Association for Asian Studies Annual Meeting, Chicago, April 2, 2005.

building efforts after the fall of the Qing dynasty. They also show the increased importance of women in China's rebuilding process as women started to enter the medical and public health fields. Furthermore, local and national Republican and Guomindang governments began to regulate midwives as early as 1913. Legitimate midwives, those who had received some formal medical training, were licensed, while those engaged in deviant practices or behaviors were proscribed.

Modern childbirth was linked with scientific medicine, and it was the foundation on which to build a strong nation. However, the shift to modern medicine was gradual, just as it was in the United States and Europe, and in China it was never complete. Even today, hospitals in China have both modern (*xiyao*) and traditional Chinese (*zhongyao*) medical departments. Childbirth is one of the areas that has been almost thoroughly medicalized, as we can see in the high rates of caesarean sections in urban China today. Only the poorest women today give birth in their homes, while the majority give birth in hospitals or local clinics, though usually without medical anesthesia (traditional Chinese anesthesia, such as acupuncture, is sometimes used). Compared with the hegemony of scientific medicine in the United States today, we see a much greater acceptance of alternative forms of medicine in China.

Throughout this work, there are references to the sterility, cleanliness, and order of the modern birth environment, as opposed to the disorder and disarray of the untrained *jieshengpo*. The sterile birth environment that the *zhuchanshi* advocated – white sheets and towels, clean hands, and sterilized equipment – certainly reduced maternal and infant mortality. Their starched white uniforms and bobbed hair, however, seem superfluous. Or were they? It is much easier to tell whether or not a white garment is dirty, in contrast with the drab fabrics worn by the *jieshengpo* and, indeed, most of the population. Furthermore, short hair is more easily kept out

of the way – of the eyes, the hands, the patient – under a (clean, white) hat. Regardless of their effectiveness, these visual characteristics imported from the West were modern representations of the *zhuchanshi*'s educational level. Traditionally, women who became *jieshengpo* were required to have given birth themselves in order to be seen as skilled and valid. The *zhuchanshi*, on the other hand, overwhelmingly had less first hand experience (the majority were unmarried and childless), but they put forth an air of modernity in their mode of dress. In China, the color white is a symbol of death and mourning, and we are left with a strange dichotomy: women dressed as death who are supposed to bring life.²⁰ Eventually, the *jieshengpo* disappeared. According to a recent article in *Midwifery Today*, it is next to impossible to find a true traditional *jieshengpo*, even in remote rural areas, and in any case, these *jieshengpo* most likely at the very least wash their hands before going to work and do not treat the umbilicus with animal dung.²¹ Even the traditional *jieshengpo* has adopted some modern medical techniques. Nonetheless, efforts to make childbirth safer in China, as well as to bring about continued state control over births and bodies, are ongoing today.

GENDER

The development of modern midwifery is a window through which to explore gender and its relationship to nation building and modernization. As Mary Ann Burris stated, "Medicine is the most applied of all sciences. Therefore, it gives us a particularly good opportunity to see how scientific knowledge is translated into social practice. ... Because much of scientific medicine is imported knowledge in China, and because modern universities [and hospitals] are also, in some

²⁰ We can see a similarity with the growing popularity of Western weddings in China and Taiwan; however, many brides choose to dress in brightly colored Western-style gowns instead of or in addition to white, the color of mourning.

²¹ Travis Anna Harvey, "The Jie Sheng Po of China," *Midwifery Today* 66 (2003).

ways, imports, Chinese medical universities [and hospitals] connect the global to the local in most compelling ways."²² In this regard, we may also examine how medicine, in this case modern midwifery, affected gender in China. Furthermore, childbirth is seen now not only as a characteristic of societies, but also as a point of inquiry in itself.²³ We can learn much about a society by looking at its policies and attitudes towards women and children and the birth process.²⁴

In the case of China, nationalist and modernizing policies regarding national health often targeted women as reproducers of healthy, strong citizens. At the same time, modern midwives, as professionals, sought to contribute to the modernization of the country. Women both reproduced the nation and were active participants in the modernization process. Modern midwifery in the early twentieth century brought about aseptic births and a resulting decline in maternal and infant mortality, while promoting greater state control over women's bodies.

Accounts of traditional childbirth in China in the first half of the twentieth century are filled with horrors of protracted labors, women birthing alone or in barns, uterine hemorrhage, disfiguration, and deaths of both mother and infant.²⁵ One reason for this is that traditional Chinese medicine viewed women primarily as vessels for reproduction. Most resources were spent on saving the life and protecting the health of the infant, especially if it were male, at the expense of the mother. Modern medicine did help to curb some of these miseries by providing more sanitary birth environments, modern medical procedures like caesarian section, and

²² Mary Ann Burris, "To Serve China: Medical Schooling and Modernization in the People's Republic" (PhD dissertation, Stanford University, 1991), 2.

²³ Cecilia Van Hollen, *Birth on the Threshold: Childbirth and Modernity in South India* (Berkeley: University of California Press, 2003).

²⁴ Faye D. Ginsburg and Rayna Rapp, "Introduction: Conceiving the New World Order," in *Conceiving the New World Order: The Global Politics of Reproduction*, eds. Faye D. Ginsburg and Rayna Rapp (Berkeley: University of California Press, 1995): 1-17.

²⁵ An excellent set of accounts is Zi Yun, et. al. "Wu Xiang De Shengchan Fengsu (Childbirth Customs in My Hometown)." *Funu zazhi (Women's Journal)* 11, no. 7 (1925): 1173-200; In addition, Ba Jin's *Family*, published in 1933, gives a moving illustration (3rd ed., Peking: Foreign Languages Press, 1978).

equipment and medicines such as forceps and antibiotics. It also ran the risk of becoming utilitarian, with the sole purpose of the mother, as in traditional Chinese beliefs, as a reproducer, though this time as reproducer for the nation instead of the family. Furthermore, childbirth remained the domain of women in China, whereas in the United States, midwives were nearly completely displaced by male physicians by 1950. Traditional cultural norms of female modesty hindered male physicians' access to female Chinese patients. In order for women to have modern births, they had to solicit female professionals, for attending childbirth was and is a woman's job in China.

The Chinese situation differed markedly from that in the United States. Had a fully American birth model been imposed on China, male physicians would have been attending births by the 1940s as they were in the United States. Instead, midwives remained very important actors in the realm of childbirth. Furthermore, Dr. Marion Yang studied and observed dozens of different public health programs worldwide and only then formulated a plan that she thought would best suit China's population and needs. We may see midwifery as a space in which Chinese practitioners and patients contested, modified, and transformed modern childbirth to fit their own ideas about maternal and child health, all with varying degrees of success. We can clearly see some broad issues regarding gender and childbirth. For example, midwives were regulated by the Chinese state, yet they were still the ones designated to deliver children. During the same period, American midwives all but disappeared as male physicians displaced them. Thus, we have a unique version of Chinese urban modernity illuminated in this study of midwifery regulation and reform.

IMPERIALISM

Some have argued that Western medicine is a form of cultural imperialism, a "unilateral imposition by an imperial power of its ideas or institutions upon a helpless colonized society."²⁶ The traditional historical narrative assumed the superiority and rapid implementation of Western medicine in non-European countries, as well as the correctness of medical missionaries' civilizing efforts. However, current work stresses that the spread of medicine and science were forms of Western imperialism and examines the inefficacy of nineteenth- and early twentieth-century Western medicine. This recent body of literature calls for re-examining Chinese modernizers' complicated efforts to resist imperialism while adopting Western technology in the name of nation building, and it is critical in understanding the connections between Chinese nationalism, modern medicine, and Western imperialism.

Many scholars, like Arnold, Curtin, Pyenson, and Andrews and Cunningham, have questioned the assumed intrinsic goodness of Western science, including medicine, and looked at the degrees of contestations and syncretism between colonizers and colonized.²⁷ Andrews and Wu have expanded these theories to China.²⁸ For instance, Wu found that the ineffectiveness of some medicine, such as the English physician Benjamin Hobson's ice water douches to relieve pregnancy discomfort, hindered its acceptance in China. Much of Western obstetrics and gynecology was counterintuitive to Chinese traditional cultural norms and ideas about the body

²⁶ Laurence Schneider, *Biology and Revolution*.

²⁷ Arnold, *Colonizing the Body*, Andrew Cunningham and Bridie Andrews, eds., *Western Medicine as Contested Knowledge* (Manchester and New York: Manchester University Press, 1997), Philip D. Curtin, *Disease and Empire: The Health of European Troops in the Conquest of Africa* (New York: Cambridge University Press, 1998), Lewis Pyenson, *Cultural Imperialism and Exact Sciences: German Expansion Overseas 1900-1930* (New York, Berne, Frankfurt am Main: Peter Lang, 1985).

²⁸ Bridie Andrews, "Judging Western Medicine by Chinese Values: Zhang Xichun and His Work" (paper presented at the Association for Asian Studies Annual Meeting, Chicago, IL, March 22-25, 2001), Wu, "Transmitted Secrets."

and health, like the Chinese emphasis on avoiding cold water during pregnancy.²⁹ Ruth Rogaski suggests searching for similarities between traditional Chinese and Western views of health and disease in order to better understand how Chinese adapted, manipulated, and contested Western medicine.³⁰

In her anthropological study of childbirth in South India, Cecilia Van Hollen shows how fears of depopulation prompted British colonizers and Indian nationalists alike to manage births, with the creation of maternity hospitals and philanthropic organizations like the Dufferin Fund.³¹ The Chinese case is similar, though the difference is not fear of depopulation, but of dissolution through sickness and disease. In India, medical modernizers deemed old-style childbirth dirty and immoral, and the only way to ensure safe births was through Western medicine. Van Hollen criticizes the modernization of births and the control it attempts to exact over women's lives (though traditional midwives, or *dais*, are still quite common and are regulated by the government). However, I must stress one point that is often left out of the Western medicine as cultural imperialism argument: childbirth is dangerous. Especially in areas lacking proper sanitation, maternal and infant mortality rates were, and are, extremely high. The modern midwives in China did do what they were intended to do: they reduced, often dramatically, the maternal and infant mortality rates.

In addition, I do not believe that modern childbirth was routinely forced upon the pregnant women and their families or that they had no choices in the matters of childbirth. It was prestigious for pregnant women and their families to utilize the most current medical methods, as evidenced by the fact that many women of official and gentry families in China used

²⁹ Yi-li Wu, "Introducing the Uterus to China: Benjamin Hobson's *New Treatises on Women's and Children's Diseases* (Fuxing xinshuo), 1858" (paper presented at the Association for Asian Studies Annual Meeting, Chicago, March 22-25, 2001).

³⁰ Ruth Rogaski, *Hygienic Modernity*.

³¹ Van Hollen, *Birth on the Threshold*.

modern medicine as soon as it was available (see Chapter One). We see the same trends in the United States and elsewhere as well, with both the rich (by choice) and the indigent (by necessity) being the first to access modern medicine.³² Word of mouth spread every time a woman safely delivered a child with the help of a modern midwife or physician. Each successful birth brought new patients.

Furthermore, if women and their families hoped for a safer birth and believed that Western medicine could deliver that, then they sought it out themselves. The numbers of hospital births and births attended by skilled birth helpers, including modern midwives and trained old-style midwives, grew dramatically in the twentieth century. The remarkable decreases in maternal and infant mortality during this period are most marked in developed countries and are due to better prenatal care and births assisted by skilled midwives and physicians.³³ This alludes to greater numbers of women accessing modern prenatal care and giving birth in hospitals or at home assisted by skilled birth attendants. For instance, the proportion of hospital births in the United States increased from 55% to 90% between 1938 and 1948.³⁴ Leavitt's theory behind this rapid shift from female midwives to male physicians in America is that women believed that physicians knew more than the midwives did and that the former could engender safer and more comfortable births.³⁵ In 2005, 61% of women worldwide utilized skilled midwives or physicians to assist in parturition and birth.³⁶

³² Judith Walzer Leavitt, "Science' Enters the Birthing Room: Obstetrics in America," in *Sickness and Health in America*, p. 81-97, Van Hollen, *Birth on the Threshold*.

³³ In developed countries, the maternal mortality rate declined 50-fold between 1900 and 2000. H. Gelband et.al., "The Evidence Base for Interventions to Reduce Maternal and Neonatal Mortality in Low and Middle-Income Countries," World Health Organization Commission on Macroeconomics and Health, Working Paper Series, WG5 Paper No. 5 (2001), p. 2.

³⁴ Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC, "CDC on Infant and Maternal Mortality in the United States: 1900-99," in *Population and Development Review* 25, No. 4 (1999): 821-26.

³⁵ Leavitt, "Science' Enters the Birthing Room.

³⁶ Population Reference Bureau, Datafinder, http://www.prb.org/datafind.

Modern medicine eases the fears of childbirth by claiming the ability to control it. By eliminating or reducing the risk of human error and carelessness, and by quantifying events (timing contractions, signifying the three stages of labor, measuring cervical dilation), modern medicine purports to make birth safe and controllable. For women with a contracted pelvis, an abnormal fetal presentation, or gestational diabetes, prenatal care and a birth assisted by a modern physician or midwife were invaluable and could save the lives of both mother and infant. Caesarian section, after the advent of aseptic surgical methods, was especially advantageous to women who otherwise would not have been able to deliver a live child or survive the birth themselves.

Most of the practices that the modern medical profession promoted in China dealt with asepsis, not invasive medical or surgical procedures, and it is these aseptic practices that are the primary focus of this work. Some of the new medical practices were medically necessary, while others were merely "cultural add-ons." A case in point is the way that modern medicine in the twentieth and early twenty-first centuries treats pregnancy as a disease to be monitored, managed, and treated by a skilled physician in a hospital using fetal heart monitors and intravenous drugs. The extensive medicalization of birth and parturition, for example, routine episiotomies, pubic shaving, a prone labor and delivery position, and constant monitoring of mother and infant, are in most cases unnecessary to ensure a safe birth, but they are important rituals that engender security and safety on the part of the parturient woman and her family. The patient and the modern midwife collaborate on these procedures based on a degree of trust and faith: the patient trusts the midwife to produce a safe and healthy birth, and the midwife puts her faith in her skills in modern medicine to safely deliver the child.

In addition to the culturally imperialistic view of medicine, several scholars have considered philanthropy to be a form of cultural imperialism.³⁷ Many of the hospitals, midwifery training programs, and public health campaigns in China were promoted and funded by foreign philanthropic organizations, whether they were missionary endeavors, national organizations like the League of Nations Health Organization (established in 1908), or private donors like the Rockefeller Foundation. The latter organization poured millions of dollars into improving China's health care system.³⁸ In fact, the Rockefeller Foundation worked closely with the League of Nations and even formed a special committee, the China Medical Board, to distribute funds to China. Richard Brown claims that the Rockefeller endeavor was based solely on creating a healthy society that would further the United States' capitalist needs. A director of a Rockefeller-controlled investment corporation claimed that "where mass diseases are brought under control, productivity tends to increase – through increasing the percentage of adult workers as a proportion of the total population, [and] through augmenting their strength and ambition to work."³⁹ This theory of medicine argues that medical philanthropies were developed to support and legitimize capitalism, while focusing attention away from problems that such capitalist industrial development may cause, for example black lung disease. Furthermore, "the Rockefeller philanthropy officers could publicly acknowledge their use of medicine to integrate dissenting people into industrialist and capitalist society" by demonstrating that they had the common people's best interests at heart.⁴⁰ In fact, according to Paul Weindling, "the broad

³⁷ Robert F. Arnove, *Philanthropy and Cultural Imperialism: The Foundations at Home and Abroad* (Boston: G.K. Hall, 1980), E. Richard Brown, Rockefeller Medicine Men, Jiang Xiaoyang, "Cross-Cultural Philanthropy as a Gift Relationship: The Rockefeller Foundation Donors and Chinese Recipients, 1913-1921" (PhD dissertation, Bowling Green State University, 1994).

³⁸ The Rockefeller Foundation's China Medical Board donated US\$45 million to health care efforts in China. See page 119. ³⁹ Stacy May, quoted in Brown, *Rockefeller Medicine Men*, 116-17.

⁴⁰ Brown, Rockefeller Medicine Men, 124.

agenda of social and preventive medicine was meant to reinforce political stability by building up internal administrative structures.⁴¹

I argue that in China, the government and the citizenry adapted philanthropy in the form of modern medicine to suit their own needs. It was not forced upon them, nor was it adopted outright without change and therefore was not imperialistic. In this regard, I agree with Laurence Schneider's analysis of philanthropies in China. He does not consider Western medicine or Rockefeller philanthropy in China to be imperialistic because the Nationalist government actively sought funding and technical assistance from foreign powers, in large part because of their own inadequate funds. Political modernizers and intelligentsia alike supported and encouraged this cooperation.⁴² The First National Midwifery School, discussed in Chapter Three, is a prime example of the cooperation between the Guomindang and private foreign philanthropists. In addition, Schneider argues that Western philanthropies did not promote science and modernization in China or other countries solely to exploit them. The motivations and the degrees of agency of all parties in these matters are extremely complex and thus cannot be simplified in such terms as cultural imperialism.

SCOPE

Between the fall of the Qing dynasty in 1911 and the establishment of the Nationalist, or Guomindang, government in Nanjing in 1927, the central government had at best a tenuous grasp on the country. Most of China was under the control of local warlords, and there were no successful national efforts to control or support modern midwifery. During the Nanjing Decade

⁴¹ Paul Weindling, "Philanthropy and World Health: The Rockefeller Foundation and the League of Nations Health Organisation," *Minerva* 35 (1997).

⁴² Schneider, *Biology and Revolution*.

(1927-1937), the Nationalist government created and supported various modern medical and public health enterprises, though implementation was still difficult because of the fragmented political nature of the country. During this time, the Guomindang were fighting the Communists and, later, the Japanese, especially between 1937 and 1949 when the country was embroiled in both civil war and the Second Sino-Japanese War. China's resources were often too scarce to devote to developing modern medicine.

My focus then is on the period between 1911 and 1937, because this era was the essential introductory phase of medical modernizing efforts on local and national levels. Prior to this time, the Qing dynasty had attempted to change a few aspects of their government in fits and starts, but it was not until the end of the dynastic system that plans to really change society and politics got underway. The invasion of China by Japan in 1937 halted much of these efforts, and so my study ends there. The sources for this period, like government documents, sometimes overstate the success of the programs. Although the plans may have never been realized because of social, financial, and political restraints, much of the post-1949 development followed precisely the same path. The ideology behind the modern midwifery movement was already set by 1937. Arif Dirlik's description of the sources he used in his study of the New Life Movement may be applied here: "Though these sources exaggerated the movement's accomplishments and must be used with caution in assessing its impact on Chinese society, their distortions are something of an advantage in the present analysis, which stresses the expectations of the movement over its actual accomplishments."43 Similarly, the plans for maternal and child health that local and national governments enacted, especially during the Nationalist era, signify modernizing, nationbuilding ideologies and the vision of a new China.

⁴³ Arif Dirlik, "The Ideological Foundations of the New Life Movement: A Study in Counterrevolution," *Journal of Asian Studies* 34, no. 4 (1975): 948.

While the scale of this study is broad in that I examine midwifery efforts nationwide, the effects of modern midwifery during this period were very small. During the Republican and Nationalist eras, the number of women who gave birth in hospitals or clinics, or were even attended at home by a modern midwife or physician, was extremely small, yet significant. We see a very rapid increase in modern medical births in the 1930s. When modern midwives were available, people sought them out. Urban centers, where midwife-training institutions were located, had the most midwives, and rural areas were left largely untouched. Although there are no concrete figures for how many births nationwide were attended by old-style midwives or new midwives, we can make some assumptions based on available sources. It is also difficult to ascertain accurate maternal and infant mortality rates in China in this period, but some surveys do exist. Contemporary medical modernizers estimated the overall annual mortality rate in China in the 1920s and 1930s to be 25 to 30 per 1,000 people. The infant mortality rate (under one year of age) was 250 per 1,000 live births.⁴⁴ Medical historian Xiao Wenwen estimates the infant mortality rate from tetanus in China to be as high as 50 to 70 percent among those using traditional midwives, and other estimates range from 20 to 80 percent.⁴⁵ In the 1920s, there were an estimated 12,000,000 births per year in China, which means that anywhere from to 2.4 million to 9.6 million infants died annually.⁴⁶

Even at the height of midwife training in the 1920s, the majority of women still utilized old-style midwives. Dr. Marion Yang, head of the First National Midwifery School, asserted that in Beijing, the center of midwifery training during the Nationalist era, fifty percent of all

⁴⁴ In comparison, Japan's annual infant mortality rate during this period was 18 per 1,000 and England's was 12 per 1,000. Ka-che Yip, *Health and National Reconstruction*.

 ⁴⁵ Xiao Wenwen, "Zhongguo Jindai Xiyi Chanke Xueshi (The History of Modern Obstetrics in Western Medicine in China)" *Zhonghua Yishi Zazhi* (Chinese Journal of Medical History), 25.4 (1995): 204-10, J. Preston Maxwell and Amos I.H. Wong, "On Puerpural Mortality and Morbidity," *National Medical Journal of China* 16 (1930): 684-703.
 ⁴⁶ John B. Grant, "Midwifery Training," (Peking: Peking Union Medical College, 1927).

births were attended by untrained midwives and twenty-five percent by only the parturient woman's relatives or the parturient woman herself.⁴⁷ This means that Marion Yang's new midwives reached only twenty-five percent of Beijing's childbearing population at the height of her modern midwifery campaign. However, the number of registered trained midwives grew considerably during this time, from 1883 in 1934 to 6000 in 1948.⁴⁸ Maternal and infant mortality was much lower in areas served by these midwives. In 1948, the infant mortality rate in areas served by modern midwives was an estimated 11 percent, and maternal mortality was estimated by some to be an astoundingly low .4 percent.⁴⁹ In comparison, the overall infant mortality rate in China in the early 1950s was 200 per 1000, or 20 percent.⁵⁰

Urbanites were more likely to patronize modern medicine in part because that is where most facilities were located, and also because cities were the primary focus of modernization efforts, including the development of modern medical enterprises. In 1935, for example, almost half of all modern physicians were practicing in Jiangsu and Guangdong provinces.⁵¹ Most Chinese did not have access to traditional Chinese medicine (TCM) or modern medicine, nor could they afford it. Public health modernizer Wu Liande estimated in 1937 that 65 percent of Chinese still relied on TCM, 4.3 percent utilized modern medicine, while around 26 percent died without receiving any treatment.⁵² While some campaigns like James Yen's Mass Education Movement centered on rural areas like Dingxian and included some maternal and child health

⁴⁷ Grant, "Midwifery Training."

⁴⁸ Marion Yang, letter to Dr. Frank E. Whitacre, June 8, 1948, Folder 538, Box 76, Record Group (RG) IV2B9, Rockefeller Archive Center (hereafter RAC), Sleepy Hollow, New York.

⁴⁹ Ibid.

⁵⁰ Information Office of the State Council of the People's Republic of China, "Children's Health Care," *White Papers of the Government* (Beijing, April 1996). http://www.china.org.cn/e-white/children/c-3.htm.

⁵¹ Hsi-ju Chu and Daniel G. Lai, "Distribution of Modern-Trained Physicians in China," *Chinese Medical Journal* 49 (1935): 544-45.

⁵² Wu Liande, "Fundamentals of State Medicine," Chinese Medical Journal 51 (1937): 773-813.

efforts, rural residents largely distrusted the young new midwives.⁵³ Ka-che Yip has pointed out that, aside from its successes in surgical methods, most Chinese did not have confidence in modern medicine or its physicians.⁵⁴ As we will see, rural efforts at modern midwifery were not far-reaching in the early twentieth century, and some rural modernizers like C.C. Chen resigned themselves to making only a small dent in rural maternal and child health. Even today, many rural areas are still lacking basic health care, and the Chinese government's efforts to improve maternal and child health continue. One study in 2002 found that 76 percent of all women in China give birth in hospitals, including nearly all women in urban areas.⁵⁵ Rural women are still left out of the modern midwifery movement.

It is clear that from 1900 to the 1940s and beyond, there was a concerted move from private to public midwifery, with the state gaining more and more control over the training and licensing of modern midwives by the 1930s. Western physicians and medical missionaries in early twentieth-century China created public health programs that targeted women and children, started medical schools and trained female medical workers and midwives, and sent Chinese students to the United States to study. The Nationalist government took over this role as midwifery moved from a private enterprise to a state-run endeavor. With state administration came greater interference in the lives of women: old-style midwives, who were ostracized and banned; modern midwives, who had to submit to a standardized curriculum and licensing apparatus; and the patients themselves, whom the state encouraged to have healthy babies in order to strengthen the nation. This state model of public health is the basis for the Chinese

⁵³ Charles W. Hayford, *To the People: James Yen and Village China* (New York: Columbia University Press, 1990). ⁵⁴ Yip, *Health and National Reconstruction*.

⁵⁵ "Midwifery Phased out in China's Rural Areas," *People's Daily Online*, Monday, September 30, 2002, http://english.people.com.cn/200209/30/eng20020930_104171.shtml#.

Communist Party's "barefoot doctors," laypersons who received rudimentary medical instruction to serve rural populations, after 1949.

The Nationalist policies to strengthen the state in the fields of medicine and public health were continued in the People's Republic of China (PRC) after 1949. Paul Cohen has examined the fallacy of the perceived "1949 divide" that was common into the 1990s.⁵⁶ This imaginary divide was created by the Chinese Communist Party in its quest to shape a new China separate from its feudal past as well as from the first half of the twentieth century and the Nationalist government. It was also supported by others. Marxists and feminists around the world heralded full social equality for all under the Chinese Communist Party (CCP), while capitalists mourned the loss of freedom and a potential lucrative market. Recently, scholars have begun to see the continuities between the Guomindang and the CCP administrations. The problem arises that a revolution was supposed to have taken place in 1949 and afterwards, but the health system after 1949 was, in fact, not that revolutionary. My research on modern midwifery ends around the time of the Second Sino-Japanese War, but it supports this thesis of continuity. The Guomindang public health system, especially in its pyramidal hierarchy of medical personnel and training programs, mirrors the health system under the CCP. Similarities exist between the programs of the 1920s and even today.

SOURCES

My research relies heavily on Chinese official sources like government proclamations, yearbooks, and five-year plans. In some cases, I also talk about physician and nurse training as a comparison to midwifery, because obstetrics nearly always comprised a large part of the practice

⁵⁶ Paul A. Cohen, "Reflections on a Watershed Date: The 1949 Divide in Chinese History," in *Twentieth-Century China: New Approaches*, ed. Jeffrey Wasserstrom (London and New York: Routledge, 2003): 27-36.

of female nurses and physicians. I found much of this type of information in medical school annual reports and yearbooks.

Because the *jieshengpo* were illiterate and left no written records, I have been unable to uncover their voices. The only sources about them that I have found are extremely critical. Aside from the occasional personal account of childbirth, the patients' voices are also largely silent. I do, however, include biographical material about the women who chose to become modern midwives. Much of this literature is polemical, heralding the new science that would save China and speaking with disdain about traditional Chinese birth practices. In the absence of the patients' and the *jieshengpo*'s personal voices, we can only speculate that many changes occurred in the areas of patient autonomy, patient-caregiver relationships, and social functions of childbirth.

Chapter One gives the earliest accounts of modern medicine and medical training in China, beginning with the medical missionaries in Canton. During the mid-nineteenth and early twentieth centuries, some local officials and gentry – even warlords – supported modern medicine by founding hospitals and starting schools. We can trace the gradual development of modern medicine as a field for women back to the mid-1800s. Germ theory and ideas about public health that emerged in the United States and Europe during this time were applied to China, with the additional hope of saving souls for Christ. Medical specialization began to occur during this time as well, and obstetrics was one of the first specialties created. During this time of political and social instability, modern medical efforts were scattered, depending mainly upon the location of medical missions in China.

In Chapter Two, I trace the development of Republican and Nationalist policies towards maternal and child health. It is during this period that women and children started to become

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more important in making government policies. Intellectual reformers of the New Culture Movement in the 1920s called attention to the plight of women – bound-footed and unproductive – and their importance in shaping a new nation as reproducers of healthy and able children. We also see the development of state medicine in the Nationalist era, with an emphasis in this case on national plans for improving maternal and child health.

Not only did women reproduce the new nation, but they also actively helped to shape it. Chapter Three is a case study of the First National Midwifery School at Peking Union Medical College and its founder, Dr. Marion Yang. This chapter shows the partnership between private and government public health efforts, as many PUMC graduates helped to shape health policy in the Nationalist government. Here we may see an example of the private to public nature of midwifery, the interconnectedness of public health programs nationwide, and the importance of the relationship between the Nationalist government and the Rockefeller Foundation.

Chapter Four examines the creation and development of a modern midwifery profession, the move from vilified old-style midwives to young, educated modern ones. With professionalization came licensing, regulation, and standardized examination and training curricula. Midwives also formed professional organizations in order to further their social and political goals. Although a few notable scholars have touched on aspects of midwifery, especially midwife training programs,⁵⁷ the existing scholarship does not discuss the development of the profession, the people who chose to enter it, or the organizations they created. This work is the first to trace the development of a new profession of trained midwives and its place in the history of gender segregation in China. Many scholars have charted the decline of the midwifery profession because of physicians' actions in Europe and the United States. I chart

⁵⁷ Mary Brown Bullock, *An American Transplant: The Rockefeller Foundation and Peking Union Medical College* (Berkeley: University of California Press, 1980), Yip, *Health and National Reconstruction.*

the opposite development in China: midwifery expanded and professionalized during the Nationalist phase.

In Chapter Five I look at images of modernity and the popular press of the Republican and Nationalist periods. I explore how gender ideology, especially in the form of popular publications and modernization and nationalization rhetoric, encouraged Chinese women to embrace the new scientific methods. Magazine and journal articles encouraged women to utilize modern medicine and to have healthy – modern – pregnancies in the name of national duty and honor. Images of family life, modern midwives, and birthing equipment signify the importance of the modern in the new nation.

Finally, I end with a conclusion that briefly discusses midwifery during the Second Sino-Japanese War and surveys midwifery in China today. Surprisingly, midwifery did not vanish in the throes of battle and unrest, thanks largely to the efforts of Dr. Marion Yang. However, the efforts to improve maternal and child health in China are ongoing.

CHAPTER ONE. LAYING THE FOUNDATION: MISSIONARY AND GENTRY ATTEMPTS AT MEDICAL EDUCATION AND REGULATION

The seeds of formal medical education for Chinese women were planted around the fall of the Qing dynasty in 1911. Medical training in China during this time, as in the United States and Europe, was unsystematic and sparse. In the absence of a strong central government in China, medical missionaries from the United States and Great Britain played the primary role of providing and training modern medical personnel. They took to their task of saving lives with the same conviction that they used to save souls. By the 1910s and the 1920s, new ideas from the United States and Europe about public health and its role in nation building prompted everyone from missionaries, modern Chinese physicians and nurses, government officials and local gentry, to businessmen aimed at making a profit, to contribute to these training programs in various ways. Nearly all of the funding for medical training came from such private sources, and even some high-level government officials like Viceroys Li Hongzhang and Yuan Shikai supported these endeavors. Because American and British missionaries were the primary purveyors of modern medicine in China, medical training there was greatly affected by medical developments in the West. Aside from the growing awareness of public health, an increasing emphasis in the United States and Europe on medical specialization and the development of modern hospitals contributed to the growth of formal medical training.

This chapter will examine several medical training programs for women from the late 1800s to the 1920s. Most important to this study are the very few midwife-training programs in existence during this time, but sources on these institutes are lacking. I have supplemented information on midwifery with any medical school that accepted women students because the majority of women physicians treated parturient women and their babies. In addition, I include several nursing programs because they nearly always had a significant obstetrics component required for female students, and many practicums took place in hospitals for women and children. Male nurses were still common until the 1920s in China, but I assume that they were exempt from these curricula because obstetrics was a woman's realm and gender segregation in hospitals among patients and staff was the norm.

In the early 1900s, childbirth was still the domain of midwives in both TCM and in modern medicine, and the great majority of Chinese women gave birth at home with lay attendants. Parturient women with serious complications may have called on one or more traditional Chinese or modern physicians, but most of those were house visits, and they were not common in most parts of China. For example, a male physician, Dr. D. Bethune McCartee, worked in Ningbo under the Presbyterians from 1844 to 1872 and saw only "four or five obstetrical cases in all that time." He had on occasion "sent preparations of ergot in cases of flooding [hemorrhaging] and only prescribed women's diseases at second hand."⁵⁸ The few modern female physicians and medical helpers in China at this time may have assisted in problematic births, usually at home. In fact, the hazards of childbirth prompted many medical missionaries and modern Chinese physicians.

⁵⁸ Mary H. MD Stinson, Work of Women Physicians in Asia (Norristown, NJ: J.H. Brandt, 1884), 17.

Well into the twentieth century, modern medicine reached very few people in China, and modern childbirth was even rarer. The number of Chinese who accessed, or had access to, modern medicine during this period was infinitesimal. In 1910 there were fewer than 500 modern physicians in China to serve a population of roughly 500 million.⁵⁹ Modern medicine was focused primarily in treaty ports, but there were a few inland cities where medical missionaries had settled and built hospitals and dispensaries, such as Xiangya Medical School and Hospital in Changsha, Hunan province. Furthermore, medicalization of childbirth was only beginning to take place in the West in the early twentieth century, and so the ideas of hospital births and antenatal (prenatal) care were not widespread or even considered necessary. Specialized and systematic midwifery training did not commence until the late 1920s with the advent of a modern public health system and greater importance placed on maternal and child health.

PUBLIC HEALTH IN THE UNITED STATES AND EUROPE

Modern obstetrics in China closely followed its development in the United States and Europe. In the early stages, the very rich and the indigent alike received the most up-to-date obstetrics care. In the late eighteenth century, middle and upper class women began to ask male physicians into their homes to assist with parturition and childbirth. At the same time, doctors established charity hospitals to aid the poor and gain experience. Therefore, some very poor women and new immigrants got similar treatment in hospitals as the rich women did in their homes, though in the 1700s only about five percent of parturient women used these hospitals.⁶⁰ The growth of Western-trained midwives and obstetricians closely followed in China, as most medical

⁵⁹China Medical Commission of the Rockefeller Foundation, *Medicine in China* (New York: Rockefeller Foundation, 1914).

⁶⁰ Leavitt and Numbers, eds., Sickness & Health in America.

missionaries were American or British citizens who brought their training and ideas with them to the mission field.⁶¹ Slowly, more and more Chinese women came to utilize Western-trained personnel to assist in births. Medical missionaries created charity hospitals and made house calls to members of all socioeconomic classes. They sought out patients and patrons from gentry and officials in order to fund their operations and garner support among the Chinese.

As public health emerged as a major theme in the United States and Europe, Western medical missionaries and other health professionals established midwife training programs in China. This development began with "scientific motherhood" movements in the early 1900s that targeted middle-class and working-class mothers in the United States, teaching them the "science" of child care and feeding in order to improve maternal and child health. Such efforts professed a belief – a faith, if you will – that science would solve the world's most dire health problems like infectious disease and hunger.

One of the most advanced programs was prompted by high rates of maternal and infant mortality among the lower socioeconomic groups. In 1912, the United States Children's Bureau was created as a division of the United States Department of Commerce and Labor, according to Ellen More, "chiefly to conduct educational campaigns to improve maternal and child health ... including social, economic, cultural and medical aspects of child health."⁶² One of the most advanced programs was an infant and maternal mortality survey started in 1913 that showed that United States maternal and infant mortality rates were almost twice as high among low-income families as in prosperous ones. Responding to this dilemma, women's clubs throughout the country organized child health fairs for baby weighing and measurement and distributed

 ⁶¹ There were a few Catholic missions from North America and Europe, though the majority were Protestant.
 ⁶² Ellen S. More, *Restoring the Balance: Women Physicians and the Profession of Medicine, 1850-1995* (Cambridge: Harvard University Press, 1999), 76.

pamphlets like *Infant Care* and *Prenatal Care*. They also created United States Children's Bureau milk stations that distributed clean milk to needy families. These campaigns focused primarily on sanitation and cleanliness, similar to Western cleanliness campaigns in the colonies.⁶³ A faith in cleanliness, which had first been attributed to godliness and later to health with the discovery of germ theory, was a foundation of the public health movement in the United States and abroad. The faith in cleanliness was further strengthened after John Snow found that cholera was transmitted in drinking water (1854) and by the discovery that bubonic plague is carried by rats (1898). Disease could be prevented by keeping one's environment clean.

The Sheppard-Towner Act of 1921 established prenatal and child health centers for maternal education and well-baby clinics for mothers and mothers-to-be in the United States. It was placed under the authority of the newly-established Federal Board of Infant and Maternal Hygiene. Public health nurses and physicians provided education in personal and child hygiene, including disease prevention, personal cleanliness, nutrition, and proper clothing. The law lapsed in 1929 and was not renewed. Between 1924 and 1929, approximately 3,000 prenatal and child health centers were established, 4 million infants and expectant mothers used these services, and public health nurses taught 20,000 classes to educate mothers, midwives, and girls in child health and hygiene.⁶⁴ Female physicians, who often concentrated on medicine for women and children, were the primary public health advocates, contributing to specialization and gender segregation among medical fields.

At the same time the public health movement gained ground in the United States and Europe, medical practitioners began to attach increasing importance to specialized fields. The

⁶³ See, for example, Timothy Burke, *Lifebuoy Men, Lux Women: Commodification, Consumption and Cleanliness in Modern Zimbabwe* (Durham: Duke University Press, 1996).

⁶⁴ More, *Restoring the Balance*, 153.

field of scientific medicine was advancing so rapidly that it was impossible for one person to learn and utilize all the knowledge required to treat all conditions and illnesses. Before the twentieth century, the term "specialist" generally referred to quacks, for example, "venereal specialist" or "hernia specialist."⁶⁵ In the 1800s, general practitioners usually delivered babies as part of their practices. According to a 1912 study by noted Johns Hopkins University obstetrician/gynecologist J. Whitridge Williams, birth attendance comprised approximately 30 percent of a general physician's practice. By 1900, physicians delivered about half of the babies born in the United States, most often at the woman's home.⁶⁶ However, with advances in scientific medicine like germ theory, pregnancy and childbirth began to be considered illnesses that required medical treatment. Birthing women and their babies are especially susceptible to septic infections and tetanus that can be present in unsanitary environments. Furthermore, abnormal fetal presentation (such as breech) or pelvic deformities caused by malnutrition often resulted in protracted labor. If caught early through prenatal examinations, physicians could anticipate these problems and schedule necessary procedures, such as the use of forceps or even caesarian sections. The development of antisepsis and anasthesia in the mid-1800s allowed physicians to perform caesarian sections instead of craniotomies to remove a fetus. As early as 1906, physicians in the United States were calling for all women to give birth in hospitals attended by an obstetrician. Dr. Julius Noer, a Wisconsin physician and member of the Wisconsin State Medical Society's Committee on Obstetrics, argued that year that "all confinement cases should be placed in a lying-in [maternity] hospital...where women will be properly, aseptically and scientifically cared for during and after labor."67

⁶⁵ Charlotte G. Borst, *Catching Babies: The Professionalization of Childbirth, 1870-1920* (Cambridge: Harvard University Press, 1995), 139-40.

⁶⁶ Leavitt and Numbers, eds., Sickness & Health in America, 61-63.

⁶⁷ Borst, *Catching Babies*, 145.

This ideal of aseptic births to decrease maternal and fetal illness and death led to the specialized branch of obstetrics. Even as early as the 1870s, physicians began to establish specialized medical professional organizations, such as the American Gynecological Society (1876) and the American Association of Obstetricians and Gynecologists (1888). No longer was the general practitioner qualified to attend births. Obstetrics was the second specialized medical board examination established by the American Medical Association, in 1930.⁶⁸ As Judith Walzer Leavitt discusses, by 1940 over half of all births in the United States took place in hospitals, with physicians displacing midwives as the primary birth attendants.⁶⁹ In contrast, even in 1940s China, the vast majority of births still took place at home, though modern nurses, midwives, and obstetricians had aseptic births nationwide, though not necessarily in a hospital setting, as their primary goal.

Finally, the development of modern hospitals also contributed to the increased need for trained medical personnel in the United States and abroad. In early nineteenth-century America, hospitals were charity institutions for the poor who could not afford physicians or nurses to treat them in their own homes. Advances in scientific medicine led more and more people to patronize hospitals. Their number in the United States grew from 170 in 1880 to over 1,500 by 1904. Independent hospitals owned by physicians, religious groups, or rich philanthropists gradually replaced poor almshouse institutions.⁷⁰

Medical missionaries expanded the new ideas of public health, medical specialization, and hospitals to the mission fields and combined them with a quest for salvation. The missionaries' belief in scientific medicine was similar to their belief in salvation with Jesus

⁶⁸ The first was Opthamology, begun in 1917. Edward Stewart Taylor, *History of the American Gynecological Society 1876-1981 and American Association of Obstetricians and Gynecologists 1888-1981* (St. Louis: C.V. Mosby Company, 1985).

⁶⁹ Leavitt and Numbers, eds., Sickness & Health in America.

⁷⁰ More, *Restoring the Balance*, 105-07.

Christ as the ultimate healer. Most importantly, perhaps, was that most Chinese women in the late nineteenth century refused to see male physicians, either Western or Chinese. Women physicians, by contrast, could reach female patients to improve their health and possibly save their souls. Medical missionaries took to their task with zeal. Writing of native Chinese obstetrics, the medical doctor J.C. Thomson stated that

"...consummate ignorance predominates. And is not the faculty in China measurably responsible for woman's inhumanity to woman, as here illustrated, though it be the sin of ignorance. Century upon century of blindest empiricism, with no ray of medical science to shine into these habitations of cruelty. But the Sun of China has arisen with healing in his beams and the ministering angels from the West have come with balm from Gilead and must increasingly prove a boon and blessing."⁷¹

The mission field held great opportunities for Western medical women who were unable to practice medicine at home due to gender discrimination or societal expectations of marriage and family life. It is no wonder that medical women went to China to gain greater experience and perhaps more acceptance among the medical community. Many of these women physicians aimed at educating women in methods of hygiene and sanitation. The missioners often linked spiritual salvation with corporeal "salvation" through modern medicine, especially cleanliness and hygiene, and believed that through women they could fundamentally improve the lives of all Chinese.⁷²

However, the methods that modern physicians used for prenatal care, parturition, and childbirth, especially around the turn of the twentieth century, were unproven and sometimes even harmful, for example, Hobson's ice water douches that contradicted traditional Chinese

⁷¹ Jos. C. Thomson, MD, "Native Practice and Practitioners," *CMMJ* 4, no. 3 (1890): 187-88.

⁷² Shemo, "An Army of Women."

medical beliefs.⁷³ Furthermore, some of the nutrition prescriptions for Chinese patients ran counter to traditional Chinese beliefs, such as consuming large amounts of red meat and dairy products. On the other hand, medical missionaries did not always dismiss outright Chinese childbirth practices. A Dr. Browning of Ningbo wrote in the China Medical Missionary Journal that Western physicians may learn something from Chinese midwives about placental separation and tying the umbilical cord. Dr. Browning had been called to attend a confinement case, but when he arrived, the baby was already delivered and lying in a tub with its placenta still attached. The doctor, surprised at the sight, learned that in this particular area of China, midwives cut the umbilical cord only after the baby had been washed and dressed. This practice ran counter to the speedy severing and tying of the cord common in modern childbirth at the time. In the article, Dr. Browning claimed that the Chinese way was the more "natural" process, allowing for a slower transition for the baby from the womb to the outside world. He urged his fellow practitioners to consider what harm they may be doing by being too hasty.⁷⁴ Although this is a good example of the ways the Chinese and Westerners accommodated each other, this attitude was not common among medical missionaries. Most spoke of Chinese midwives – and their patients – with scorn and pity.

EARLY MODERN MEDICAL TRAINING IN CHINA

As early as 1901, Dr. James Boyd Neal, then editor of the China Medical Missionary Journal, wrote that Chinese should be trained in medicine in order to provide "relief of much of the suffering of this disease-cursed people" as well as to save souls by spreading Christianity.⁷⁵ Neal

⁷³ Wu, "Introducing the Uterus to China."
⁷⁴ Dr. Browning, "Notes of Cases," *CMMJ* 6, no. 2 (1892): 82-85.

⁷⁵ Dr. James Boyd Neal, "Medical Education for the Chinese," *CMMJ* XV, no. 3 (1901): 220.

advocated short courses in midwifery for women who otherwise would not have the time or skill to pursue a full course in medicine. Even illiterate women could be taught the principles of childbirth and midwifery. Neal did not support full medical education of women because they tended to marry soon after completing training, and their family duties interfered with their work. Courses in midwifery, on the other hand, would allow women to attend classes and work despite marital and family constraints. Neal and his colleagues would not be restricted to teaching only young unmarried women, as was usually the case for the full medical course that lasted several years. Instead, women of all ages could participate: "Women of considerable age might easily spare a few weeks at a time, or some months, in which to be taught the essentials of midwifery and then returning [sic] for a further course within a year or two, and after considerable practical experience, might be given certificates which would give them a certain standing at least among Christians."⁷⁶ However, Neal was worried that with a little training some women might feel themselves fully trained in medicine and "degenerate into quacks, who will bring disgrace on all foreign practice."⁷⁷ Some thirty years later, the Western-trained Chinese physician Marion Yang (Yang Chongrui 杨崇瑞) would adopt a short course curriculum like this to train old-style midwives in modern midwifery methods. Furthermore, new midwifery legislation aimed to prevent modern midwives from becoming charlatans.

In addition to their public health and religious objectives, medical missionaries simply did not have enough trained help in their hospitals and dispensaries in order to fulfill their goals of improving health and fighting disease. They began training locals to assist them out of necessity, providing unstructured lectures with hands-on apprenticeships. According to a report

⁷⁶ Dr. James Boyd Neal, "Training of Native Women in Midwifery," *China Medical Missionary Journal* (hereafter *CMMJ*) 15, no. 3 (1901):221-22.

⁷⁷Ibid., 222.

by the Rockefeller Foundation's China Medical Commission, by the 1910s there were only around 450 medical missionaries and physicians in China, 45-55 Chinese physicians trained in the United States or Europe, plus a few trained in China or Japan. By the 1920s, that number had grown to 1,500, including 600 medical missionaries or other foreigners, resulting in one modern physician for every 300,000 people in China. During the same period, there were around 2,000 nurses in China and 500 hospitals, mostly in urban areas.⁷⁸ The need for trained personnel was critical.

Mission hospitals in Canton began informal training of male students as early as 1835. The Canton Medical Missionary Hospital (Canton Hospital, Boji vivuan 博济医院) was founded by Dr. Peter Parker in 1835 as China's first Western medical institution. It was run by the South China Mission of the American Presbyterian Board of Foreign Missions. By 1879, a more structured medical program was in place, a three-year curriculum with 16 male students, including three Cantonese women who enrolled at their own request. This was the earliest formal medical training for women, aside from Dr. Julia Sparr's single female medical student in Fuzhou in 1871.⁷⁹ The Canton Hospital students came from the True Light Seminary for Girls, also run by the Presbyterian South China Mission and located across the street from the hospital. Miss Mary Niles, MD, and Miss Mary Fulton, MD, arrived in Canton in 1882 and 1884, respectively, to teach female medical students and attend women and child patients. John G. Kerr, Peter Parker's successor in 1854, recognized the potential to reach upper-class women with native female physicians. Missioners often complained of not being able to reach the upper classes to convert them to Christianity, who would in turn exert greater influence throughout China. Trained native female medical personnel could attend female patients in the wards and in

⁷⁸ Rockefeller Foundation, *Medicine in China*, Yip, *Health and National Reconstruction*.

⁷⁹ Stinson, Work of Women Physicians in Asia, 21.

the patients' homes, thus bringing more people into contact with modern medicine and Christianity. By 1880, the female students were attending female patients and making home visits to treat female diseases and disorders.⁸⁰

In 1896, 239 of the 508 home visits recorded for Canton Hospital were made by Chinese women medical practitioners trained at the hospital. In 1898, nine of the hospital's 30 medical students were women.⁸¹ In 1899, due to a dispute between John G. Kerr and his colleague John Swan, Kerr left the hospital and took his male medical students with him. Five female students and two Chinese women instructors were left behind with no provisions to continue their schooling. Mary Fulton resigned from the Canton Hospital and organized an independent medical school for women "to train Christian women physicians to go out amongst their own countrywomen."⁸²

The Guangdong Medical College for Women and its affiliated hospital opened its doors in 1901 with nine students. Fulton at first shared the space with her brother Albert's Canton Presbyterian Church. Several locally trained Chinese women physicians assisted Fulton in instructing the students, including the instructor of obstetrics and gynecology. The Presbyterian mission's other physicians also taught the female students. After a large donation of \$4,000 by Mr. E.A.K. Hackett of Indiana, Mary Fulton's hospital was renamed Hackett Medical College for Women (*Xiage nuzi yixueyuan* 夏各女子医学院) in 1902.⁸³ It was affiliated with the David Gregg Hospital for Women and Children, built the same year, and a nurse training school later

⁸⁰ Sara Waitstill Tucker, "The Canton Hospital and Medicine in Nineteenth Century China, 1835-1900" (PhD dissertation, Indiana University, 1983), 360.

⁸¹ Ibid., 364.

⁸² Mary Fulton, MD, "Hackett Medical College for Women, Canton," *China Medical Journal* (hereafter *CMJ*) XXIII, no. 5 (1909): 326.

⁸³ Tucker, "The Canton Hospital." The unit of currency listed here and throughout this text, unless otherwise noted, is the Mexican silver dollar, a more stable currency than the Chinese yuan.

named the Turner Training School for Nurses. According to one contemporary, in 1915, "the operating room [was] the best in Canton."84

This institution had the support of the Viceroy of Guangzhou and Guangxi, Cheung Yantsun. He stamped the diplomas of the seven 1907 graduates, "the highest official recognition obtainable" and the only diplomas in the province to receive that distinction. The Viceroy also gave three gold watches to the three students with the highest cumulative grades. The following year, for the first time in the history of the Guangzhou missions, the Viceroy personally attended the commencement exercises. He also sent an honor guard of 500 soldiers.⁸⁵

GENTRY AND OFFICIAL PARTICIPATION

The support of gentry and local officials was very important in the early stages of medical education in China. As Tsin, Leung, Will, and others have written, charitable halls and merchant guilds were often important philanthropic institutions that aided the poor and indigent during the late Ming and Oing, especially during times of famine or disease.⁸⁶ Angela Leung, in her study of Chinese philanthropy from the beginning of the imperial era, found that from the mid-Tang, individual philanthropists (shanren 善人) occasionally donated money for prescriptions and medicine to the poor and established charity infirmaries and pharmacies. It was also common in the Qing to fund the printing of medical treatises in order to bring merit on oneself and one's

⁸⁴ Robert Esper and David Bovaird, "The Problem of Medical Education in Canton," (Presbyterian Archives, 1915), 2. ⁸⁵ Fulton, "Hackett Medical College."

⁸⁶ William Warder Cadbury and Mary Hoxie Jones, At the Point of a Lancet: One Hundred Years of the Canton Hospital, 1835-1935 (Shanghai: Kelly and Walsh, Limited, 1935), Joseph Esherick and Mary B. Rankin, eds., Chinese Local Elites and Patterns of Dominance (Berkeley: University of California Press, 1990), Angela Ki-che Leung, "Organized Medicine in Ming-Qing China: State and Private Medical Institutions in the Lower Yangzi Region," Late Imperial China 8, no. 1 (1987), Michael Tsin, Nation, Governance, and Modernity in China: Canton 1900-1927 (Stanford: Stanford University Press, 1999).

ancestors.⁸⁷ However, not until the late Ming did private individuals, usually "famous intellectuals," begin to create organized aid institutions.⁸⁸ By the Qianlong period, local wealthy commoners, often merchants, also began to establish such organizations. For example, Mr. Sit Meng-cook of Canton gave US\$500 to build a girls' boarding school "in memory of his daughter, who had been attended by Dr. Regina Bigler," a woman physician.⁸⁹ Although Sit's daughter did not survive, he was sufficiently impressed by her medical treatment to fund further Western training for women. In 1887, a rich Chinese gentleman built the Alice Memorial Hospital in Hong Kong in memory of his wife, and other Chinese donors added an affiliated Maternity Hospital and one of the earliest midwifery training programs.⁹⁰

Local Chinese gentry and officials played an important role in funding Western midwifery training programs and hospitals for women and children, especially before and immediately following the 1911 revolution. During this time of political and social turmoil, the late Qing state had little interest or power to establish wide-ranging relief programs. There were few government-sponsored Western medical institutions before the fall of the Qing. However, some local gentry, including the Empress Dowager Cixi herself, donated and raised money to fund Western hospitals. Some of these were Chinese Christians, though others were decidedly not. Thomas Cochrane, a Scottish physician with the London Missionary Society, cared for Guangxu and his son, as well as the head eunuch Li Lianying and lady-in-waiting Duchess De.⁹¹

⁸⁷ Wu, "Fundamentals of State Medicine."

⁸⁸ Leung, "Organized Medicine," 147.

⁸⁹ Donald MacGillivray, *A Century of Protestant Missions in China* (Shanghai: American Presbyterian Mission Press, 1907), 531.

⁹⁰ Harold Balme, *China and Modern Medicine: A Study in Medical Missionary Development* (London: United Council for Missionary Education, 1921), 152.

⁹¹ According to Dr. Cochrane, Dutchess De wanted him to "perform a delicate and difficult operation but she feared that, when she went back to court, she would get into trouble for having allowed a man to operate on her ... she went through a ceremony whereby I became her brother-in –law and then it was considered proper for me to operate," Francesca French, *Thomas Cochrane: Pioneer and Missionary Statesman*, (London: Hoder and Stoughton,

Cochrane subsequently convinced Cixi of the importance of a new Western-style medical school, to which she donated 10,000 taels (1,400 British pounds). Other court gentry added an additional 1,600 pounds to fund the Peking School of Medicine.⁹² The Chinese government recognized the hospital and pledged an annual grant, and the Board of Education gave all graduates a special diploma.⁹³

It was the policy of medical missionaries early on that local Chinese would assist in building and maintaining hospitals, as well as receive medical training. According to a contemporary observation of Dr. Elizabeth Reifsnyder's hospital for women and children in Shanghai (established 1888), "From the very beginning it was deemed best to have the wealthy Chinese pay for services rendered, the poor being cared for, both in the hospital and at the dispensary, free. This plan has worked very well, and the Chinese who have given, have felt that they were helping in caring for their own people. High and low, rich and poor, have been seen, both in their homes and at the hospital..."

This sliding scale policy was also used by the well-known University of Michigan-trained Chinese physicians Kang Cheng and Shi Meiyu, also known as Ida Kahn and Mary Stone, respectively. In their dispensaries and hospitals in Jiujiang, Shanghai, and Nanchang, wealthy patients paid for their treatments and hospital stays, while the poor paid only for their medicines. According to Shemo, Kang and Shi found that patients and their families ignored treatments and medicines dispensed for free. Paying patients, even poor ones, maintained their self-respect by not succumbing to charity, and modern medicine seemed to be worthy. The paying patients in Jiujiang were mainly wealthy gentry and middle-class citizens probably comprised of merchants

^{1956),} as quoted in John Z. Bowers, *Western Medicine in a Chinese Palace: Peking Union Medical College, 1917-1951* (The Josiah Macy, Jr. Foundation, 1972), 8.

⁹² Bowers, *Western Medicine*, 8-9.

⁹³ Balme, China and Modern Medicine, 115.

⁹⁴ MacGillivray, A Century of Protestant Missions, 470-71.

and those in foreign trade. More and more people with money started patronizing the hospital so that in 1904 Shi requested money from her home mission to expand the hospital's private ward. According to Shi, the rich patients were loath to use the general ward.⁹⁵

Further examples illustrate the importance of local gentry in developing and maintaining Western medical practice. I focus here on hospitals and training that benefited women, such as midwifery and nurse training programs and hospitals for women and children. There are many more instances of gentry funding general hospitals and medical schools, which are beyond the scope of this paper.

The Fangbian Hospital (*Fangbian yiyuan* 方便医院)in Guangzhou was the result of local wealthy commoners' efforts at philanthropy. According to Michael Tsin, it was started as a shelter for homeless and indigent men and women (a *fangbiansuo* 方便所) by local merchant guilds in 1894 in response to the plague epidemic that ravaged Canton in the 1890s.⁹⁶ A local merchant with connections to Hong Kong, Chen Heyun raised money in Hong Kong to save the hospital from the verge of bankruptcy in 1899, while a merchant turned philanthropic activist in Canton, Chen Huipu, coordinated efforts and funds from several local charitable halls. Donations to the hospital reached Chinese \$110,000 by 1906, up from over Chinese \$6,000 in 1899. It grew into one of the most well-known and modern hospitals in south China and eventually included a midwifery training school established in 1938, and a women's ward. It was later absorbed into Zhongshan University.⁹⁷

The Maternity Hospital and Training Home for Midwifery opened in Hangzhou in July 1906, a joint effort between Chinese gentry and Dr. Duncan Main of the Edinburgh (Scotland)

⁹⁵ Shemo, "An Army of Women," 170.

⁹⁶ Tsin, Nation, Governance, and Modernity.

⁹⁷ Lu, Yu. "Guangzhou de fangbian yiyuan" (The Fangbian Hospital of Canton), in *Guangdong wenshi ziliao*, Vol. 8 (1963): 139-50; Tsin, *Nation, Governance, and Modernity*, 27-29, 33.

Medical Missionary Society. Dr. Main and his wife had wanted to start such an institution for many years but did not because Dr. Main "felt the native gentry should move in the matter." Mrs. Kao, a prominent Hangzhou philanthropist, "conceived the idea of starting such an institution with [Dr. Liu Ming-ts, Dr. Main's chief assistant]."⁹⁸ Kingston DeGruche, Dr. Main's biographer, stated that

"the sufferings of women in China through the ignorance which attends them in their confinements passes description, not only to the women themselves at the time, but afterwards also, and to the babies, who often suffer contusions on the head and body. Blindness and deafness through wrongs inflicted on them at their birth, neglect of necessary cleanliness and lack of proper care in many cases carry life-long trouble and affliction. ... [Mrs. Kao], with her friends, was not only willing but anxious that some definite help for Chinese women in their confinements should be provided. These ladies were most sympathetic with the idea of training native women midwives and monthly nurses, that this appalling evil should be lessened as far as possible."⁹⁹ Upon the first class's graduation in 1908, Mrs. Kao presented each nursing student with "a fully stocked medicine and instrument case."¹⁰⁰

As soon as the Training Home for Midwifery opened in Hangzhou, the staff received 90 student applications. Of those, 22 were accepted, and nine stayed on to work at the hospital after graduation. Students attended lectures on anatomy, physiology and midwifery, as well as a daily practicum. They also took a course on Romanized Chinese so that they could take notes on Western medical terms. The faculty taught students to give vaccinations to children and adults and to treat cases of opium poisoning, a common suicide method among Chinese women. The Hospital and Training Home were very successful, even among the Hangzhou elite. The

⁹⁸ Kingston DeGruche, Dr. D. Duncan Main of Hangchow (Who Is Known in China as Dr. Apricot of Heaven Below) (London: Marshall, Morgan & Scott, Ltd.), 74.

⁹⁹ Ibid., 73.

¹⁰⁰ Ibid., 75.

Governor of Hangzhou's wife and sister both had their babies at the Maternity Hospital. In the first two years, 68 patients came to the hospital, with 38 baby girls and 31 baby boys delivered.

In December 1906, Training Home students began district work, in which they traveled to underserved areas. According to DeGruche, "the gratitude of those treated took the form of gifts of money to the Maternity Hospital, tablets, etc., convincing proof enough of the efficiency of the students."¹⁰¹ One report states that there were 212 women in-patients in one year, and 26 mothers were treated in their homes. At one time, female inpatients in the maternity wards numbered 26, and there were 17 newborn babies in the nursery. These figures may seem to be startlingly low, but even in the United States around the turn of the twentieth century, very few women delivered their babies in hospitals. It is important to realize that quite a few Chinese women, including those from the upper classes, began to utilize modern childbirth as soon as it was available. Midwives were continuously in training, and graduates most often established themselves either in Hangzhou or the surrounding countryside and treated women of all socioeconomic classes.¹⁰²

One of the most well-known medical events in nineteenth-century China is the treatment of Lady Li, wife of Viceroy Li Hongzhang, in Tianjin. Tianjin was one of the first cities to adopt Western medical practices because of the support of its governmental leaders, as evidenced by the following frequently related story. Li Hongzhang was "looked upon as one of the most astute and enlightened of the Chinese statesmen, as he is the most powerful, and at the present time is the hope of the party of progress."¹⁰³ In 1879, Dr. John Kenneth Mackenzie, a Canadian of the London Missionary Society, started working in Tianjin and petitioned Viceroy Li

¹⁰¹ Ibid., 74.

¹⁰² Ibid., 119, 200-01.

¹⁰³ Mary F. Bryson, *John Kenneth Mackenzie, Medical Missionary to China* (New York: Fleming H. Revell Company), 175.

Hongzhang to help his struggling hospital, to no avail. Li's attitude seems to have changed because of a crisis in his own family.

Later that year, the Viceroy sent for Mackenzie and his colleague Dr. A. Irwin, the Customs Medical Officer, to attend the Viceroy's wife Lady Li, "who had been given up by the old-style physicians."¹⁰⁴ Mackenzie and Irwin successfully treated her, but "it became necessary for the patient's complete restoration to health... to adopt a certain line of treatment, which, according to Chinese etiquette, could only be carried out by a lady."¹⁰⁵ They called for Dr. Leonora Howard, of the Philadelphia Branch of the Woman's Foreign Missionary Society of the Methodist Episcopal Church, to come from Peking. She stayed one month in the Chinese palace treating Lady Li, along with Drs. Irwin and Mackenzie.

Mackenzie gives a vivid description of his days at the palace: "So we found that in our daily visits to our noble patient our steps were thronged with eager suppliants, who, hearing that the Viceroy's wife was undergoing medical treatment, sought for relief from the same source.To reach the family apartments we had to pass through these numerous courts, and here we were beset with patients from the crowds assembled outside the gates, and the friends of the soldiers, door-keepers, secretaries, and attendants who had succeeded in gaining an entrance."¹⁰⁶

Viceroy Li Hongzhang was swayed by the successful medical treatment of his wife and began to support and promote modern medicine. According to Choa, "The most powerful mandarin in his time and an indispensable minister to the Dowager Empress Cixi, Li firmly believed that China could only be strengthened by the full exploitation of the benefits of Western

 ¹⁰⁴ K. Chimin Wong and Lien-Teh Wu, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period* (Tientsin, China: The Tientsin Press, Ltd., 1932), 283.
 ¹⁰⁵ Bryson, *John Kenneth Mackenzie*, 180.

¹⁰⁶ Ibid., 180-81.

science. With this conviction he played a significant part in fostering medical education in China and encouraging the acceptance of Western medicine.¹⁰⁷

Later, Irwin and Mackenzie suggested the Viceroy witness a surgical operation, so they set up an operating room in his courtyard, where they removed tumors from two patients and repaired a harelip. The Viceroy was so impressed that he set up a room outside the gates of the yamen for dispensary work. The crowds grew too large, so he set up an entire quadrangle in the Taiwang temple to Zeng Guofan as a dispensary and to see inpatients.¹⁰⁸ Even after the move, there were still so many patients, both male and female, that Mackenzie could not treat them all. Shortly afterwards, the Viceroy put a tablet over the entrance that said "Free Hospital" and gave Mackenzie 200 taels to buy drugs along with "a commission, appointing me, with Dr. Irwin, medical attendant upon his family and yamen, and a separate authorization to establish and superintend the free hospital at the temple."¹⁰⁹ At Mackenzie's request, in lieu of a salary, the Viceroy pledged to finance all his medical mission work at the temple. He also got a pony with English saddlery and a daily military escort.

Mackenzie built a new hospital on London Missionary Society grounds, paid for by rich Chinese patients, but kept the temple dispensary open. The Viceroy authorized Mackenzie to present a public subscription for the hospital and also offered 1,000 taels. A general cured of dysentery gave 500 taels, and the Customs taotai gave 1,000 taels. The city's Prefect had established a native dispensary but got promoted to the provincial capital, closed the dispensary, and turned the proceeds (300 taels) over to Mackenzie. The new hospital was opened publicly by the Viceroy on December 2, 1880. The Viceroy also asked Mackenzie to set up a vaccine

¹⁰⁷ G.H. Choa, "Heal the Sick" Was Their Motto: The Protestant Medical Missionaries in China (Hong Kong: The Chinese University Press, 1990), 93.

¹⁰⁸ Wong and Wu, *History of Chinese Medicine*, 283.

¹⁰⁹ Bryson, John Kenneth Mackenzie, 182-83.

clinic at the temple, I presume for smallpox.¹¹⁰ In 1895, while traveling abroad, Li took along Dr. George Mark, a Chinese Christian who had attended the Government School in Hong Kong and the Tianjin Medical School. In 1889, the Viceroy appointed Dr. H. Mason Perkins, a United States medical school graduate, Dental Surgeon-in-Ordinary. Furthermore, at a banquet held in 1892, the Viceroy's son toasted the health of Dr. Irwin and "paid a public tribute to Western medicine in general."¹¹¹

To return to Dr. Howard, shortly after she treated Lady Li, the Viceroy persuaded her to move to Tianjin to set up a dispensary in the memorial temple to Zeng Guofan. Mackenzie wrote to the London Missionary Society committee, asking for her transfer to Tianjin "to take up the splendid opening for work amongst the women here. She has therefore come down to [Tianjin] with her Chinese women, and commenced work, taking the female department at the temple, the entire support of which is borne by Lady Li."¹¹² Other gentry families and officials called on Dr. Howard, and the Viceroy and his family befriended her. Dr. Howard stated that "I was called to the houses of the highest officials; their prejudices are breaking down everywhere over the land… Patients come from the interior and take up their residence near the temple, that they may be treated."¹¹³ Lady Li built her a hospital in Tianjin [possibly re-named the Isabella Fisher Memorial Hospital], and the Viceroy's mother bequeathed \$1,000, reportedly the first inheritance from a Chinese woman to a Christian.¹¹⁴ Dr. Howard treated 1,747 patients in her first year.¹¹⁵

¹¹⁰ Ibid., 192.

¹¹¹ Wong and Wu, *History of Chinese Medicine*, 325.

¹¹² Bryson, John Kenneth Mackenzie, 184-85.

¹¹³ Stinson, Work of Women Physicians in Asia, 20.

¹¹⁴ MacGillivray, A Century of Protestant Missions, 465.

¹¹⁵ Wong and Wu, *History of Chinese Medicine*, 283.

Both Howard and Mackenzie trained medical personnel. In 1885-1890, Dr. Howard trained two medical women, Mrs. Xu and Mrs. Cai, as assistants. According to Wong and Wu, "Though Dr. Howard's undertaking cannot perhaps be considered as a proper school, its importance as one of the first institutions in China where women only were instructed in medicine cannot be overlooked."¹¹⁶ MacKenzie graduated a total of nineteen students from three three-year classes at Tianjin.¹¹⁷ The Chinese government had opened an educational mission in 1872 in which several 10- to 12-year-old boys were selected, mainly from Shanghai and Canton, to study in the United States from elementary school to college. Peking withdrew the whole mission in 1881 because of reports the boys were adopting foreign ways and religions. When Mackenzie heard of this, he petitioned the Vicerov to put eight of these students in his school to study medicine and surgery so they could eventually serve the government as medical officers.¹¹⁸ Li agreed, and thus the first government medical school in China was begun on December 15, 1881, as the Viceroy's Hospital Medical School (Yiyao guan 医药馆,). The first batch of students graduated in 1885 and were conferred a civil rank by the Vicerov.¹¹⁹ Its first graduate became a personal physician to Li and was said to have removed a bullet from Li's face after an assassination attempt in Korea. In its second year, there were four students, all from Hong Kong, with 12 students during the third year.¹²⁰ In 1888 the school was taken over by the Qing government and its name changed to Beiyang Medical School (Beiyang vixuexiao北洋医学校).

¹¹⁶ Ibid., 292.

¹¹⁷ Balme, China and Modern Medicine, 113.

¹¹⁸ Bryson, John Kenneth Mackenzie, 230-31.

¹¹⁹ Choa, "Heal the Sick," 93-94.

¹²⁰ Wong and Wu, *History of Chinese Medicine*, 441-43.

It later became the Beiyang Naval Medical College.¹²¹ When Mackenzie died, the Viceroy and other officials withdrew their patronage.¹²²

Other officials and gentry also supported modern medicine. The Suzhou Women's Hospital, under the charge of Dr. Mildred Phillips of the Methodist Episcopal Church, South, was built in 1888 with help from the local gentry. In 1904, Governor En Shou and various officials donated \$3,000 to build a residence for a Western physician there. The next year, two Chinese men, Mr. Zhu Baosan and Mr. Xia Zenan, raised \$1,300 in Shanghai for the hospital. The donations continued. In 1906, Governor Chen gave \$2,000, and a Dr. A.E. Yandell and a Mr. Si raised over \$400 in the city of Wusih. Additionally, seven families from Suzhou made monthly donations of .50 to \$5 each to the hospital, and several others gave \$50 per year. In 1906, a prominent Suzhou banker, Lu Sandong, contributed \$30 from his bank and raised \$200 from 17 other banks.¹²³ In 1891, an affiliated Women's Medical School opened in Suzhou "under the same impression that female physicians might have less difficulty in treating women patients," and in 1894 the Elizabeth Blake Hospital for men and women was opened.¹²⁴ This coeducational seven-year course included a period of hospital service. In 1919, the hospital staff moved to Shanghai to join the Margaret Williamson Hospital as the center of a larger Women's Christian Medical College (Jidujiao nuxi yixueyuan 基督教女子医学院) to be established in 1924. The course, conducted in English, lasted four years plus one year of internship, and its first class had five students. In 1933, the hospital had 250-300 beds, 100 of which were for maternity. Each day they delivered four to five babies, with the maximum number of 178 in one month. The cost for staying in the maternity hospital ranged from \$13 to \$300 per confinement,

¹²¹ Rogaski, Hygienic Modernity.

¹²² Bryson, John Kenneth Mackenzie, 375-76.

¹²³ MacGillivray, A Century of Protestant Missions, 419.

¹²⁴ Choa, "Heal the Sick," S.M. Tao, "Medical Education of Chinese Women," The Medical and Professional Woman's Journal (1934): 74.

depending upon the ward (private, semi-private, public).¹²⁵ The Margaret Williamson Hospital merged with St. John's University in 1935.¹²⁶

The Xiangya (Hsiang-ya) Medical College and Hospital in Changsha, Hunan, opened in 1913 under an agreement between the Yale Mission and a group of gentry called the Hunan Yu Chun Educational Association (HYCEA) that had the support of the provincial government. This agreement "was the first instance of extensive cooperation in the educational and medical fields between Chinese and foreigners."¹²⁷ The Yale Mission had originated medical work in Hunan in 1908, and all existing institutions were absorbed into Xiangya after 1913. Along with the College and Hospital was an affiliated School of Nursing and a department to train nurses in obstetrics. Most of the nursing students were male until 1929. In 1913, 400 men and 120 women applied to the school. Male students did their practicums at a nearby Red Cross Hospital, while the women went to the Yale hospital for women. The government donated a Chinese building for the Medical College, and a new hospital building was erected across the street with Yale Mission funds. Clinical work and nurse training for men and women were transferred to the new Xiangya Hospital. During World War I, it was difficult for the hospital to secure Western physicians and other staff, and the institution was in financial trouble. However, "it was an encouraging proof of the steadfast loyalty of the local gentry to the cause, that on several occasions, ever at their own financial loss, they raised the funds necessary to maintain the work and to put up a new medical college building on their own campus in 1919." The new building housed teaching facilities and a medical student dormitory.¹²⁸ The administration of the hospital

¹²⁵ H.G.W. Woodhead, ed., *The China Yearbook 1935* (Shanghai: The North China Daily News and Herald, Ltd., 1935), Appendix III.

¹²⁶ Choa, "Heal the Sick," Tao, "Medical Education," 74.

¹²⁷ Reuben Holden, *Yale in China: The Mainland 1901-1951* (New Haven: The Yale in China Association, Inc., 1964), 124.

¹²⁸ K.Y. Wang, "A Report of Hsiang-Ya Medical College & Hospital," 1930, RAC, series 601A, RG1.

and college continued jointly by the Yale Mission and the HYCEA. The Medical College Board consisted of 20 people chosen by the HYCEA, while the Hospital Board was comprised of 12 people, six each selected by the Yale Mission and the HYCEA.

The Kung Yee Society (Gongviyuan 公医院) was established in Canton by Dr. Paul Todd of the Presbyterian Mission with substantial donations from local influential Chinese. In 1909, after the Presbyterian Mission declined to fund a men's medical school at the Canton Hospital, Dr. Todd enlisted 50 Chinese men who gave \$100 each to fund a school and act as a committee. The Kung Yee Society began with Mr. Pan Peiru (潘佩如, Cantonese Poon Pui Yue) as President. The medical school for men was started in 1909 with 42 students and 13 teachers, and a nursing program began in 1911.¹²⁹ In 1912, the local government gave Kung Yee 20 acres outside the city for new buildings, and the Society received \$11,000 in private gifts the same year. The directors of the school and hospital were all Chinese. There were 24 faculty members, including four foreign medical men. The rest were Chinese: one educated in Edinburgh, one in Fort Worth, two in Japan, four in Tianjin, and 12 in Canton. In 1912, there were 120 male and 37 female students, and by 1914, 50 of the 115 students were female. A Rockefeller report claimed that "the requirements for admission are low – a knowledge of Chinese, some geography, history, and arithmetic ... It is hoped that graduation from a middle school may in time be the standard."¹³⁰ The hospital had 60 beds, the average student fee was \$100 per year, and instruction was in Chinese.¹³¹

By 1914, Kung Yee had over 150 medical students, including some women, and a small hospital and dispensary on the Bund in Canton. A large parcel of land at the east gate and

¹²⁹ Cadbury and Jones, *At the Point of a Lancet*, 184, Esper and Bovaird, "Medical Education," Wong and Wu, *History of Chinese Medicine*.

¹³⁰ Rockefeller Foundation, *Medicine in China*, 26-27.

¹³¹ Ibid.

approximately \$60,000 was pledged for new buildings. There was consideration to move Kung Yee's female medical students to Hackett Medical College if the two institutions could agree on cooperative measures. Although the Chinese directors of Kung Yee did not want compulsory religious instruction in the school, they did allow missionary physicians to hold chapel services and Bible classes and "to exert any personal religious influence."¹³² Dr. Li Shufen (李树芬), a graduate of Hong Kong College of Medicine (1908) and Edinburgh University (1910), raised \$100,000 during a fund-raising trip to the United States, mostly from overseas Chinese. This money was used to build a new wing of the hospital.¹³³ In 1923 Kung Yee became the medical department of Zhongshan University (Sun Yatsen University Medical School, 孙中山博士医学 院 Sun Zhongshan boshi vixuevuan). In 1924 Mayor Sun Fo (孙科, Sun Ke, son of Sun Yatsen) donated nearly 20 acres of land to the hospital for its new buildings and medical school, and two vears later the central government in Nanjing promised \$500,000 to the new endeavor.¹³⁴ By 1925, the school had 189 students, including 29 women. The course included two years of premedical studies and four years of clinical work leading to a bachelor's degree. After a twoyear internship or five years in private practice, the students could take another examination for an MD or MS degree.¹³⁵

Dr. Kang Cheng started her medical work in Nanchang, Jiangxi, in 1903 with much help from the locals. One early patient was the wealthy wife of a reformer, Mr. Tseo, in Nanchang. At Mr. Tseo's request, Kang and Shi, still based in Jiujiang, traveled to Nanchang and brought his wife with them back to Jiujiang, where they treated her for "nervous collapse" and apparent insanity. They treated her spiritually and she studied the Bible daily. After her recovery, she

¹³² Esper and Bovaird, " Medical Education."

¹³³ Choa, "Heal the Sick," 166.

¹³⁴ Cadbury and Jones, At the Point of a Lancet, 185.

¹³⁵ Choa, "Heal the Sick," 166.

sent her sons to the mission school in Jiujiang, and "her husband gave money for their dispensary and two merit boards." ¹³⁶ Mr. Tseo and other reformers persuaded Kang to move to Nanchang. She went on to establish the self-supporting Nanchang Women's and Children's Hospital there, with most of her donations from Chinese gentry and officials. In 1905, the local gentry bought Kang a piece of land worth \$3,000 and built a dispensary with \$2,000. Some of these funds came from a gift of grain from the public granary sold by an official to raise money for the hospital.¹³⁷ Shortly after her arrival in Nanchang, however, some gentry supporters called for her break with the Methodist church, saying they would support her wholly. They accused Chinese church members of being lower class money-grubbers. Kang refused to break ties with her church, even though she received little support from them.¹³⁸

From these examples, we can see that local gentry played a significant role in establishing and maintaining Western hospitals and training programs. What motivated them? Were these gentry influenced by Christian ideals of benevolence and good Samaritan undertakings? Were they trying to gain merit for themselves or their ancestors? According to Leung, Ming and Qing gentry and local leaders usually donated money to medical institutions during times of pestilence or disease. Wu has shown that Qing gentry gained merit by printing medical texts. What we see here is quite different: money given to Christian organizations to establish permanent Western-style hospitals, not temporary ones. Furthermore, as Tsin has argued, local leaders, merchants, intellectuals, and gentry were influenced by Tan Sitong's and Liang Qichao's discussions of society. Tsin writes that, "seen through the prism of such discourse, voluntary civic organizations took on a larger significance. They should not, and

¹³⁶ Shemo, "'An Army of Women," 120.

¹³⁷ Ibid., 244. According to MacGillivray, the dispensary cost \$1,600, and the land was valued at \$6,000 (p. 466). ¹³⁸ Ibid., 232.

indeed must not, focus merely on their particularistic interests [such as controlling plague]. Instead, they should demonstrate the spirit of public morals by involving themselves in the affairs of the public arena *for the good of the collective*" [italics in original].¹³⁹

EARLY GOVERNMENT PARTICIPATION

Western medicine gained more credence after the 1911 Revolution. It is estimated that by 1920 native Chinese provided more than half of mission hospitals' operating costs, "and that no less than 27 percent of the hospitals are now entirely self-supporting, apart from the salaries of the foreign staff."¹⁴⁰ According to Balme, a "hopeful sign of the times is the way in which the Chinese people are extending financial support towards the hospitals and medical schools which have been organized in their country. Ever since the day when How Qua, the landlord of the building in which Parker had his first hospital, refused to accept any rent, the Chinese have repeatedly given proofs [sic] of their appreciation of such forms of medical charity, and of their willingness to share in the financial support of these institutions."¹⁴¹

Many reformers who had been purged or suppressed during Cixi's reign were now free to advocate and establish modernization programs. The national government was unstable and no lasting health reforms were established; however, some local officials and warlords supported Western medical training. As shown above, the local Health Officer in Nanjing supported a midwife training school in 1914. In addition, Shemo found that in the 1910s and 1920s the Nanchang government regularly supported Kang Cheng's hospital. Although China was ruled by a succession of military governors in the early twentieth century, some were dedicated to

¹³⁹ Tsin, Nation, Governance, and Modernity, 31.

¹⁴⁰ Balme, China and Modern Medicine, 187-88.

¹⁴¹ Ibid.

nationalist reforms. A group of Nanchang pastors petitioned the local government in 1912 for a permanent grant for Kang because she was a native helping natives. For several years afterward, she received a yearly \$250 grant from the local government, and in 1913-14 that was raised to \$1,000. "City authorities" in Taihu and Huangmei asked Kang and Shi to give lectures, and "magistrates had promised financial aid as well as moral support."¹⁴² By the 1920s, Kang had considerable influence in Nanchang. She had befriended the governor of Jiangxi province, and she influenced government programs that were not related to medicine or public health, like establishing public parks and repairing and building roads.¹⁴³ Around 1920, a wife of a Provincial Assembly member came to Kang's hospital in Nanchang to give birth. The woman had lost five previous children to incompetent midwives. Her sixth was delivered at Kang's hospital, and she returned to successfully deliver her seventh.¹⁴⁴

Throughout China, modern medicine garnered more and more support from government and gentry alike. The Hunan provincial government pledged at least \$50,000 per year to the Xiangya Medical College and Hospital, plus large sums for land and buildings. Officials and gentry in Anking contributed \$3,000 per year for several years towards the American (Protestant-Episcopal) Hospital there. The Shandong provincial government's Civil Governor passed a bill in 1920 for annual appropriation of \$5,000 of the provincial budget towards the University Hospital at Jinan. With government backing, hospitals were erected in several cities, many with Western and TCM departments, such as the Central and Isolation Hospitals at Peking led by Cambridge graduate Dr. S.P. Chen. The former was a very modern institution built at a cost of \$300,000.¹⁴⁵

¹⁴² Shemo, "'An Army of Women," 266-67.

¹⁴³ Ibid., 403.

¹⁴⁴ Ibid., 400.

¹⁴⁵ Balme, China and Modern Medicine, 102, 87-89.

Between 1905 and 1910, several missions banded together to consolidate medical and nursing schools, and the consolidation continued throughout the Nationalist era with subsequent governmental controls. As we have seen above, medical training in mission facilities up until this time was very sketchy and sporadic. Because funds and material resources were scarce, these missions decided to pool their resources into a few select medical training institutes in order to train more qualified practitioners and establish more rigorous qualifications and standards.

In 1905, the London Missions, together with the American Presbyterian and Methodist missions, formed the Union Training School for Nurses in Beijing. There were eight students in attendance in 1909.¹⁴⁶ In 1906, the Union Medical College for Women was established, also in Beijing, by the Educational Union of North China, comprised of the London Mission, the American Presbyterian Mission, and the Women's Board of Foreign Missions of the Methodist Episcopal Mission.¹⁴⁷ Its first class of two students matriculated in 1908, and a second class of at least six entered in 1910. In 1906, the American Board of Commissioners for Foreign Missions and the Board of Foreign Missions of the Presbyterian Church, United States, established the Union Medical College in Peking. These latter two institutions were taken over in 1915 by the Rockefeller Foundation's China Medical Board (CMB) to become Peking Union Medical College, which I will discuss below. The Nanjing Union Nurses' School, affiliated with the Friends' Mission and Hospital, opened in 1908.¹⁴⁸ In 1924 the North China Union Medical

¹⁴⁶ "Union School for Nurses, Peking," CMJ 23, no. 5 (1909): 344-45.

¹⁴⁷ The London Mission withdrew from the Union in 1908. Anna Gloss MD, "Medical Education for Women in North China," CMJ XXIV, no. 6 (1910): 423-25, "Union Medical College for Women, Peking," CMJ 23, no. 5 (1909): 334-35, "Union School for Nurses, Peking," 344. ¹⁴⁸ Lucy A. Gaynor, MD, "Nanking Union Nurses' School," *CMJ* 23, no. 5 (1909): 34-343.

College for Women in Peking (established in 1908) joined the Shandong Christian University (called Cheeloo, *Qilu yike daxue* 齊魯以科大學, after 1915) in Jinan.¹⁴⁹

After the founding of the Republic in 1912, several public health measures were legislated, though due to political instability many were not successful. Historically, Chinese government involvement in public health had been scattered. During periods of epidemics or famine during the Qing, the national government occasionally established dispensaries or almshouses. For example, the Yongzheng emperor in the mid-1700s ordered that charitable halls be established throughout the empire and urged the opening of foundling homes. These were private institutions that would benefit from government recognition and occasionally even financial aid.¹⁵⁰

After 1912, maternal and child health were low on the list of priorities in a country ravaged by disease caused by lack of sanitation and crowded living conditions. A National Sanitation Bureau was founded under the Ministry of the Interior to suppress communicable diseases, license physicians and pharmacists, regulate drugs, and oversee hospitals. In addition, the Ministry of Education administered school hygiene programs, and the Ministry of Agriculture and Commerce oversaw industrial hygiene. A proposal for a National Board of Health was not seen until 1921 and was still not in place by 1926.¹⁵¹ In 1910-11, public health in China got a kick-start from pneumonic plague in Manchuria and North China. The North Manchuria Plague Prevention Service was created in 1912 and headed by Cambridge University graduate Dr. Wu Liande (known in England as Dr. G.L. Tuck). The successful containment of

¹⁴⁹ John Z. Bowers, "Imperialism and Medical Education in China," *Bulletin of the History of Medicine* 48 (1974): 449-64, Tao, "Medical Education of Chinese Women," 74.

¹⁵⁰ Leung, "Organized Medicine in Ming-Qing China," 148.

¹⁵¹ Yip, Health and National Reconstruction.

plague boosted people's confidence in modern medicine and proved that China could run an effective public health program.¹⁵²

There were no local public health departments, government-run institutions to deal with issues like sanitation, inoculation, disease prevention, etc., in the 1910s, save those in international settlements like Shanghai and Tianjin.¹⁵³ Guangzhou is the one exception. In 1912, a local Bureau of Health was established there, with Edinburgh University of Scotland-trained physician Dr. Li Shufen at its helm. In 1920, the Canton Department of Health was formed with Western-trained Dr. Hu Xuanming as its first commissioner.¹⁵⁴ This very progressive department established vaccination and sanitation campaigns and set up local dispensaries and public health stations.

EARLY MEDICAL EDUCATION IN CHINA

Although public health reforms were underway by the 1910s as part of China's modernization efforts, the state of medical training was still in its infancy. China had no consistent educational policy in the late Qing era, much less a standardized medical curriculum. In 1872, Zeng Guofan, Li Hongzhang, and Yong Hong (Yung Wing) had convinced the Qing court to send 30 students per year to study abroad. Between 1872 and 1881, only 120 had gone to the United States, a total of 30 to England and France, and none to Germany. The program ended in 1881 because some court advisers thought the students were neglecting Chinese learning and losing their Chinese identity. In contrast, in 1870 the Meiji emperor of Japan sent the first government-sponsored students to study in Germany, and by 1900 Japan had three imperial government

¹⁵² Wu Liande, *Plague Fighter: the autobiography of a modern Chinese physician* (Cambridge, England: W. Heffner, 1959).

¹⁵³ Rogaski, *Hygienic Modernity*.

¹⁵⁴ Yip, Health and National Reconstruction, 16.

medical colleges with a national standardized curriculum: Tokyo (established in 1877), Kyoto (1897), and Kyushu (1903).¹⁵⁵ Japan had graduated over 15,000 practicing state-registered doctors from its medical education system by 1913, whereas China had only 500 medical students in training in all the missionary apprenticeship programs, hospital-schools, and union medical schools throughout China.¹⁵⁶ After the Boxer Rebellion and China's defeat in the Sino-Japanese War, the Qing government made belated reforms: "In 1909 imperial edicts ordered every Chinese provincial capital to establish 'government medical schools' with hospitals, similar to the special medical schools in Japan," though this would not happen for decades.¹⁵⁷

Public education of any kind for girls was a new phenomenon, one that many reformers encouraged around the time of the New Culture Movement. This movement's participants aimed to bring China into the modern world with social reforms that sought, in part, to redefine the family and society. Included were goals of public education, free marriage, equality for women, and the end of footbinding.¹⁵⁸ In 1907, the Chinese government had issued regulations for girls' normal and elementary schools. They deemed the highest level of education for girls the Normal School, which, depending on the school, was roughly equivalent to the American junior high or high school. There were no colleges for women aside from those run by missions. The curriculum for girls' elementary education was one year shorter than that for boys, and elementary co-education was allowed if there were not enough girls to form their own class.¹⁵⁹ This was a significant step forward for educating women and girls, although the classes were still mostly taught separately until the early 1920s. In 1912, after the Republic was founded, the

¹⁵⁵ AnElissa Lucas, *Chinese Medical Modernization: Comparative Policy Continuities, 1930s - 1980s* (New York: Praeger Publishers, 1982), 38-40.

¹⁵⁶ Ibid., 43.

¹⁵⁷ Bowers, Western Medicine in a Chinese Palace, 31.

¹⁵⁸ For family reform in the New Culture Movement, see Susan Glosser, *Chinese Visions of Family and State, 1915-1953* (Berkeley: University of California Press, 2003).

¹⁵⁹ Chindon Yiu Tang, "Woman's Education in China," *Bulletins on Chinese Education* 9, no. 2 (1923): 23.

newly created central Ministry of Education revamped the educational system to include at least theoretical equality of male and female education. The term for school, *xueding*, was changed to *xuexiao*, which "signifies a democratic turn in the conception of education" and stressed the importance the new government placed on basic public primary education.¹⁶⁰ They divided the educational system into 18 years containing four years of lower primary, three years of higher primary, four years of middle school, and six years of college. Students began school at age six or seven, and those graduating from college were 26 or 27 years of age. According to national education statistics for China, between 1907 and 1918-19 the number of girls in elementary schools rose from 11,936 to 215,626. Still, in 1918-19 girls comprised only 5.4 percent of all students in elementary schools.¹⁶¹ By 1923, the percentage of all female students in non-mission schools was only 6.3 percent, an increase from .07 percent in 1906.¹⁶²

In 1912, the Ministry of Education passed the University Act, which standardized a fouryear medical curriculum and established provincial medical schools in Beijing and Hangzhou the same year, with two more the following year in Suzhou and Wuzhang. These Medical Special Colleges (for men only) were staffed mainly by Chinese graduates of Japanese four-year secondgrade medical colleges.¹⁶³ The Ministry of Education standardized their curriculum in 1912 and included obstetrics and gynecology, with practical obstetrical training using manikins.¹⁶⁴ The Medical Special Colleges came under attack in the 1920s by League of Nations Health Organization advisers, Chinese medical leaders, and Nationalist government administrators

¹⁶⁰ Shou Shang Hsu, Hsiao Lan Ou Yang, and Yoehngoo Tsohsan Wu Lew, "Education of Women in China," in *Education in China: Papers Contributed by the Members of Committees of the Society for the Study of International Education*, ed. T.Y. Teng and T.T. Lew (Peking: Society for the Study of International Education, 1923).

¹⁶¹ Tang, "Woman's Education in China," 6. The 1907 number is for girls in "elementary school." The 1918-19 number includes girls in "lower primary" and "higher primary" schools, a distinction created in 1912.

¹⁶² Chinese National Association for the Advancement of Education, "Statistical Summaries of Chinese Education," *Bulletins on Chinese Education* 16.2 (1923): 4-5.

¹⁶³ Lucas, Chinese Medical Modernization, 45.

¹⁶⁴ Rockefeller Foundation, *Medicine in China*, 11, 103.

critical of the quality of the Chinese medical personnel who ran them. They began to close in the late 1920s.¹⁶⁵ Regulations for special medical schools (vixue zhuanmen xuexiao 医学专门学校) were also enacted. The course of study was for four years preceded by one year of premedical and more than one year of postgraduate studies.¹⁶⁶ In 1912, medicine was divided into the fields of medicine and pharmacy, and premedical courses were required for admission to either. In 1917, the medical course of study was raised from four to five years.¹⁶⁷

The 1921 and 1922 Conferences of Provincial Educational Associations, held in Canton and Jinan, respectively, restructured the educational system and included provisions for four-year National Technical Colleges. Co-education was allowed and was common in the lower primary grades. Several national colleges adopted co-education, though in practice upper primary and middle schools were still sex segregated.¹⁶⁸ Even in national co-ed colleges and universities, the number of female students was very small; for example, there were 11 female and 2,246 male students at the National University of Peking in 1923.¹⁶⁹ The conference members also encouraged the creation of more Elementary and Secondary Vocational Schools for girls, which were on the same standing as girls' Normal Schools.¹⁷⁰ Vocational Colleges included specialty curricula in midwifery, nursing, and medicine, as well as in business and handiwork like embroidery and dressmaking. The number of girls' Vocational Schools grew from 21 in 1916 to 158 in 1922. Most of these were private institutions. In 1923, the Joint Conference of Education and Industry in Jiangsu passed a resolution to establish a Provincial Girls' Vocational School.¹⁷¹

¹⁶⁵ Lucas, *Chinese Medical Modernization*, 68.

¹⁶⁶ Choa, "Heal the Sick," 96.

¹⁶⁷ Ibid.

¹⁶⁸ Tao, "Medical Education of Chinese Women," 74.

 ¹⁶⁹ Tang, "Woman's Education in China," 24.
 ¹⁷⁰ Ibid., 5. In addition to the adjustments noted, the system was changed to six years of elementary school, three years of junior middle school, three years of senior middle school, and four years of college. ¹⁷¹ Ibid., 20.

The majority of colleges were in urban areas. In 1923, Peking had 37 colleges, and Jiangsu had 15. Eleven provinces had either only one or no colleges. Peking had the largest number of female college students, with 653. Nationwide, there were 847 female college students of a total of 34,880 college students in China. Women comprised 7.13 percent of all students in Secondary Vocational Schools, with 1,452 of 20,360 total students. Again, Peking had the largest number of these students, 617. The number of females in Elementary Vocational Schools was greatest in Jiangsu, perhaps because of the large missionary influence and silk industry there. There were none in Peking. Girl students of this kind comprised 1,757 of a total of 20,467 vocational students nationwide.¹⁷²

By this time, China had eight union medical schools for men, at Mukden, Peking, Jinan, Hankou, Chengdu, Nanjing/Hangzhou, Fuzhou, and Guangzhou. In addition, there were three medical schools for women: Hackett in Guangzhou, Suzhou under Margaret Polk, and the Union Medical College for Women in Beijing.¹⁷³ Out of the 815 students enrolled in medical schools in 1923, 17 were girls. They were all in urban areas, leaving the vast majority of China's population untouched by Western medical influence. Furthermore, there were no enforced national standardized curricula or registration, thus no uniformity among admissions requirements or training. In addition to these legitimate schools, there was still unofficial training of medical personnel in various hospitals throughout China.¹⁷⁴ None of these schools had many students. Some women students studied in the United States, Europe, or Japan, but these were extremely rare. In 1919, there were 63 Chinese women studying in America in all fields, and 65 in 1920.

¹⁷² National Association for the Advancement of Education, "Statistical Summaries of Chinese Education," 4-5, 10-49.

¹⁷³ Balme, China and Modern Medicine: A Study in Medical Missionary Development.

¹⁷⁴ Yip, Health and National Reconstruction, 17.

Boxer indemnity money that the United States remitted to China between 1908 and 1917 was used to found Qinghua University and to send Chinese men and women to study in the United States. Qinghua was established in 1911 as a junior college to prepare students for study in the United States on Boxer scholarships. In the first 18 years of the program 1,300 men and women were sent abroad.¹⁷⁵ The program was initially designed to send10 female students for a five-year course of study in America every other year, but those numbers were not met.¹⁷⁶ No students were sent in 1920 or 1922, and as of 1923, Qinghua dedicated only three percent of its total scholarship money to sending women students abroad and proposed to stop sending women altogether. Several educational and women's organizations challenged this proposal, so Qinghua planned to send five female students in 1923.¹⁷⁷

Formal education for women, even by the 1920s, was dismal, and women's medical education was almost nonexistent, but change was rapid and forthcoming. The idea that women could and should be educated was spreading. This major shift in gender identity, that women were worthy of an education and that they could help to build a new China, gave them more opportunities and opened the medical field to them. In addition, modern medicine and public health gradually became more accepted, especially in urban areas, in part because of their effectiveness in halting the North Manchurian plague epidemic. The foundation laid by the medical missionaries from Great Britain and the United States, based on the support of local gentry and officials, allowed the Nationalist government to rapidly adopt public health and medical education measures.

¹⁷⁵ Bowers, "Imperialism and Medical Education in China," 455-56.

¹⁷⁶ Ibid.

¹⁷⁷ Tang, "Woman's Education in China," 27-30.

Gradually, Chinese women entered the medical field, often as low-level technicians, and although medicine was not a prestigious field, they gained experience that allowed them in some cases to pursue further education or to encourage others to do the same. These women opened the doors for the professional midwives who were to follow. As women became nurses and medical helpers (and later midwives), and medicine became more and more regulated under the expanding arm of the state, women too were subject to more regulation. We see a gradual but definite move towards centralized government control over public health and the medical field, as well as greater cooperation between Western and Chinese institutions, during the Nationalist era. The scattered and erratic medical training in early twentieth-century China forms the basis on which Nationalist public health policies were built.

CHAPTER TWO. MIDWIFERY EDUCATION AND CONTROL IN THE NATIONALIST ERA

"The important bearing of maternal and infant health on the health of the future citizens and the present entire absence of adequate facilities in midwifery practice make this question a matter that demands immediate attention." J. Heng Liu (Liu Ruiheng 刘瑞恒), Vice-minister of Health and later Director of the National Health Administration¹⁷⁸

An increasing awareness of public health, including midwifery training and regulation, was characteristic of the Nanjing decade, the period during which the Guomindang had an established government in Nanjing. While the main focus of China's Ministry of Health was communicable disease prevention and sanitation, maternal and child health was a significant component, for maternal and child health was considered preventive medicine. The high infant and maternal mortality rates could be prevented by utilizing modern techniques like prenatal care and aseptic childbirths. Ka-che Yip's study of Guomindang efforts to modernize through public health provides an excellent foundation from which to explore midwifery reform. He states that in the 1920s, ideas about public health expanded from the occasional street cleaning and night soil campaigns to crusades for individual health and hygiene and "acceptable social behavior."¹⁷⁹

¹⁷⁸ J. Heng Liu, "The Chinese Ministry of Health," *National Medical Journal of China* 15 (1929): 145. ¹⁷⁹ Yip, *Health and National Reconstruction*, 102.

Ministry of Health implemented maternal and child health programs. Midwife training in particular was part of a larger movement to quickly train "health aides" with less training than physicians in order to reach more people more quickly. At the same time, modern midwifery fit perfectly with the Nationalist focus on science as the solution to many of China's ills.¹⁸⁰

The newly formed Guomindang government in Nanjing established a National Midwifery Board in 1929 that sponsored and developed midwifery programs. One of their most important efforts was the First National Midwifery School (FNMS), a joint endeavor with the China Medical Board. During that same year, the Ministry of Health's first Five-Year Plan aimed to improve maternal and child health nationwide. It established national and provincial programs to train new and old-style midwives, standardized curricula and examinations for midwifery and other medical training programs, and instituted a national midwife registration and licensing program. Part of this turn to Western maternal and child health practices stems from the government's attempts to curtail the power of traditional Chinese medical practitioners in favor of a new and modern medical system.¹⁸¹ These efforts went a long way to validate and solidify the role of modern midwives as the birth attendants for a modern nation. This chapter will focus on Nationalist policies to regulate and educate midwives within the broader context of improving China's public health.

Guomindang midwifery reform was part of the larger effort to extend state control and to bring previously private matters into the public sphere. This included regulating the family as well as the newly emerging midwifery profession. The Nationalist government sought to extend its control into the private lives of its citizens, much more so than China's imperial governments had attempted in the past. As Susan Glosser has illustrated, the state took over the family

¹⁸⁰ Schneider, *Biology and Revolution*.

¹⁸¹ Xu Xiaoqun, Chinese Professionals.

authority that had previously been held by the elder generations. These policies were accepted because many modernizers believed that China needed a strong state to survive.¹⁸² This control was best accomplished through science and law. Public health programs, including modern midwifery, aimed to improve the people's health through science. Midwives and other medical personnel were regulated, and they were also needed to document (and thus control) the people's lives through statistics collection and research investigations. The birth process was overseen by the newly trained and registered midwives, who in turn collected statistics about the health and socioeconomic conditions of the mothers and infants. The goal was to institutionalize childbirth as part of a broader effort at family reform that included encouraging small nuclear families.¹⁸³

The Chinese government, with the backing of Western medical institutions, also supported and controlled women medical professionals, including promoting medical training for women as part of nation-strengthening efforts. The medical profession, especially the fields of midwifery, nursing, and obstetrics/gynecology (OB/GYN), was a way for Chinese women to enter into the nationalist discussion and help to strengthen China. In fact, Westerners and Chinese alike encouraged Chinese women to study medicine in order to serve female patients who traditionally could not be examined by men.¹⁸⁴ One of China's most famous reformers, Liang Qichao (1873-1929), was especially vocal about the importance of female education. Most of his writings focus on the necessity of educated and healthy women as good mothers, and he wrote an article praising physicians Ida Kahn and Shi Meiyu as examples of the promise of women's intelligence and dedication to the nation.¹⁸⁵ He also advocated prenatal care in order to

¹⁸² Glosser, Chinese Visions of Family and State, 1915-1953.

¹⁸³ Ibid.

¹⁸⁴ Bullock, An American Transplant, Yip, Health and National Reconstruction.

¹⁸⁵ Liang Qichao, "Ji Jiangxi Kang nushi" (On Miss Kang of Jiangxi). *Yinbingshi wenji* (Essays from the Ice-Drinker's Studio), vol. 1, no. 1. Reprint. Shanghai: Zhonghua shuji, quoted in Weili Ye, "Nü Liuxuesheng' The Story of American-Educated Chinese Women, 1880s-1920s." *Modern China* 20:3 (July 1994): 315-46, 320-21.

improve children's health and thus the nation's "racial vigor."¹⁸⁶ Liang, along with many others like Tan Sitong and Kang Youwei, published articles and books that promoted women's participation in the new nation (see Chapter Five).

Feminist writers since the 1980s have been analyzing women's roles in nation building and nationalist movements. They have found that women indeed play a significant part and in fact "actually tend to accept the obligation of nation and nation building."¹⁸⁷ A considerable amount of scholarship has been devoted to theorizing the gendering or, to use Tamar Mayer's term, "sexing" of the nation complicated with issues of race and class.¹⁸⁸ During revolution, war, and nationalist movements, women's bodies often become a site of nation-building or nation-preserving strategies.¹⁸⁹ Furthermore, the state often explicitly calls upon women to bear children as their "national duty," to become "honorable mothers" to strengthen the nation and maintain the culture.¹⁹⁰ In all cases, women are the targets of these policies, partly because it is women who do the reproducing, but also because targeting males may threaten cultural gender distinctions of virile men and passive, malleable women. Modernizers and the Guomindang in the early twentieth century attempted to alter women's social roles by implementing laws and encouraging modern childbirth practices and professionalism.

¹⁸⁶ Zheng Shiyu, *Liang Qichao jiaoyu sixiang* (Liang Qichao's Thoughts on Education) (Taibei: Taibei Youshi wenhua shiye gongsi yinxing, 1980).

¹⁸⁷ Tamar Mayer, "Gender Ironies of Nationalism: Setting the Stage," in *Gender Ironies of Nationalism: Sexing the Nation*, ed. Tamar Mayer (London and New York: Routledge, 2000).

¹⁸⁸ For example, Jozsef Borocz and Katherine Verdery, "Gender and Nation: Introduction," *East European Politics and Societies* 8, no. 2 (1994), Anne McClintock, "'No Longer in a Future Heaven:' Nationalism, Gender, and Race," *Transition* 51 (1991): 104-23, Henrietta Moore, *Feminism and Anthropology* (Minneapolis: University of Minnesota Press, 1988), Lois West, "Introduction: Feminism Constructs Nationalism," in *Feminist Nationalism*, ed. Lois West (New York and London: Routledge, 1997), Nira Yuval-Davis and Floya Anthias, eds., *Woman - Nation - State* (New York: St. Martin's Press, 1989), and Tamar Mayer, ed., *Gender Ironies of Nationalism: Sexing the Nation* (London and New York: Routledge, 2000).

¹⁸⁹ Nira Yuval-Davis, "Women and the Biological Reproduction Of 'The Nation," *Women's Studies International Forum* 19, no. 1/2 (1996).

¹⁹⁰ For example, Katherine Verdery, "From Parent-State to Family Patriarchs: Gender and Nation in Contemporary Eastern Europe," *East European Politics and Societies* 8, no. 2 (1994).; Haleh Afshar, "Women and Reproduction in Iran," in *Woman-Nation-State*, ed. N. Yuval-Davis and F. Anthias (New York: St. Martin's Press, 1989).

After the start of the Nationalist era, the Ministry of Health (*weisheng bu* 卫生部) was established in 1928 and issued a mandate that emphasized public health "for the sake of the nation."¹⁹¹ With the help of the League of Nations Health Organization (LON-HO), the government attempted to create a state-run central health program. Their goal, according to AnElissa Lucas, was to build a "national network of medical and health care institutions, functionally divided and hierarchically organized from rural villages to urban centers, which could distribute accumulated medical resources to the entire Chinese population."¹⁹² The LON-HO Report on Medical Schools in China recommended a two-tier educational system: national medical schools for "high-grade physicians" with an eight-year curriculum, and "special medical schools" for a larger number of "medical practitioners" with a five-year curriculum.¹⁹³ Both included coursework in public health. However, the report's author, Knud Faber, only indirectly referred to medical education for women – in short sections on midwife and nurse training – a grave oversight given the interest of other foreign and domestic policymakers towards this issue in other publications. In fact, the China Medical Commission of the Rockefeller Foundation devoted a portion of its 1914 report to plans for women's medical education.¹⁹⁴

As part of the push for Western scientific learning in China, in 1929 the Nationalist government "decreed that in university and specialized education, emphasis must be laid on applied sciences to strengthen the contents of all courses of study, in order to train students in special knowledge and skill and mould their character for the service of the country and society."¹⁹⁵ Universities were divided into four categories: national, provincial, municipal and

¹⁹¹ Yip, *Health and National Reconstruction*, 26. See Yip, Chapter 5, for a description of Nationalist Ministry of Health policies.

¹⁹² Lucas, Chinese Medical Modernization: Comparative Policy Continuities, 1930s - 1980s, 10.

¹⁹³ Knud Faber, *Report on Medical Schools in China* (LON-HO, June 31, 1931).

¹⁹⁴ Rockefeller Foundation, Medicine in China.

¹⁹⁵ Choa, "Heal the Sick," 97.

private, and would have three or more of the faculties of arts, science, law, education, agriculture, commerce, engineering or medicine. In addition, independent colleges (*duli xuexiao* 独立学校) could exist but were limited to no more than two faculties. The course of medical study would last five years, while all others were for four.¹⁹⁶

Between 1931 and 1935, the Chinese National Commission on Medical Education standardized curricula and textbooks for national medical colleges and provincial medical schools. There were five national medical colleges in China by 1934: Shanghai (established in 1908), Beijing (1912), Guangzhou (1926), Shanghai (1927), Nanjing (1935), plus two military medical schools in Nanjing (1902) and Kunming (1931).¹⁹⁷ In addition, there were six provincial-level medical schools, all with Chinese-language instruction: Hangzhou (established in 1912), Baoding (1916), Nanchang (1921), Kaifeng (1928), Jinan (1932), Kunming (1933). Furthermore, at least 17 private medical colleges and schools existed, all in major urban areas: five in Shanghai (1906, 1909, 1918, 1924, 1926), two in Guangzhou (1899, 1909), two in Shenyang (1912, 1921), and one each in Beijing (1906), Jinan (1909), HK (1912), Nantong (1912), Chengdu (1914), Changsha (1914), Taiyuan (1919), and Harbin (1926).¹⁹⁸ Most of these were run by missionaries.

By 1935, there were reportedly 5,390 Western-trained physicians in China, 87 percent of whom were Chinese. Seventy-one percent of these Chinese doctors were educated in China, and the vast majority practiced in urban areas, with 22 percent of them in Shanghai alone.¹⁹⁹ By 1934, there were over 550 Chinese female medical school graduates, including 463 from Chinese medical colleges, 70 from Japanese women's medical schools, and 26 from American medical

¹⁹⁶ Ibid.

¹⁹⁷ Lucas, Chinese Medical Modernization: Comparative Policy Continuities, 1930s - 1980s, 69.

¹⁹⁸ Wong and Wu, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period*, 795-98.

¹⁹⁹ Ibid., 799.

schools. The 28 medical schools in China in 1934 included only two exclusively for women and three for men. Out of 3,655 students, 619, or 16.9 percent, were women.²⁰⁰

In addition to improving medical education, there was a concentrated effort to develop maternal and child health programs. In 1929, the Ministry of Health's first Five-Year Program aimed to provide preventive and clinical maternal and child health care in cities and rural areas. This plan focused on building a health administration unit and training facilities. It included the creation of the Central Field Health Station in Nanjing, a central hygiene institute with research labs and a drug production unit. It also established the Chinese National Health Administration under the Ministry of Interior in 1931, a body responsible for health legislation enforcement and administrative supervision that reported to the Executive Yuan. The Central Field Health Station was responsible for technical and educational aspects of the National Health Administration.²⁰¹

The Five-Year Program also created programs to train old-style and modern midwives and public health nurses, as well as provide a nationwide maternal and child health care network. Like other aspects of public health in China in the 1920s and 1930s, these training programs were heavily influenced by the LON-HO. At the 1931 LON-HO European Conference on Rural Hygiene, "the continental system of two grades of midwives was favored, with the 'secondclass' midwife's shorter period of training oriented toward rural health work."²⁰² This meant that high school graduates could enroll in lengthy midwife training programs, while at the other end old-style midwives would get a cursory two-week to two-month instruction on methods of aseptic childbirth. This was the basic model that the First National Midwifery School followed.

²⁰⁰ Tao, "Medical Education of Chinese Women," 75.

²⁰¹ Lucas, Chinese Medical Modernization: Comparative Policy Continuities, 1930s - 1980s, 60-61.

²⁰² Ibid., 65.

The ministries of health and education jointly established a National Midwifery Board (zhuchan jiaoyu weiyuanhui 助产教育委员会) in 1929 "to promote midwifery education in the country."²⁰³ According to the Vice-Minister of Health J. Heng Liu, "The realization of the paramount importance of midwifery education at the present moment has led to the formation on January 15 [1929] by the Ministries of Health and of Education of a National Midwifery Board." The board's nine members included two representatives each from the Ministries of Health and of Education, to hold office for two-year terms. The committee met twice yearly and also regulated midwifery curricula and midwife registration. Its members in 1932 included: from the Ministry of Health, Dr. J. Heng Liu and Dr. L.C. Yen (Chief of the Department of Medical Administration); from the Ministry of Education, Mr. Wu Lai Chua (Vice Minister of Education) and Dr. S.L. Hong (physiologist); and Honorary Members Madam Feng Yuxiang,²⁰⁴ wife of the progressive "Christian General," Madam Chiang Kai-shek, ²⁰⁵ Dr. F.C. Yen (Dean of Central University Medical School), Dr. Sun Keh-chi (Obstetrician, Red Cross Hospital, Shanghai) and Dr. Marion Yang of the First National Midwifery School.²⁰⁶ A sum of \$30,000 per year was obtained from the National Government for the promotion of midwifery education. At the first meeting of the Midwifery Board, held on January 23, 1929, the members decided that the First Midwifery Training School and attached hospital would be established in Beiping and approved the plan proposed by the Beiping Midwifery Commission.²⁰⁷ To help resolve the immediate

²⁰³ Liu, "The Chinese Ministry of Health," 139, Nianjian bianzuan weiyuanhui Neizhengbu, *Neizheng Nianjian* (*Yearbook of Internal Affairs*), vol. 4 (Shanghai: Shang wu yin shu guan, 1936), G303-04.

²⁰⁴ Mrs. Feng Yuxiang had opened a midwifery school in Kaifeng, Honan, in 1927 or 1928, which had "taught her the necessity for trained personnel." Grant, letter to Dr. Victor Heiser, 1928.

²⁰⁵ I have been unable to find any information about Madame Chiang's involvement in the NMB, other than that she was an honorary member. An interesting side note is that Dr. Marion Yang and Madame Chiang did not see eye-to-eye: According to John B. Grant, Yang "could not cope with either Madame's superficialities or the vagaries of her entourage" Bullock, *An American Transplant*, 194, n.12.

²⁰⁶ "First Annual Report, First National Midwifery School (hereafter FNMS), 1929-1931," (Beiping: First National Midwifery School, 1931), iii.

²⁰⁷ Liu, "The Chinese Ministry of Health," 140.

crisis in maternal and child health, the Ministry of Health planned to offer short courses lasting two or three months to old-style midwives, often called *chanpo xunlianban* (产婆训练班), "on asepsis and the primary physiological principles ... while at the same time more advanced midwifery schools [*zhuchan xuexiao* 助产学校] with appended hospitals for practical work will be established."²⁰⁸ The number of these advanced schools would grow as midwifery school graduates were available to staff them. The First National Midwifery School (*di yi zhuchan xuexiao* 第一助产学校) in Beiping would be the model for other midwifery schools, and local health bureaus and departments were encouraged to follow this policy.²⁰⁹ I will return to the FNMS in Chapter Three.

The Midwifery Board aimed to provide midwife training at national, provincial, and rural levels. The Ministry of Health together with the National Midwifery Board established curricula guidelines and licensing registration of public health nurses and midwives in 1929. In 1930, these organizations, along with the First National Midwifery School, launched the National Maternity and Child Health Service (or Programme), headed by Marion Yang. Its first five-year plan emphasized training personnel, experimenting with teaching methods, and "educating the public to utilize modern maternity care."²¹⁰ In 1932, Marion Yang toured numerous rural and urban locations in China to investigate maternal and child health problems and recommend solutions. She assisted the Yenching University Sociology Department's Sociological Experimental Station at Qinghe (see below) to establish a rural "reconstruction" program to improve maternal and child health. That year Yang also provided technical assistance for maternal and child health work in Shanghai; Yutien county, Hebei province; the Jiangsu

²⁰⁸ Ibid., 145.

²⁰⁹ Ibid.

²¹⁰ "Fifth Annual Report, FNMS, Beiping, July 1, 1933 - June 30, 1934." (Beiping: First National Midwifery School, Beiping, 1934).

Provincial Hospital and Midwifery School; and old-style midwife training in Jiangsu province. We can see here the top-down organization that the Nationalist government bodies were attempting to exert on maternal and child health work.

In 1930, the National Health Administration (*weishengshu* 卫生署) was formed as part of the reorganization of the national government. The Ministry of Health merged with the Ministry of the Interior, and the National Health Administration assumed the former's responsibilities. In 1935, the National Health Administration was made an independent division of the Executive Yuan on the same level as a Ministry. Its primary work concerned legislation, supervision of public health institutions, and registration of medical personnel.²¹¹ The National Health Administration was only indirectly involved in maternal and child health work. According to Director Dr. J. Heng Liu, the National Health Administration formulated maternal and child health programs, gave technical assistance to local institutions, lent personnel, and made inspections and supervised other institutions. It also organized postgraduate training for midwives and conducted a tour "enabling midwifery teachers to visit various types of work in different parts of the country." The National Health Administration provided financial and personnel assistance to schools and rural health work. School health was emphasized, and the National Health Administration provided teacher training in primary and secondary school health education so that ideas of public health were spread throughout China's public schools.²¹² Liu's national model for "state medicine" was applied directly to maternal and child health, "this being

²¹¹ J. Heng Liu, "National Health Organization," in *The China Christian Yearbook, 1936-37*, ed. Frank Rawlinson (Glendale, CA: The Arthur H. Clark Co., 1937), 337. ²¹² Ibid., 345-46.

the only course for China to take if modern medicine is to extend proportionately to the whole country."²¹³

During the same year, the government ordered "all midwifery schools to register with the National Midwifery Board and for students to take examinations and obtain a license before going into practice."²¹⁴ At the third meeting of the National Midwifery Board in 1932, its members issued a declaration outlining methods and enforcement of midwifery school licensing. It stated that all midwifery schools – national, provincial, private, and rural – and their affiliated hospitals seeking national registration must be subjected to a joint inspection by local educational and health officers. These persons had to complete a standardized form listing information such as the school's size, personnel, number of students, operating expenses, physical plant and equipment, along with "reputation of the school in the locality" and "among the medical circle."²¹⁵ All qualified schools successfully registered would be required to conform to the national standardized entrance requirements and midwifery curriculum, as follows:

National standardized entrance requirements limited candidates to females between 20 and 30 years of age who were graduates of a junior middle school or those having similar qualifications. The number of students admitted could not exceed twice the number of available maternity beds in the school's affiliated hospital. All schools had to offer a two-year course, with the following standardized curriculum:

²¹³ Woodhead, ed., *The China Yearbook 1935*, Appendix III: Report on the Visit to Shanghai, September 30 – October 8, 1933, viii.

 ²¹⁴ "Sixth Annual Report, FNMS, Beiping, July 1, 1934 - June 30, 1935," (Beiping: First National Midwifery School, Beiping, 1935), Appendix III: Report on the Visit to Shanghai, September 30 – October 8, 1933, viii.
 ²¹⁵ Ibid.

Semester	Subjects	Number of Hours Per Week
1^{st}	Anatomy	4
	Physiology	3
	Nursing	1
	Bacteriology	2
	Materia Medica	2
	On Duty	20
	Practice in Maternity	Ward 12
2^{nd}	Anatomy	4
	Physiology	3
	Urinalysis	1
	Midwifery	4
	Care & Feeding of Ch	ildren 2
	First Aid	1
	On Duty	17
	Practice in Maternity	Ward 12
3 rd	Midwifery	4
	Gynecology	2
	Care & Feeding of Ch	ildren 2
	Clinic	2
	Class Demonstration	4
	On Duty	10
	Practice in Maternity	Ward 22
4 th	Abnormal Midwifery	2
	Dietetics	1
	Dermatology	1
	Practice in Maternity	
	Ward, etc.	10
	On Duty	30

The maternity ward practice grouped together no more than three students to take care of delivery and the postnatal mother and baby for at least 25 deliveries. The students were required to take detailed notes about their maternity ward experiences.²¹⁶

The National Midwifery Board also played a significant role in legitimizing the new midwifery profession. Its members instituted rules, standardized midwifery school curricula and exams, restricted old-style midwives from practicing, and enforced licensing and registration. This bureaucratization helped to solidify the midwives' role in building a new China. Its most notable successes were the national schools, for they served as models for several other provincial, city wide, and rural midwife training programs.

According to a national report, in 1936 China had two national midwifery schools (First National Midwifery School in Beiping and the Central Midwifery School in Nanjing),10 provincial schools, one of which was affiliated with a national medical school and one with a public hospital, and 52 private midwifery schools.²¹⁷ There were also rural midwife training programs as part of a few experimental districts, like Dingxian. I will discuss national, provincial, rural, and municipal midwife and public health training programs in turn.

I have included a survey of nursing schools in this study because obstetrical training was part of most, if not all, nursing programs. The Nurses' Association of China, in fact, initially opposed separate midwife training, stating that midwifery fell under the broader domain of nursing.²¹⁸ Midwifery courses were part of the standard nursing training, and oftentimes schools offered nursing graduates additional coursework to specialize in midwifery. According to a 1934 investigation of the China's Department of Public Health (*weisheng shu* 卫生署), nationwide

²¹⁶ Ibid.

²¹⁷ Neizhengbu, *Neizheng Nianjian*, 208.

²¹⁸ Yip, Health and National Reconstruction, 165-67.

there were 172 nursing schools (*hushi xuexiao* 护士学校), all but10 of which were registered with the Nurses' Association of China, and 35 nurse training programs (*xunlianban* 训练班).²¹⁹ The National Committee on Nurse Education (*hushi jiaoyu weiyuanhui* 护士教育委员会), established in 1934, was charged with regulating and registering nursing schools, including standardizing nurse training curricula. By 1934, according to a Public Health Department report, there were 172 nursing schools in China, and 162 of those were registered with the Nurses' Association of China. In addition, 35 nurse training programs (*hushi xunlianban*) had been established.²²⁰

NATIONAL MIDWIFERY PROGRAMS

The First National Midwifery School (FNMS) opened in Beiping in October 1929²²¹ and was headed by PUMC graduate Dr. Marion Yang.²²² It was the national model for midwife training, and its graduates would in turn teach in other provincial and local midwifery schools. The school consisted of a High-Ranking Course (*gaojiban* 高级班), a Midwife Training Course (*zhuchanshi xunlianban* 助产士训练班), a Midwife Research Unit (*zhuchanshi yanjiuban* 助产 士研究班), and a Nurse Midwife Training Course (*hushi zhuchan xunlianban* 护士助产训练班). The *gaojiban*'s aim was to prepare qualified teachers to teach modern midwifery methods in local midwife training programs. The Midwife Training Course lasted six months and was designed to train midwives for needy rural areas. The Midwife Research Unit held a six-month advanced training course for midwife graduates. Finally, the six-month Nurse Midwife Course

²¹⁹ Neizhengbu, Neizheng Nianjian, G202-04.

²²⁰ Liu, "National Health Organization," 203.

²²¹ J. Heng Liu gives the opening year as 1931, but the 1936 *Neizheng nianjian* and other FNMS documents state that the school opened in 1929.

²²² This is a brief description of the FNMS. Please see Chapter Four for a more detailed analysis.

was established for nurses to receive additional midwife training. Please see Chapter Three for a more considered discussion of the First National Midwifery School and its role in shaping maternal and child health efforts during the Nationalist period.

After the FNMS got underway, in 1933 the Central Hospital in Nanjing and the Nanjing Municipal Health Station jointly opened the second national midwife training institution, the Central Midwifery School (zhongvang zhuchan xuexiao 中央主产学校), the year after the Central School of Nursing was established in that city. Marion Yang left her post as head of the First National Midwifery School in 1931 to help establish Central in its new half-million dollar building and acted as director there for an initial three-month period.²²³ Six affiliated antenatal clinics were established around Nanjing to provide practical field experience for Central Midwifery School students. The school opened in 1932 and offered a two-year course. Fortyone students were enrolled in 1934, comprising 29 first-year and 12 second-year students.²²⁴ Selected personnel were to receive special training from the FNMS and PUMC's Departments of Hygiene and Public Health and of OB/GYN. The aim was to have a city wide maternal and child health service within 10 years. In the first year, the school expected to see 1,500 antenatal cases, or 10 percent of the city's total, and make 7,500 total antenatal visits, 500 hospital and 200 home deliveries, and 300 postpartum visits.²²⁵ By 1934, many of the FNMS's senior personnel were sent to the Central Midwiferv School to work.²²⁶

The Central School of Nursing (*zhongyang hushi xuexiao*中央护士学校, changed in 1935 to *zhongyang gaoji hushi zhuanye xuexiao* 中央高级护士专业学校) was established in

²²³ Neizhengbu, Neizheng Nianjian, 206-07.

 ²²⁴ Ibid., 208-09, Yip, *Health and National Reconstruction*, 166. Yip gives the opening date of the Central Midwifery School as 1933, but I have used the 1936 *Neizheng nianjian* date of 1932.
 ²²⁵ "Fifth Annual Report, FNMS."

²²⁶ "Sixth Annual Report, FNMS." 2.

Nanjing in 1932. Its three-year course included public health and midwifery courses in which 91 students were enrolled in 1935. In fact, the entire second year was devoted to pregnancy, birth, and postpartum management.²²⁷

PROVINCIAL MIDWIFERY PROGRAMS

By 1936, several provinces had some type of public health administrations or hospitals that promoted public health. Hunan, Gansu, Ningxia, Qinghai and Zhejiang had provincial public health experimental stations (*sheng weisheng shiyanchu* 省卫生实验处), Jiangxi had a provincial public health department (*sheng weisheng chu* 省卫生处), and Shanxi had a public health committee (*weisheng weiyuanhui* 卫生委员会). In addition, Jiangsu, Henan, and Guangxi had provincial hospitals that promoted public health throughout the province.²²⁸

Several provinces also had established provincial midwifery schools by the 1930s. According to Liu's 1937 report on the National Health Administration, the National Health Administration and the Central Field Health Station in Nanjing helped to establish provincial midwifery schools in the late 1930s in Fujian, Jiangxi, Gansu, and Ningxia.²²⁹ The 1943 *Yunnan xingzheng jishi* (Records of the Yunnan Administration 云南行政纪实) states that the National Health Administration also assisted Kunming in establishing a provincial midwifery school as early as 1933.²³⁰ Zhejiang had started a provincial midwifery school attached to the provincial hospital (*Zhejiang shengli zhuchan xuexiao* 浙江省立助产学校) under the provincial civil administration department (*minzhengting*民政厅) in 1928, and it was approved by the

²²⁷ Neizhengbu, Neizheng Nianjian, G201-03. Liu, "National Health Organization," 338.

²²⁸ Neizhengbu, Neizheng Nianjian, G4.

²²⁹ Liu, "National Health Organization."

²³⁰ Yun Long et. al., eds., *Kunming Xingzheng Jishi*, vol. 22, Weisheng, Kunming shizheng (Kunming: Yunnan zezhengting yinshua, 1943). The school was started in 1928 but, according to the report, did not receive NMB assistance until Minguo 23 (1934).

Department of Education in 1931. During that year, the hospital delivered 296 infants.²³¹ Furthermore, in 1933 Hubei province opened a provincial nursing school in the provincial hospital, a midwifery school (*zhuchan xuexiao* 助产学校), and an old-style midwife training program (*chanpo xunlianban* 产婆训练班) under the provincial public security department (*gonganju* 公安局). There may be other claims to National Health Administration assistance in building midwifery training schools in additional provinces.

The following year Jiangsu and Hunan opened not proper schools but provincial maternity hospitals, by 1935 Shanxi had its own midwifery school and maternity hospital,²³² and in 1933-34 the First National Midwifery School provided technical assistance to the Shaanxi Provincial Midwifery School in Xian.²³³ Jiangsu's commoners' maternity hospital (*pingmin chanyuan* 平民产院), part of its larger provincial hospital, was administered by the Jiangsu provincial public health affairs department (*Jiangsu sheng hui weisheng shiwusuo* 江苏省会卫 生事务所) under the public security department (*gonganju* 公安局). When the maternity hospital opened in 1932, there were six beds with three patients, and deliveries numbered about 15 per month, including home deliveries.²³⁴ There were plans in 1932 to establish 10 maternity homes with antenatal and postnatal supervision in 10 different counties within two years in Jiangsu province. Its goals, aside from the obvious of improving maternal and child health in rural locales, was to open up areas in which the Jiangsu Provincial Midwifery School graduates could obtain practical experience. The Jiangsu provincial government also began training old-

²³¹ "Second Annual Report, FNMS, Beiping, July 1, 1930 - June 30, 1931," (Beiping: First National Midwifery School, Beiping, 1931), box 222, series 3, sub-series 601L, RG 5, RAC, p. 24.

²³² Shen Jiaying, "Report on the School and Lying-in Hospital (Ben Xiao Chanyuan Liang Zhou Shixi Zhi Jingkuang)," *Shanxi shengli zhuchan xuexiao niankan* (1935): 91-92.

²³³ "Sixth Annual Report, FNMS."

²³⁴ Ibid., Appendix III, xix.

type midwives in May 1932, the instructors of whom were graduates of the FNMS.²³⁵ Hunan's maternity hospital (Hunan chanyuan 湖南产院), administered by its civil administration office, was the "central organization established to 'move forward' and manage the whole province's midwifery work" (tuijin ju guanli guan sheng zhuchan gongzuo zhi zhongxin jiguan推进及管理 全省助产工作之中心机关).²³⁶ We can assume that these institutions engaged in formal or informal midwife training to staff their hospitals. As we have seen above, many Western missionary hospitals provided at least casual training of assistants, and these maternity hospitals were modeled on Western methods and equipment.

It is unclear whether or not all of these schools and hospitals had the support or assistance of the National Health Administration, which brings us to consider the disarray and deficiency of some early twentieth- century Chinese government documents. Although the National Health Administration existed to govern public health, and the National Midwifery Board to oversee maternal and child health projects, due to China's unstable political and social conditions, reporting to these government offices was often inconsistent or nonexistent. It seems as though many provincial governments jumped on the public health bandwagon in the 1930s, but the extent and efficacy of their programs was usually lacking due to funding and administration problems.

Liu Ruiheng's 1937 report to LON-HO states that nine out of 18 provinces had established provincial health services, with three in stages of advanced planning. However, according to Liu, traditional Chinese medical practitioners still attended over 65 percent of patients, and 26 percent of sick people were estimated to die without treatment each year.

²³⁵ "Fourth Annual Report, FNMS, Beiping, July 1, 1932 - June 30, 1933," (Beiping: First National Midwifery School, Beiping, 1933), Appendix I: Suggested Plans for Places Surveyed, xi-xiii. ²³⁶ Neizhengbu, *Neizheng Nianjian*, G226.

Furthermore, it was hard to get qualified doctors to live in remote rural areas, battle traditional beliefs, and compete with TCM practitioners. There were also the continuing shortages of funding and resources, corruption, and lack of transportation for medical supplies and people.²³⁷

RURAL MIDWIFERY PROGRAMS

The Five-Year Plan drawn up in 1934 at the national Public Health Division of the Internal Affairs Department meeting stated that every county in every province would have public health facilities within five years. However, due to lack of funds, only Jiangsu, Zhejiang, Jiangxi, Guangxi, and Henan had counties with such facilities by 1935. The Plan also stated that the counties should each have maternal and child health facilities and training programs (*xunlianban* 训练班) for old-style midwives (*jieshengpo* 接生婆). In fact, these goals were part of Year One of the Five-Year Plan, second only to opening 25-bed hospitals in each county. Year One also included provisions for public health programs in schools and methods to "propagate public health" (*weisheng xuanchuan* 宣传).

At the end of the first Five-Year Plan, each village (*cun* 村) or group of villages was to establish a 25-bed hospital with internal medicine, surgery, and OB/GYN departments. The head of the hospital, a medical doctor, was charged with attending patients, including pregnant women and newborns, as well as overseeing the district public health work. Each *cun* or group of *cun* was to have a district dispensary with old-style midwives trained in modern methods whose duties were to assist childbirth and report births and deaths to their district dispensaries (*zhiliaosuo* 治疗所). The head nurse in charge of the district dispensary had as her duties to treat

²³⁷ Lucas, *Chinese Medical Modernization*, 88-89, Liu Ruiheng's report at the 1937 League of Nations-Health Organization (hereafter LON-HO) Intergovernmental Conference of Far Eastern Countries on Rural Hygiene, LON-HO, C.H. 1195 and 1235.

minor venereal illnesses (*qing xing jibing* 轻性疾病), promote maternal and child health (*fuying weisheng* 妇婴卫生), train old-style midwives (*chanpo jiesheng* 产婆接生), give preventive injections (inoculations, *yufang zhushe* 预防注射), promote public health, supervise and help in the work of rural relief workers and old-style midwives, and gather the *cun*'s birth and death reports. The budgets for the district dispensaries and hospitals were small and depended upon the provincial and county financial situations at the time. The budgeted start-up costs for each 25-bed county hospital totaled 3,275 yuan, and operating expenses were allowed 1,430 yuan per month, give or take depending upon the county's size and financial situation. District dispensaries were budgeted 850 yuan for start-up costs and operating expenses of 253 yuan per month, also depending on the district's size and financial conditions.

Experimental counties like Dingxian (定县) and Jiangningxian (*Jiangning zizhi shiyan xian* 江宁自治实验县) incorporated rural health centers staffed with midwives and nurses whose duties included pre- and postnatal care and submitting birth and death reports. By 1933 Jiangning had a "health demonstration area" (*weisheng shiyan qu*) and a public health clinic (*weishengyuan*) five miles outside of Nanjing that was established to test the medical education policy of creating model *xian* (county)-level rural health centers. Eventually every rural *xian* was to have a public health clinic with a 30-50 bed hospital, a diagnostic laboratory, and a health administration office. The hospital should staff five to seven nurses and two *zhuchanshi*, along with a head doctor, laboratory and public health workers, and administrative personnel. The monthly budget was 2,000 yuan.²³⁸ Below the *xian*, "health stations" (*weishengsuo* 卫生所)

²³⁸ Neizhengbu, Neizheng nianjian, 218-19.

were established for each 50,000 people, and subordinate "health substations" (weisheng fensuo 卫生分所) in each xian or administrative village.

This plan was organized by LON-HO's Dr. Berislav Borcic and was based on the Yugoslavian model. The first Three-Year Plan for the Chinese National Health Administration (1931-34) called for local and national governments to pay for all medical services in these xian until local cooperative health insurance plans were established. Each *xian* health station was staffed by one physician, two nurses, and one midwife, with a monthly budget of 200-300 yuan. Part of its mission was to carry out maternal and child health and midwifery work, oversee school health, and propagate and disseminate public health methods and information. The substations each had a nurse trained in public health and with midwifery experience who could handle "routine maternity and health problems, school hygiene, vaccination, and general first-aid emergencies.²³⁹ The monthly budget of 50-70 yuan was to cover outpatient treatment; smallpox and other vaccinations; school health programs; maternal and child health work and midwifery; reporting births, deaths, moves, and marriages; and propagating public health.²⁴⁰ Each *cun* was to have a local "village health assistant" (xiezhu yishi 协助医师).241 In 1933, the Public Health Department under the Division of Internal Affairs (neizhengbu weishengshu 内政部卫生署) and the Public Health Experimental Station of the National Economic Association (quanguo jingji weiyuanhui weisheng shiyan chu 全国经济委员会卫生实验处) helped to fund one head nurse (*hushi chang* 护士长) and one midwife instructor in Jiangningxian "for experimental rural health work and to train qualified personnel" (wei shiyan xiangcun weisheng gongzuo ji xunlian rencai qijian 为实验乡村卫生工作及训练人才起见). They also paid part of the salary of one assistant

²³⁹ Lucas, Chinese Medical Modernization, 72-73.

²⁴⁰ Ibid., 72, Neizhengbu, Neizheng Nianjian, 218.

²⁴¹ Lucas, Chinese Medical Modernization, 72-74.

doctor (*xiezhu yisheng* 协助医生) to help train others and established public health departments (*weishengsuo*卫生所) in various towns throughout the county.²⁴² In 1934, Jiangningxian's public health center, clinic, stations, and substations aided in 221 births (*jiesheng* 接生), inspected 5,154 households (*jiating fangshi* 家庭访视), and treated 2,394 pregnant women (*chanfu huli* 产妇 护理) and 1,694 children (*ving 'er huli* 婴儿护理).

Liu Ruiheng, head of the National Health Administration-Central Field Health Station outside Nanjing from 1931 to 1937, created a 1937 plan similar to the Jiangning model above, with *xian*-level substations staffed by a nurse-midwife. He also established national standards for hygiene in public schools. The Central Field Health Station in Nanjing was funded in part by the Rockefeller Foundation/International Health Division. Between 1929 and 1934, the IHD gave \$27,000 for capital expenses and \$11,000 for annual running expenses for a total of \$82,000. The National Health Administration-Central Field Health Station sponsored public health campaigns via central broadcasting stations in Nanjing, health exhibits, public lectures, pamphlets, posters, lantern slides, and mobile medical units.

They also continued training public health workers, doctors, nurses, midwives, school hygienists, paramedics, and sanitation workers.²⁴³ From 1929 to 1936, the Department of Maternity and Child Health of the Central Field Health Station graduated 189 individuals, nearly 90 percent of whom worked in a public health or similar institution in 16 different provinces. Many of them were instructors or deans of midwifery schools.²⁴⁴ In 1932, the Chinese Ministry of Education and the National Midwifery Board wanted to start a class at the Central Field Health Station for instructors and administrators at all types of midwifery schools. The National

²⁴² Neizhengbu, Neizheng Nianjian, 218-19.

²⁴³ Lucas, Chinese Medical Modernization, 86-87.

²⁴⁴ Marion Yang, letter to Dr. W.A. Sawyer, January 21, 1937, folder 374, box 45, series 601, RG 1, RAC.

Health Administration offered a grant-in-aid "with the stipulation that graduates from this course were obliged to return to their own schools for at least two years."²⁴⁵ Between 1932 and 1936, 40 students graduated from this course. Furthermore, the maternal and child health division of the Central Field Health Station offered a teachers' course for midwives. Sixteen students from 14 different institutions participated in 1936. After their one-year term, they would all return to their home institutions "as future leaders and teachers in these communities."²⁴⁶ The maternal and child health-Central Field Health Station had big plans: to train 100,000 maternity and child health workers (one for every 4,000 persons), 1,000 maternal and child health supervisors, 400 maternal and child health medical officers, and 10 maternal and child health medical organizers. They also wanted to establish teaching and demonstration centers in Nanjing, Shanghai, and Beiping, as well as numerous rural and provincial centers.²⁴⁷

Dingxian is perhaps the most famous experimental county in China. Its Mass Education Movement was established in 1929 by James Yen and funded by individual philanthropists and the Rockefeller Foundation's China Medical Board and Peking Union Medical College. Dingxian is in Hebei province, 60 miles from the nearest medical school and modern hospital in Baoding, which is 100 miles southwest of Beijing. Like Jiangningxian, its health system was also based on the *xian* model. At its peak, between 1929 and 1937, it had a 50-bed hospital and an administrative office in the *xian* center, 15 subcenter health stations, and local health workers in 150 villages. Its subcenter stations were staffed by a physician and a nurse, usually graduates from the medical school in Baoding who completed extra public health training at the *xian*-level hospital. Eventually each village within the subcenters was to have voluntary "village health

²⁴⁵ Ibid.

²⁴⁶ Ibid.

²⁴⁷ Ibid.

workers" or "medical helpers" (*zhuliyuan* 助理员). The Dingxian experiment lasted until 1937 when the Sino-Japanese War ended it.²⁴⁸ There is little mention of midwifery work in Dingxian in the 1936 *Neizheng nianjian*, other than the maternal and child health Research Unit (*fuying weisheng yanjiushi* 妇婴卫生研究室) in the organizational chart, listed under the Health Protection Station (*baojianyuan* 保健院) with one inspector in charge (*shichayuan* 视察员).²⁴⁹ However, we know that midwife training plans were in the works, if only because of their failures.

Many of these programs were to offer short courses for old-style midwives similar to those in rural health centers like Dingxian. However, C.C. Chen (Chen Zhiqian 陈志潜), chief of the Xiaozhuang Rural Health Demonstration Program and superintendent of the Dingxian Rural Health Station, noted that his midwifery programs in Xiaozhuang and Dingxian were not popular and had to be dismantled because of resistance to new childbirth methods and reluctance to rely on young, unmarried and childless midwives.²⁵⁰ Both programs attempted to retrain old-style midwives, but the midwives were illiterate and "resented the young, unmarried woman… an inexperienced upstart" who trained them.²⁵¹ Chen then resorted to training younger relatives of the old midwives instead, "who, as a member of their [sic] own family, would receive the older woman's support in her new role…and eliminate the problem of jealousy."²⁵² However, this program also was short-lived because its organizers could not get enough women to undertake the work, due in part to other household and occupational duties.

²⁴⁸ Lucas, Chinese Medical Modernization, 72-74.

²⁴⁹ Neizhengbu, Neizheng Nianjian, 221.

²⁵⁰ C.C. Chen, MD and Frederica M. Bunge, *Medicine in Rural China: A Personal Account* (Berkeley: University of California Press, 1989), 90-91.

²⁵¹ Ibid., 91.

²⁵² Ibid.

Chen did institute successful programs to lower the high maternal, infant, and child mortality rates. The 1934 figures for Dingxian show infant mortality at 185.2 per 1,000 live births; death among people under 5 years old was 44.5 percent (partly because of epidemics of dysentery and scarlet fever that year). The death rate among children under 2 years of age was 200 per 100,000. Chen instituted a program for mothers to learn aseptic child-care techniques and receive pre- and postnatal home visits. They also "persuaded a continually growing number of women to deliver their babies at the district center under qualified care."²⁵³ Chen remarked that although the mortality "figures reflected a lamentably low health level, we were making progress. The rates of puerperal sepsis, tetanus neonatorum, and problems related to childbirth and early infancy in general were declining."²⁵⁴ Although efforts at midwife training were not succeeding, health education programs aimed at mothers seemed to lower the mortality rates.

Another rural health expert, Li Tingan, "lamented that because of their lack of education many older midwives failed to grasp the basic concepts of modern medicine, reverting to traditional methods soon after graduating from the course. Sometimes visual reminders were used to ensure that correct procedures were followed in delivery. For example, midwives were told to put two drops of medicine from a bottle with a red label (containing silver nitrate) into the eyes of newborns to prevent blindness. In addition, Chiang Kai-shek repeatedly turned down funding requests for Li's midwife education efforts. Finally, the Sino-Japanese War ended the experiment in 1937. Still, whatever their limitations, retrained midwives provided a vital service to rural families when modern health personnel were not available."²⁵⁵ Furthermore, despite its shortcomings, the two-tier method of midwife training and the *xian*-based public health system

²⁵³ Ibid.

²⁵⁴ Ibid., 87.

²⁵⁵ Yip, Health and National Reconstruction, 167.

(famous for its "barefoot doctors" of the PRC) were both implemented after the founding of the PRC in 1949, a continuation of policies begun during the Nationalist era.

Aside from the more well-known rural model health counties like Dingxian and Jiangningxian, there were numerous other xian-level public health stations and hospitals, all of which had at least a maternal and child health division listed in their organizational charts, and most offering some sort of maternal and child health care and/or training. For example, the Taixian County Hospital (Taixian xianli vivuan 台县县立医院) had two zhuchanshi and one hushi, and in 1933 opened a commoners' maternity hospital (pingmin chanvuan 平民产院), the first rural maternity hospital of its kind in China. This was the result of a technical assistance visit by the First National Midwifery School Director, Marion Yang, and the work of two FNMS midwives sent to help improve rural maternal and child health there.²⁵⁶ In 1933, it had four beds plus a separate delivery room and a nursery, in which were delivered nearly 20 babies. Its three midwives on staff gave prenatal checkups to 31 pregnant women, gave postnatal nursing care to 179 people, 31 infant check-ups, and nursing care to 951 infants.²⁵⁷ Heze *xian* had two nurses and one midwife who attended more than 250 births per month and gave pre- and postnatal checkups.²⁵⁸ Six rural health districts within Jiangxi province gave a total of 131 lectures and talks on modern childbirth.²⁵⁹ However, as with Dingxian, many of these smaller programs were not wildly successful. Huaxian, Shanxi province, had developed a significant maternal and child health education program, but the workers had found that maternal and child health work was difficult because of lack of knowledge among local women. Therefore, their main goal was educating the populace and publicizing maternal and child health methods and local facilities. In

²⁵⁶ "Fifth Annual Report, FNMS."

²⁵⁷ Neizhengbu, Neizheng Nianjian, G227-8.

²⁵⁸ Ibid., G230-1.

²⁵⁹ Ibid., G234.

February 1936, they surveyed 1,000 mothers and found that of the 1,000, 42 elderly women had given birth to a total of 292 children. Of these, miscarriage and stillbirth had taken 25 of the infants, and tetanus another 51. In order to help prevent tetanus, the rural health station distributed 15 sets of clean umbilical cord-wrapping gauze with instructions for its use. Furthermore, this health station saw a total of 16 people in its women's and children's clinic (*fuying menzhen* 妇婴门诊), delivered two babies, gave 14 pre- and postnatal nursing checkups, visited/inspected 170 homes, and distributed 200 fliers.²⁶⁰ Education was often the goal in these rural areas because women were reluctant to utilize young, unmarried women dressed in white, a symbol of cleanliness in the West, but a sign of death and mourning in China.²⁶¹

The public health program of the Qinghe experimental district (Qinghe shiyanqu 清河试 验区) was a project of the Yenching University Department of Sociology and the Beiping City Police Department's Number One Public Health Station (*Beipingshi gong'anju di yi weisheng shiwusuo* 北平市公安局第一卫生事务所). It was established in July 1931 in Wanping county (宛平县) of Hebei province, an area that included 40 villages with a total population of 32,000. The Public Health Station sent one doctor each Saturday to Qinghe to carry out public health and dispensary work. In August of the same year, they formally established a station (*shiwusuo* 事 务所), and a year later, because they "deeply believed in the importance of rural public health" (*shenjue weisheng gongzuo zai xiangcun zhi zhongyao* 深觉卫生工在鄉村之重要), expanded the organization and established another station.

In 1932, Yenching's Sociology Department entered into a cooperative agreement with the First National Midwifery School to open a rural maternity and child health service there, similar

²⁶⁰ Ibid., G231-2.

²⁶¹ Many thanks to Christina Gilmartin for a discussion of this issue.

to the one in Dingxian. This provided rural practical service opportunities for FNMS students and graduates, as well as ideally helped to improve Qinghe's maternal and child health. The FNMS provided technical direction and supervision of the service but did not assume financial responsibility. A graduate of FNMS's two-year course took charge of midwifery work and strove to advance maternal and child health (fuying weisheng 婦嬰衛生). Most of her work consisted of monthly home visits to talk to families about the importance of maternal and child health, and many services were carried out in the patients' homes. In 1932-33, the staff midwife made 1,052 home education visits, plus 740 routine ante- and postnatal visits, and 41 home deliveries.²⁶² There was also a clinic, with 228 new cases in 1932-33 and 401 new cases in 1933-34. There were also 78 deliveries that year, four of which were referred to a hospital.²⁶³ The delivery fee was \$4 if the family was able to pay; otherwise, the service was free. In 1933-34, the service received \$106.50 for deliveries. The district also included eight Mothers' Clubs (muqin hui 母親會) organized throughout the district that taught women modern child-care methods (see Chapter Five).²⁶⁴ In 1932-33, there were 51 club meetings with a total attendance of 896.²⁶⁵

In 1932-33, Qinghe began training old-style midwives. Qinghe was a true model village. The outline for teaching midwifery prepared by the staff of the Qinghe rural maternal and child health service was published in a manual at the request of the Ministry of Education in 1934 and distributed to vocational schools throughout China.²⁶⁶ In April 1935, the rural maternal and child health service began to give training to a group of women, ages 25-35, selected by village leaders

²⁶² "Fifth Annual Report, FNMS."

²⁶³ "Sixth Annual Report, FNMS."

²⁶⁴ Neizhengbu, *Neizheng Nianjian*, G222-23.

²⁶⁵ "Fifth Annual Report, FNMS."

²⁶⁶ "Sixth Annual Report, FNMS."

as "Maternity and Child Health Helpers." Upon completion of training, each helper would work in her own village and be supported by her own people. This would be a model for other rural villages throughout China.

MUNICIPAL PUBLIC HEALTH TRAINING

In addition to the midwife training programs and the nursing schools that invariably included midwife training, public health nurses (gonggong weisheng hushi 公共卫生护士) and public health doctors (gonggong weisheng yishi 公共卫生医师) also received instruction in modern pregnancy, childbirth, and postpartum care. These public health projects were popular in the 1930s, as Ruth Rogaski and Kerry MacPherson have shown in their respective studies of Tianjin and Shanghai. However, these studies only briefly consider midwife training and related programs, although maternal and child health was often a key part of public health plans.²⁶⁷ The city governments of Nanjing, Shanghai, and Beijing²⁶⁸ established such programs as part of model sanitation districts (weisheng mofan qu 卫生模范区) or experimental public health districts (weisheng shiyan chu 卫生试验处), which included substantial midwifery education and maternal and child health projects.

In Nanjing, the National Departments of Internal Affairs and Public Health, along with the National Economic Board (*quanguo jingji weiyuanhui* 全国经济委员会) and the Public Health Experimental Station (*weisheng shiyanchu*卫生实验处) established a public health personnel training program (*gonggong weisheng renyuan xunlianban* 公共卫生人员训练班) to improve public health knowledge among trained doctors and nurses. The first six-month course

²⁶⁷ MacPherson, A Wilderness of Marshes, Rogaski, Hygienic Modernity.

²⁶⁸ I discuss the Beijing municipal public health efforts in Chapter Four.

for doctors started in 1933 with 16 students and included 16 hours each of maternal and child health courses and practicum. There were 18 students the following year. The public health nurse program began the same year with 23 students, and the 1934 course had 30 students. It included 36 hours of obstetrics instruction and 216 hours of obstetrics practicum.²⁶⁹

In Shanghai, midwifery and maternal and child health formed a substantial part of the city's public health efforts. In 1928, the Greater Shanghai Bureau of Public Health was established in 1928 as an administrative unit of the City Government. Its program included sanitation, control of communicable diseases, vital statistics, and "public health education, which includes personal health talks, public lectures, demonstrations, health movements, health motion picture shows, health posters, circulars, newspapers and reprints, etc."²⁷⁰ They also organized a medical service to promote mental and physical health, including medical services from birth to death: "maternity and infant hygiene, pre-school health, school health, health of the workers, medical clinics, hospital facilities, and registration of hospitals, physicians, midwives and nurses, etc."²⁷¹ Between 1933 and 1934, the number of deliveries made by the Bureau's personnel nearly doubled, from 234 to 426. The postnatal clinic service also expanded dramatically, from 39 visits in 1933 to 451 in 1934. The Bureau also distributed over one million public health fliers and pamphlets in this period and examined more than 40,000 school children.²⁷²

The Shanghai Health Commissioner in 1933 had plans to establish one health center in each of 16 police districts, some of which would also have infirmaries. Two primary public health centers started in Shanghai in the 1920s were at Gaoqiao and Chapei districts. The Gaoqiao Village Public Health Model District (*Gaoqiao xiangcun weisheng mofan qu* 高桥乡村

²⁶⁹ Neizhengbu, *Neizheng Nianjian*, G211-13.

²⁷⁰ Woodhead, ed., *The China Yearbook 1935*.

²⁷¹ Ibid.

²⁷² Ibid.

卫生模范区) was begun in 1927 under the jurisdiction of the Shanghai Municipal Public Health Bureau. Its staff of two full-time and two part-time physicians, three public health nurses, two midwives, and one sanitary inspector provided public health care and education to a rural population of 38,000 with an annual budget of \$18,000.²⁷³ In addition to public health and sanitation campaigns, Gaoqiao had a trained midwife (*zhuchanshi*) for "normal deliveries" (*zhengchangchan* 正常产) and a doctor (*yisheng* 医生) for difficult deliveries (*nanchan* 难产). The district also advocated pre- and postnatal care for the masses (*minzhong* 民众). According to its 1936 annual report, the public health station's midwives delivered more than 30 percent of the district's babies.²⁷⁴ Dr. Marion Yang gave technical assistance to the District's maternal and child health efforts in 1933. Chapei District focused on improving maternal and child health under the Shanghai Child Welfare Association established in 1933 under the auspices of the Bureaus of Social Affairs, of Public Health, and of Education. It became a branch association of the National Child Welfare Association, a private organization founded in 1927 primarily by foreign contributions.

Another good example of municipal government support of midwifery training can be seen in 1930s Canton. Part of the Canton government's extremely progressive Three-Year Plan passed in 1933 included the establishment of municipal nurse training programs, a municipal maternity hostel "for the common people," and an eventual maternity hospital. It also listed provisions for improving the municipal midwifery school and establishing city wide nursing and midwifery graduation examinations. Each year of the Three-Year Plan enforced nurse training among girls in municipal schools (while all boys were to receive military training).²⁷⁵

²⁷³ "Sixth Annual Report, FNMS."

²⁷⁴ Neizhengbu, *Neizheng Nianjian*, G223-24.

²⁷⁵ Edward Bing-Shuey Lee, *Modern Canton* (Shanghai: The Mercury Press, 1936), especially Appendix III, 153-68.

PRIVATE SCHOOLS

As well as government-sponsored programs, private midwifery training schools sprung up as part of hospitals and independently throughout China in the 1930s. In 1934, there were 52 private such programs in China that were registered with the government, in addition to 10 provincial training schools. In 1935, there were 38 midwifery schools, "including two national and nine provincial."²⁷⁶ Private midwifery training programs were also established throughout China on both large and small scales. Some of the largest and most well-known of these were run by medical missionary outfits or other foreign medical organizations. Others were established by local Chinese who had, or claimed to have had, medical training abroad or in one of the Western medical schools in China.

In 1928, a School of Midwifery was established in the Xiangya Medical College, also known as Yale-in-China, in Changsha, Hunan, mentioned above. This was the first school of its kind in Hunan province, and it received a monthly grant of \$1,000 from the provincial government. The two-year course aimed to supply the local community with trained midwives. In 1930 there were 30 students. By this time, there was also a prenatal clinic and free beds in the maternity ward for the poor. They established a clinic at the YWCA to encourage hospital admissions in order to decrease maternal and infant mortality rates. Further public health work included health campaigns, students' clinic, vaccination training classes, and free inoculations.²⁷⁷ Shortly thereafter, the Department of Education approved the private Hangzhou Guangji Hospital Midwifery School (*Hangzhou guangji yiyuan fushe zhuchan xuexiao* 杭州广济医院附 设助产学校) and the Shanghai Zhongde Midwifery Schools (*Shanghai zhongde gaoji zhuchan zhuanye xuexiao* 商海中得高几株产专业学校) in 1931 and 1933, respectively. Also in the

²⁷⁶ Yip, Health and National Reconstruction, 166.

²⁷⁷ Wang, "A Report of Hsiang-Ya Medical College & Hospital."

1930s, the following schools were established: Beiping Municipal Private Welfare High Ranking Midwifery School (*Beijingshi sili gongyi gaoji zhuchan zhuanye xuexiao*

北京市私立公益高级助产专业学校), the Guangdong Provincial High Grade Nursing and Midwifery Professional School (*Guangdong gaoji hushi zhuchan zhuanye xuexiao* 广东高几护 士助产专业学校), the Republic of China Private High Ranking Midwifery School(*Sili minguo gaoji zhuchan zhuanye xuexiao* 私立民国高级助产专业学校), the Shanghai Private Tongde Midwifery School (*Shanghai sili gongde zhuchan xuexiao* 上海私立同德助产学校), and the Tuqiang Midwifery School in Guangzhou (*Tuqiang gaodeng zhuchan xuexiao* 图强高等助产学 校).

Clearly, midwifery education, both public and private, greatly expanded in China during the Nanjing Decade. As more people opened hospitals and more patients patronized these institutions, regulation posed a problem. According to the Nationalist government's plan to grow and expand public health, all hospitals and medical schools had to be registered and conform to particular standards. Numerous small maternity hospitals and schools sprung up, especially in urban areas like Shanghai and Guangzhou. They were often run by individuals with dubious educational backgrounds and credentials, and they took in paying students, supposedly to train them in modern midwifery techniques. Shanghai's International Settlement, for example, had several such institutions under the jurisdiction of the municipal Department of Public Health.

The schools ran advertisements in local newspapers to recruit students. An ad for Zung Wei Obstetrical Hospital (*Renhui chanke yiyuan* 仁惠产科医院) on Haining Road in 1936 read:

"Chances for Girls. The hospital provides gratis training of Students. Tuition and boarding fees and security are all exempted. Moreover, monthly allowance of about more than \$10.00 is given. Candidates must be above 18 years of age, physically strong, persevering and patient. Applicants may call on Mr. Chu of the Obstetrical Hospital or CRN Honan at Haining Road daily from 4 to 6 pm."²⁷⁸

Other hospitals charged fees for its students. Hu Hsi Commoners' Obstetrical Hospital (*Huxi pingmin chanke yiyuan* 沪西平民产科医院, formerly Hongkew Hospital) charged its students \$100 to \$400 for tuition, room, and board. In some cases, students brought charges of fraud against these hospitals based on lack of training received or poor facilities or exorbitant charges. Students from the Zung Wei Obstetrical Hospital claimed that the hospital superintendent was not a real doctor and that the hospital was an unauthorized obstetrical school. None of the four "doctors" at Zung Wei were registered, nor could they produce medical diplomas, though one claimed a medical degree from "Kiao Kung" Hospital in Japan and another from Nanyang Medical College. Three of the "doctors," in fact, were actually midwives trained in small, unlicensed midwifery schools in and around Shanghai. Some of the eight "nurses" on staff at Zung Wei had had some obstetrical training, again at small, unlicensed midwifery schools in the Zhejiang region. In another case, in 1936 several students went on strike against Hu Hsi and demanded refunds of their tuition fees.

The hospitals not only trained students but attended patients as well, some of whom filed grievances with the Shanghai Department of Public Health about their experiences at maternity hospitals. An angry husband of a maternity patient from Hu Hsi lodged a formal complaint that his parturient wife got only two young, unlicensed assistants to aid in her birth. There was no

²⁷⁸ "Complaint Re: Hu Hsi Obstetrical Hospital, 112 Markham Road, Shanghai International Settlement," (Shanghai: Shanghai Department of Public Health, 1936), Shanghai Municipal Archives.

midwife or physician in attendance, and the man claimed that his wife nearly died. Furthermore, this hospital was not licensed by the municipal health authority and was not adequately equipped.

Patients' fees varied greatly, from the cheap or free crowded charity hospitals to astronomical fees for luxury accommodations for the rich. The Zung Wei Obstetrical Hospital charged a \$4 registration fee, required in advance, and another \$5 at parturition. For these fees, a woman doctor would visit the patient once a month for the first seven months, and once or twice weekly thereafter until delivery. The doctor would provide medicines, "correct abnormalities," and notify the family of the anticipated delivery date. After delivery, the hospital "sent doctors daily for some time free of charge." Upon parturition, inpatients of the special, or highest, class paid \$6 per day for a private room with one female attendant (an additional attendant was another \$1 per day). First class inpatients paid a daily rate of \$3, second class patients \$2, third class \$1, and fourth class 50 cents, plus \$1 per day for an additional attendant. The free ward patients had to pay 20 cents per day for meals. All fees had to be paid 10 days in advance, and a fan, stove, and medicine were extra. The regulations stated that the hospital was registered with the Shanghai Department of Public Health, but in fact it was not.

The Hu Hsi Commoners' Obstetrical Hospital "mostly caters to the poorer classes from Chapei who can't afford to attend the larger institutions."²⁷⁹ P.C. Frank Chen opened the hospital in the poor Chapei district in Western Shanghai where the people, according to Chen, suffered from a lack of hygiene and childbirth was attended by "ignorant aged midwives of the old type resulting in countless unnecessary deaths."²⁸⁰ He used his own money to establish the hospital and employed obstetricians to use modern obstetrical methods. There were two doctors on staff, one male and one female, along with six female and two male nursing students.

²⁷⁹ Ibid.

²⁸⁰ Ibid.

Some of these private hospitals applied for charity status to reduce or eliminate municipal tax payments. By 1935 there were already four such charity hospitals in the Wayside district of the International Settlement alone. The Kai Mai Obstetrical Hospital, established in 1922 in the French Settlement, saw 60 to 90 patients per month, about half of whom received free treatment. The others paid about \$1 per day. The San Ming Obstetrical Hospital (*Sanmin chanke yiyuan* \equiv 民产科医院), established in 1935 in the Wayside district of the Shanghai International Settlement, had 10 beds, three of which were free. The poor paid 20 coppers per visit, and regular patients paid 50 cents to \$1 per day. The staff included six nurses, one student nurse, and four registered physicians. By 1937, the total attendance at San Ming was 11,955 visits, and 30 percent of these patients came from outside the Settlement, many of whom were members of the Shanghai Laborers' Union.

On the other end of the spectrum were private hospitals for rich individuals. The Women's Hospital (*Chanfu yiyuan* 产妇医院) on Great Western Road was supported entirely by patient revenue, private gifts, and free services by physicians. It had 29 paying beds and 9 free beds, a free nursery with bassinets and incubators (used for premature or ill infants). The hospital staffed one qualified resident physician and variable attending physicians who worked there for free, along with 12 graduate nurses. In 1937-38, the hospital received 2,608 patients. The cost of this place was \$6 per day for a non-private room, up to \$28 per day for a private bath and telephone. According to the Chief Health Inspector's report dated May 3, 1938, "the buildings and fittings of this hospital are positively luxurious, and it was evidently built for the accouchement of wealthy Chinese ladies." An 11-bed maternity hospital run by a German lady, the Shanghai Maternity Hospital (*Shanghai furu chanke yiyuan* 上海妇孺产科医院), was built

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in a "foreign style" and funded by four wealthy Chinese philanthropists. The Shanghai Department of Public Health rejected these hospitals' applications for charity status.

There were midwifery schools springing up everywhere in China in the 1930s. All of these hospitals had to be inspected and regulated and registered with the municipal government, as did all of their staff. In 1934-35, six midwifery schools in Beiping alone were closed down by the municipal public health authorities.²⁸¹ This regulation and standardization of medical care and education grew in intensity as the Nationalist era progressed, culminating in the New Life Movement and its attempted hyper-control of all aspects of personal and private lives.

NEW LIFE AND LEGISLATION

The New Life Movement was launched in 1934 with the goals of reforming China's spiritual and material life through improvements in hygiene and behavior.²⁸² It began by focusing on improving public health and good manners, and then grew to encompass larger social problems like gambling and opium smoking, among other things, as well as an endeavor to encourage native over foreign goods. This movement was a revolutionary attempt to create loyalty and obedience to the new Chinese state, to create public awareness and a mass movement to generate a new, modern China. The New Life Movement's stance toward women was a complicated one fraught with contradictions. On one hand, the New Life Movement sought to eradicate what many viewed as degenerate "modern" girls who wore makeup and Western clothes and bought foreign products.²⁸³ On the other hand, women played a crucial role in the public health and hygiene campaigns and were encouraged to enter medical and public health fields. The images

²⁸¹ "Sixth Annual Report, FNMS."

²⁸² Dirlik, "The Ideological Foundations of the New Life Movement."

²⁸³ Hsiao-pei Yen, "Body Politics, Modernity and National Salvation: The Modern Girl and the New Life Movement," *Asian Studies Review* 29, no. 2, (2005): 165-86.

of midwifery students, as we will see in Chapter Five, portray women with permed and bobbed hair, makeup, Western clothes, and plucked eyebrows. How did the New Life Movement reconcile these conflicting notions of the ideal traditional, conservative woman with the modern, educated woman so necessary to help revitalize the nation? Did they expect educated women to wear braids and traditional clothing, to shun all aspects of Westernization except medicine and public health? While the Guomindang during the Nanjing Decade turned towards conservatism, it also utilized women to help build the nation.

A major goal of the movement was to improve the health of the Chinese people and, in turn, create a healthier China. Footbinding and breast binding were both illegal under the Guomindang, and in 1934 the importance of woman's "healthy beauty," as opposed to the traditional ideal of "fragile beauty," was "promoted by the state as the new norm of femininity."²⁸⁴ The movement advocated physical education for men and women. In fact, PUMC's First National Midwifery School built a "playground" in which its students could play basketball and other sports.

Part of improving the citizens' health was enforcing standardization and regulation of the medical field. The Nationalist government enacted strident legal reforms to control old-style *jieshengpo* and to support trained *zhuchanshi*. The goal of these reforms was to legitimize modern midwifery by creating distinctions between old-style and new-style midwives. They attacked and vilified the *jieshengpo* on several fronts: these women were unsanitary, superstitious, dangerous, backward, and *uncontrollable*, all characteristics that the Nationalist government attempted to thwart as further evidenced by later anti-superstition campaigns and the New Life Movement. Furthermore, modern midwives were sanitary, scientific, safe, modern,

²⁸⁴ Ibid., 178.

and controlled by the state. As soon as the Nationalist government was established, the government enacted strictures against *jieshengpo* and regulations controlling *zhuchanshi*.

As early as 1928, the Guomindang issued a public announcement of rules governing (guanli 管理) old-style midwives. It fundamentally prohibited *jieshengpo* from practicing at all, even before the government-supported midwifery schools were in place. The first rule stated that Chinese *jieshengpo* had to have graduated from a medical school or a midwife training school in order to practice midwifery. That eliminated nearly all old-style midwives, for short courses in midwife training were only in their infancy at this time. Furthermore, in order to practice, the midwife was required to obtain a license from the government. Midwives already practicing before this law was instituted had six months to obtain a license. *Jieshengpo* had to be between the ages of 30 and 60, with intact eyes, ears, limbs, and mental capacity, and free from infectious disease. This age restriction is interesting since the modern *zhuchanshi* students were ideally between 20 and 30 years of age. Upon applying for the license, the *jieshengpo* had to submit her name, age, birthplace, number of years practicing midwifery, and a recent photo to the local government office (*difang guanshu* 地方官署).

Municipal governments like those in Beijing, Shanghai, and Guangzhou also established their own regulations for controlling midwives. In many cases, these governments did not come up with their public health plans on their own. They received much financial and administrative help and urging from foreigners, especially those affiliated with the China Medical Board (see Chapter Three). In the mid-1920s, the China Medical Board's John Grant, a staunch public health advocate, urged the establishment of a midwifery division within the municipal health department in Beijing to help control a leading cause of mortality, tetanus neonatorum. (The other leading cause of mortality was smallpox, but the National Epidemic Prevention Bureau was

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on the job to eradicate it through inoculation campaigns). Prior to this, there was no agency to train or supervise old-style midwives, the leading purveyors of tetanus.

In one 1,200-person village outside of Beijing that Grant visited, he found an 80 percent infant mortality rate over a 10-year period "due solely to the peculiarly dirty habits of the single midwife of the village. A small merchant from this village sat in my office with tears in his eyes - an unusual thing for Chinese men - and stated that he had lost all of his six consecutive sons within the first week of life from 'wind' disease."²⁸⁵ Grant claimed that the three previous governors of Beijing had been interested in solving the midwife problem, but because of political instability the CMB had been hesitant to collaborate on any significant municipal public health efforts. By 1926, Grant believed that the local government was stable enough to move forward with a plan to develop a midwifery division within the health department. The midwifery division in Beiping would open a municipal midwifery training school, and each of the 20 counties within Beiping municipality would send and support one student. After graduation from the proposed six-month course, the student would be obligated to serve the county for a specified length of time, teaching others and doing maternal and child health work. Dr. Marion Yang would supervise the school. John Grant asked the IHB for \$10,781 to purchase equipment and remodel the government-provided premises. After the IHB's initial capital expenditure, local government organizations would take over financial and administrative responsibility for the school.

In Shanghai and Guangzhou too, municipal plans were set in place in the 1920s and early 1930s to restrict or eliminate old-style midwives and register new ones. Sanitary inspectors made regular checks of maternity hospitals like those in Shanghai to force them to comply with

²⁸⁵ John B. Grant, letter to Dr. Victor Heiser, Beijing, September 20, 1926, folder 669, box 94, RG IV2B9, RAC. Tetanus in Chinese is called *poshangfeng*, lit. "wind disease" or "wind damage."

standards or else shut them down. According to the Shanghai Chief Health Inspector's Office, these hospitals were probably diverting poor patients from the "ignorant native practitioners" and so the Shanghai Department of Public Health often admitted them with charity status. A report from the Shanghai Public Health Commissioner stated that "I suggest it is up to us to encourage such establishments."²⁸⁶ Another letter stated that "our purpose is to eliminate the quacks and ignorant old-type midwives gradually from the practice and on the other hand to protect the community."²⁸⁷ However, such hospitals were also subject to close scrutiny: "These so-called hospitals know nothing about the arrangement of a hospital or clinic. They are invariably dirty, have poor equipment, unsanitary kitchens and latrines."²⁸⁸ Regarding the Zung Wei Obstetrical Hospital in Shanghai, a Sanitary Inspector stated that the hospital was a "serious menace to women and infants." The Department of Public Health encouraged and supported these institutions only as long as they conformed to standard hospital regulations. Of course, we may attribute many of Shanghai's peculiarities to its unusual status as a treaty-port city with a French Concession and an International Settlement. Its public health department - its organization and its activities – was undoubtedly influenced by the large number of foreigners who lived there.²⁸⁹

While traditionally a treaty-port city, Guangzhou was displaced by Hong Kong as a major foreign settlement by the twentieth century, so its public health development took a somewhat different turn. Guangzhou did not experience the same level of official foreign influence that there was in Shanghai. In 1934, there were an estimated 410 foreigners in Guangzhou, as compared to 69,797 foreigners in Shanghai in 1932.²⁹⁰ However, many of the native Chinese

²⁸⁶ "Complaint Re: Hu Hsi Obstetrical Hospital."

²⁸⁷ Dr. Hou-ki Hu, 193?

²⁸⁸ "Complaint Re: Hu Hsi Obstetrical Hospital."

²⁸⁹ MacPherson, A Wilderness of Marshes.

²⁹⁰ anon., All About Shanghai and Environs: A Standard Guidebook, Historical and Contemporary Facts and Statistics, Lee, Modern Canton, Appendix 6.

who were in charge of the Guangzhou city government had had training abroad. Guangzhou's first mayor, Sun Fo (served 1921-22, 1923-24, and 1926-27), studied municipal administration at the University of California at Berkeley. All of the six Bureau chiefs under Sun Fo had studied abroad: two in Japan, one in Europe, and three in the United States. According to Winston Hsieh, "those who studied abroad held a virtual monopoly of the available administrative positions indicates the extent to which foreign models were copied."²⁹¹ Furthermore, Guangzhou was the headquarters of the Guomindang intermittently in the 1910s and 1920s, so many of the city's progressive public health policies may be attributed to Sun Fo and Guomindang ideals of a strong, centralized, modern government.

The Guomindang government was founded in Guangzhou in 1912, and during the following year Guangdong province passed regulations controlling midwives, as follows:

1. Midwives graduated from a specialized midwifery school had to register with the Municipal Police Department (警察厅).

2. Midwives must not call themselves "doctor" (*yisheng* 医生) but had to call themselves "obstetrist" (*chankesheng* 产科生).

3. Midwives must not use medicine or any means to cause abortion. Aside from being brought to trial, the accused midwife will also have her licensed revoked by the Police Department.

4. During birth, the midwife may not threaten or coerce the parturient woman or her family members to use unnecessary tools resulting in injury to mother or child. If accused, after strict investigation the midwife will be brought to trial and her license revoked.

5. If, during a difficult birth, the midwife must not dismember [*sui* 碎, lit. break to pieces] the infant. If there is no choice and the midwife must use this method, the midwife must call in a licensed physician.

²⁹¹ Winston Hsieh, "The Ideas and Ideals of a Warlord: Ch'en Chiung-Ming (1978-1933)," *Papers on China: Harvard University Committee on Regional Studies* 16 (1962): 219.

6. If, after a birth, there is blood poisoning [xueduzheng 血毒症], the midwife must report it to the Police Department, and the midwife cannot deliver another infant for two weeks in order to stop the spread of the disease.

7. The midwife license costs 5 yuan.

8. Unlicensed midwives must meet the following conditions:

a) The government cannot use unlicensed midwives.

b) Unlicensed midwives may not put up a sign on their own ["put up a shingle," meaning that they may not open an office or clinic].

c) Unlicensed midwives may not obtain fees for their services.

d) Unlicensed midwives cannot testify in court for medical lawsuits.²⁹²

In essence, unlicensed midwives were not legally allowed to practice midwifery for payment. These were harsh laws for a period in which there were few midwifery schools and certainly no standardized curriculum for training.

By the early 1930s, Guangdong province had intensive public health campaigns to modernize and improve medical facilities and training. For example, Guangzhou's first Three-Year Plan (1933-36) included establishing a maternity hospital for the poor, a children's hospital, and free clinics throughout the city. There was a municipal midwifery school, and plans were in the works for standardized examinations for midwifery and nursing schools. This was part of a general campaign opposing such questionable practices as prostitution, dancing, public kissing, fortune-telling, astrology, and acupuncture, while supporting and regulating sanitation, poorhouses, orphanages, medical schools, clinics, and police.²⁹³

We have seen how local and national governments in China attempted to restrict old-style midwives, regulate midwifery schools, standardize curricula, and license and register medical

²⁹² Guangdong Provincial Government Police Department, "Police Department Announcement of Draft Regulations for Registered Western Doctors, Obstetrists, Pharmacists, Prescriptions, Western Hospitals and the Red Cross (Jingchating Gongbu Shixing Suo Ni Xivisheng Chankesheng Yaojishi Tiaoji Yaofang Xiviyuan Chihongzihui Ge *Li'an Zhangcheng Wen*)," (Guangdong Provincial Government, 1913). ²⁹³ Lee, *Modern Canton*.

personnel. Foreign medical and missionary personnel, along with local officials, gentry, and later national government leaders, affected these changes. The First National Midwifery School is an example of the interaction between foreign philanthropy and technical transfer on one hand, and Nationalist modernization strategies on the other. Marion Yang, as both a skilled and politically savvy modern physician, attempted to cross cultural and political barriers to create a nationwide maternal and child health program that focused on midwives and broad access to care.

CHAPTER THREE. THE *JIESHENGPO* MEET *ZHUCHANSHI*: MARION YANG AND THE FIRST NATIONAL MIDWIFERY SCHOOL ²⁹⁴

"The graduates of a government midwifery school will encounter far less prejudice from ignorant and superstitious folk than if they came from a school conducted under foreign auspices alone. ... The more thoroughly Chinese this project can be made to appear, the faster will scientific midwifery be accepted by the uneducated people."²⁹⁵

The creation of the First National Midwifery School (FNMS) illustrates the melding of nation building with modern medicine. It serves as an example of the ways in which medical personnel, modernizers, and politicians used modern medicine to further China's nation-building goals. The FNMS also shows how influential one organization was in visualizing a national maternal and child health plan for China. As the national model for midwifery schools throughout China, the FNMS had government support and was overseen by the National Midwifery Board, a joint effort of the Ministries of Health and Education. This, coupled with the Nationalist efforts to regulate and control midwifery, made it a formidable opponent to old-style midwives. It is yet another example of state control over birthing bodies (see Chapter Two). Furthermore, the FNMS was a new arena in which women could exercise their bodies and minds as part of a new China. The FNMS recruited all sorts of women to attend varying levels of midwifery courses.

²⁹⁴ Much of this chapter is drawn from the Annual Reports of the First National Midwifery School from 1929 to 1935 that were sent to the Rockefeller Foundation, the primary funding body for the FNMS in these years. I was unable to locate subsequent reports.

²⁹⁵ Ruth Ingram, "Midwifery Training," memo to Mr. N. Gist Gee, Peking, December 29, 1927, folder 371, box 45, series 601, RG1, RAC.

Bright young women could become highly skilled nurse-midwives or midwives, while old-style *jieshengpo* were shaped into (sometimes, but not always) clean and efficient *legitimate* midwives. Both were then eligible for government licensing. Finally, and perhaps most importantly, the plans for improving maternal and child health in China in the 1930s can be traced back to one person, Dr. Marion Yang, an American and European-trained OB/GYN physician. She was concurrently the Director of the FNMS and the Head of the National Midwifery Board, so she had the practical experience and political connections to achieve her goals of improving the health of mothers and infants, and thus the nation, throughout China.

In Europe and the United States during this time, modern physicians were consolidating their hold on medicine. The specialization of physicians extended to medical fields like surgery, ophthalmology, and obstetrics/gynecology, while other medical personnel like nurses were trained as general assistants. (The specialization of paramedical, or semi-professional, personnel like emergency medical technicians, physician assistants, and divisions within the field of nursing, did not begin to take place until the 1960s.) Nursing, a traditionally male occupation, was becoming feminized in the West, and a medical hierarchy was emerging with the primarily male physicians at the top and female nurses subservient to them. In the field of obstetrics, physicians were rapidly displacing midwives as primary birth attendants. In China, however, because Western medical organization and practice could not resolve the health problems of women, a specialization of modern midwives was put forth on a national scale. Female midwives as birth attendants appealed to the Chinese idea of childbirth as a woman's arena, as well as to the Western medical gender hierarchy. According to the national midwifery plan under the Nationalists, (female) midwives always had to refer difficult or unusual cases to (male)

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physicians. Thus, Marion Yang's midwifery school fit in with both Western and Chinese ideas of gender appropriateness.

At the same time, public health was at the forefront of the medical field both at home and abroad after World War I in order to improve the health of peoples worldwide, creating in effect the idea of *world* health based on the promises of health and hygiene from the eighteenth and nineteenth centuries.²⁹⁶ Government and philanthropic organizations like the League of Nations and the Rockefeller Foundation's International Health Division devoted funds and personnel. In fact, these two organizations formed a partnership in the 1920s in order to tackle public health problems left in the devastating wake of World War I. They focused on disease prevention founded on improved nutrition and hygiene from the program developed at Johns Hopkins University School of Public Health in Baltimore. The Rockefeller Foundation initially started with hookworm and yellow fever eradication campaigns in the southern United States, but this soon extended to public health endeavors on every continent. The Rockefeller Foundation and LON-HO efforts in China, therefore, were part of a larger campaign to improve health worldwide, and one of the main concentrations of the global health movement was infant and maternal mortality.

According to a 1931 LON-HO report, infant mortality (under one year of age) accounted for one-tenth of all deaths worldwide.²⁹⁷ Because the main causes of maternal and infant mortality were easily preventable with prenatal care and aseptic birth techniques, maternal and child health fell under the domain of preventive medicine. Both organizations promoted maternal and infant health around the globe, including breastfeeding, pre- and postnatal

²⁹⁶ Alison Bashford, "Global Biopolitics and the History of World Health," History of the Human Sciences 19, no. 1 (2006): 67-88. ²⁹⁷ LON-HO, "Health," (Geneva: 1931).

education, and "maternal hygiene" campaigns.²⁹⁸ In 1926, LON-HO undertook a preliminary investigation in several European countries and found that most infant mortality was caused by poor prenatal or obstetrical care. Likewise, the First National Midwifery School was a leader in the global public health movement, as its creators were graduates of Johns Hopkins Medical School, members of the Rockefeller Foundation's International Health Division, and advisors to LON-HO.

The First National Midwifery School was part of the Peking Union Medical College, an "American transplant" of Johns Hopkins Medical School, arguably the most well-known and well-respected medical training ground in the United States.²⁹⁹ PUMC was founded in 1919 and funded by the Rockefeller Foundation's China Medical Board. All told, between 1913 and 1949, the China Medical Board poured US\$45 million into health care in China, funneled directly or indirectly through PUMC.³⁰⁰ PUMC's physical plant alone cost more than \$7.5 million.³⁰¹ CMB chose PUMC in part because it was the only missionary hospital recognized by the Chinese government.³⁰² Of special note here is the development of PUMC's obstetrics and gynecology department, which was closely modeled on the one at Hopkins, the premier teaching hospital for OB/GYN in the United States. Medical training at Hopkins was a new, integrated approach that included clinical practice, laboratory research, and lectures, and for OB/GYN that meant attending numerous births. Formerly, attending births was not part of most medical schools' curricula, and new physicians' first experience with childbirth often occurred on the job.

²⁹⁸ Bashford, "Global Biopolitics."

²⁹⁹ For examinations of the Rockefeller Foundation, the China Medical Board, and PUMC, see Bowers, *Western Medicine in a Chinese Palace*, and Bullock, *An American Transplant*.

³⁰⁰ Jiang, "Cross-Cultural Philanthropy," 162.

³⁰¹ Bowers, Western Medicine in a Chinese Palace, 59.

³⁰² Jiang, "Cross-Cultural Philanthropy," 162.

Hopkins served as the model for medical education in the United States, and in turn PUMC became the model, with modifications, for medical schools in China.

Improving public health had been one of the key goals of PUMC since its inception. Of the first four divisions of the school – communicable diseases, general sanitation, vital statistics, and medical services – three were related to public health. The school quickly grew to include other specialized fields (medicine, including pediatrics, dermatology and syphilology, and neurology; surgery; OB/GYN; roentgenology [radiology]; urology; anesthetics; orthopedics; and ophthalmology), as well as the Training School for Nurses. The nursing school opened in 1920 with three students and placed its emphasis on nursing *education*, rather than just supplying hospitals with nursing services. In 1924, as part of its legitimizing and professionalizing efforts to be incorporated into the university, the training school changed its name to the School of Nursing, and the leader of the school gained the title of dean. Half of the 39 students the school had graduated by 1932 were working in midwifery or public health.³⁰³

The seed of modern maternal and child health in China was developed by Dr. John B. Grant, a member of the Rockefeller Foundation's International Health Division and chairman of PUMC's Department of Public Health, and Marion Yang, a PUMC graduate. Grant was born in Ningbo, China, to medical missionary parents, and then educated at the medical schools of the University of Michigan and Johns Hopkins. In China, Grant focused on improving school hygiene and establishing community health centers like the Health Demonstration Station in Beijing. According to Bowers, the Station "created a generation of public health nurses whose services to their country were comparable to those of the PUMC medical graduates who entered

³⁰³ Bowers, Western Medicine in a Chinese Palace, 208.

careers in public health.³⁰⁴ Grant was instrumental in getting funding and approval for a midwifery school from the Rockefeller Foundation. He believed that the high infant mortality rate caused by tetanus neonatorum was "one of the outstanding public health problems" facing China, and it was easily controllable by creating midwifery training programs.³⁰⁵ Grant noted that several governmental and private midwifery schools had been established in China in the previous 15 years, but that the best government-run one (in Taiyuanfu, Shansi province) "would not qualify for the lowest standards of midwifery schools in northern Europe."³⁰⁶ The private schools run by Hackett Medical School in Guangzhou and St. Elizabeth's in Shanghai produced "moderately well-trained graduates."³⁰⁷ He repeatedly prodded the Rockefeller Foundation's International Health Division to support and fund the fledgling First National Midwifery School. Marion Yang, founder and head of the FNMS, credits her dedication to improving maternal and child health to the tireless work of John Grant. He helped her to win a fellowship for study at Johns Hopkins University and travel abroad, and he continued supporting and encouraging Yang in her efforts.³⁰⁸

Marion Yang was the pioneer of midwifery training in Republican China, and no other person was as instrumental in creating a legitimate midwifery profession. Yang was born in 1891 to what Yang herself characterized as a relatively well-off "middle peasant" (*zhongnong* 中 农) family, though her family was obviously not of the peasant class.³⁰⁹ Her father was considered a genius because he had obtained the *xiucai* (county level imperial examination) degree at the age of 16 and passed the provincial exams (*zhongju*) at age 18. Her mother was the

³⁰⁴ Ibid., 203-4.

³⁰⁵ John B. Grant, letter to Victor Heiser, September 20, 1926.

³⁰⁶ John B. Grant, "Midwifery Training."

³⁰⁷ Ibid.

³⁰⁸ Chongrui Yang, "Wo De Zizhuan," 147-48.

³⁰⁹ The bulk of this section is taken from an autobigraphical sketch, Yang Chongrui, "Wo de Zizhuan."

third wife and came from a rich family. Her elder brother was a teacher, the second oldest a farmer, and the third oldest a surgeon. In her memoirs, Yang recounts disliking visits to her mother's family when she was young because of all the "cumbersome formalities." She much preferred the poor family of her second eldest brother's wife, where she felt much more freedom. In the "foggy recollections" of her youth, she felt the dissonance between rich and poor early on.³¹⁰

Yang's educational opportunities were remarkable because of her intelligence and her family background. When Yang was four or five years old, she started learning Chinese characters at home with the use of flash cards and books. After an interlude at a local primary school beginning at age seven, Yang entered grade school in Beijing at age 13 and then went on to high school there. She graduated from Women's Union Medical College (a precursor to PUMC) in 1917 and went to Shandong province and to Tianjin to work as a general practitioner. She returned to PUMC in 1920 with the intention of taking one year each of surgery, OB/GYN, and ophthalmology, but after only six months of research in OB/GYN, PUMC offered her the opportunity to specialize in this field. As part of her training, she worked in a small urban clinic where she gave prenatal care to pregnant factory workers and introduced them to a hospital where they could give birth. She then helped to establish a small prenatal clinic at Qihuamenwai, Yang's first seed of community maternal and child health work.

By that time, PUMC's public health program had just started (in 1921) and was in its infancy. Yang lamented that no one at that time had a clear idea of how to go about improving maternal and child health, but a few experiences solidified her commitment to community maternal and child health work. The first incident occurred when a pregnant woman came to her

³¹⁰ Yang, "Wo de Zizhuan," 143.

Qihuamenwai clinic after being in labor for several days. She was carried to the hospital, but by then it was too late. Nothing could be done to save her because her uterus had ruptured. This tragedy could have been prevented if the woman had had access to modern prenatal care, even at a small rural clinic. The second experience was the receipt of a letter written by a rural person in 1924 to PUMC's surgical department that said, "Your surgical skills are good. But we don't know how to safely deliver babies, to keep children from dying, or what medicine to take."³¹¹ Long discussions with Grant about this letter led Yang to see the connection between general public health and infant and maternal health. These two events – the woman's dying in labor and receiving the letter – spurred Yang to undertake the "virgin territory" of public health work, and she began by conducting two rural tetanus neonatorum studies. In 1926-27, Yang received a scholarship for a one-year fellowship in OB/GYN at Johns Hopkins University School of Hygiene and Public Health.

At Grant's suggestion, on the same trip, she also took a six-month tour of Canada, England, Scotland, Germany, France, Denmark and other European countries to observe their OB/GYN education and public health programs. She describes her experiences that year as "eye-opening," and after the trip she made the choice to go into public health. She had decided that public health was the fastest way to improve the health of the poor masses. After returning to PUMC, Yang assumed a joint post as assistant professor of public health and head of the First Health Demonstration Station. Her involvement with OB/GYN and midwife training would come later. For the present, she felt that hope for the health of the masses lay in the development of public health services.

³¹¹ Ibid.

However, Yang was drawn to the plight of women during childbirth. She knew it was a crucial factor in improving the general public health of any population. She repeatedly encountered cases of tetanus neonatorum and puerperal sepsis in PUMC's OB/GYN department and at the First Health Demonstration Station, two preventable diseases that greatly contributed to China's high infant and maternal mortality rates. In a letter dated 1928, probably sent to John Grant, Yang asserted that the 6,000,000 annual preventable deaths in China occurred primarily among infants and childbearing women, and that it was "impossible for the limited medical personnel to undertake all the medical work necessary" to remedy this tragedy.³¹² Although several hospitals had established training programs in the previous 30 years, there was neither centralized regulation nor supervision of any midwives. Yang wrote that "the main responsibility for the excessive deaths among the mothers and babies may be laid on the untrained group [of midwives]," which she estimated to number 400,000.³¹³

Yang had the idea to retrain old-style midwives but was concerned she would not be able to reach them all. She then thought to give specialized training to a group of talented individuals. Yang discussed the problem at length with J. Preston Maxwell, then head of OB/GYN at PUMC. He suggested accepting women with only elementary school qualifications and training them in short courses of two or six months, and then sending them out to train the *jieshengpo*. This would be an efficient way to quickly reduce the high death rates associated with childbirth. However, Yang recognized an important long-term problem: the Chinese had a long-standing distrust and superstition surrounding childbirth, and of midwives as unscrupulous old hucksters. If Yang and her cohorts did not address the need to improve the image of midwives, these old ideas would continue, both preventing talented women from entering the

³¹² Yang, letter to John B. Grant(?), 1928.

³¹³ Ibid.

profession and sustaining their poor public image. For this reason, Yang decided to accept only women with better qualifications into her program. In this way, she could help to create a legitimate profession (see Chapter Four). She also advocated government regulation of this new profession, as well as cooperation with existing medical missionary institutions:

"Midwifery is one of the professions. It can only be controlled by government through registration and enforcement of regulations. The situation requires governmental schools of good standards. Cooperation should be effected with missionary hospitals and other private institutions who however should have their training schools comply with government standards and regulations."³¹⁴

In 1926, three hospitals in Beijing formed a joint midwifery school, the North China School for Midwives, a precursor to the First National Midwifery School. Its purpose was to train certified nurses who could "fill institutional posts as head midwife, or take part in the training of midwives in purely Chinese midwifery schools."³¹⁵ The participating institutions were PUMC, plus the two women's hospitals in Peking: Sleeper Davis Hospital and Douw Hospital. Its governing body was made up of the heads of the women's hospitals, as well as the heads of the Departments of Nursing and of OB/GYN at PUMC. Only six certified nurses were eligible for admission to the 15-month course, which began in September 1926 and was conducted entirely in Chinese. The course consisted of lectures given by physicians from the three hospitals and practical clinical work in the Public Health Demonstration Area, the three hospitals, and patients' homes. The first three months (September to December) were dedicated to lectures in obstetrics and nursing and rounds in the women's and children's wards.

³¹⁴ Marian Yang, "Report of the Training and Supervision for Midwives," (Peiping: Division of Medical Service, Health Station, First Special Health Area, Department of Public Health, 1928), folder 371, box 45, series 601, RAC. ³¹⁵ H. Barchet, memo to M.K. Eggleston, June 11, 1926, folder 669, box 94, RG IV2B9, RAC.

During the next section (January to April), half of the students would attend and submit reports on labors and deliveries in the maternity ward, plus attend patients in the outpatient department. Furthermore, these students would have a course on pediatrics, especially the care of infants in the first year. The other half of the class would go to the maternity ward under the supervision of the head nurse to care for patients and infants after delivery. Each student in this second group would be responsible for certain infants, on whom they would keep detailed records. These two groups would reverse their work for the next three months (April to July). From July through December, the two student groups would in turn, without pay, act as assistants for obstetric work to the heads of Sleeper Davis and Douw hospitals, and then spend the other three months working under the head of the antenatal and natal clinic in the Public Health Demonstration Area.³¹⁶

Yang came up with a plan for a national midwifery school, which she presented at the Seventh Annual Meeting of the Chinese Medical Association in 1928. She proposed a dual-level midwife training structure. The lower level would consist of giving short midwifery courses of two and six months' duration that stressed quantity and basic modern maternal and child health knowledge. The higher level, which stressed quality education, comprised a two-year course to a fewer number of higher level students that would provide more detailed training in midwifery and would require an internship. The proposed midwifery school would have to have its own, or an affiliated, maternity hospital in order to meet the practicum requirements.

When the Nanjing government was established in 1927, Minister Xue Dubi (薛笃弼) and Minister of Education Jiang Menglin (蒋梦麟) enthusiastically supported the creation of Yang's midwifery school in Beiping. That year, the Beiping Department of Public Health submitted to

³¹⁶ Ibid.

the municipal government a charter to establish the Beiping Municipal Midwifery School. It was written by a committee of medical specialists and "local notables" Li Dequan (李德全), Zhang Hexian (郑河县), Song Youzhu (宋友竹), and Zeng Xianzhang (曾宪章), along with Yang. At the same time, the committee also created a resolution outlining China's midwifery training plans, including the Beiping Municipal Health Department's old-style midwife training course. The resolution was passed at the first meeting of the National Midwifery Board on January 23, 1929, thus creating China's First National Midwifery School, funded by the Ministry of Health and the Rockefeller Foundation's International Health Division, and directly under control of the National Midwifery Board. Yang's goal from the start was to have the FNMS be the model for midwifery schools nationwide, and also to train highly skilled personnel to provide further training and leadership in the midwifery field. The qualified trainees would then go on to help establish and staff similar schools and maternal and child health departments in each province. In this way, China would not have to expend its money and resources relying on foreign or foreign-trained personnel.

The National Midwifery Board was committed to midwifery training at all levels. Its first Five-Year Program (1929-1933) was ambitious. Yang and her colleagues were to carry out a survey of the state of midwifery education, establish "adequate supervision and control of midwifery," investigate medical problems of maternal and child health, and encourage and educate the general population to seek improved public health services.³¹⁷ By 1932, five regional national schools would be established, one each in Beiping, Nanjing, Hangzhou, Canton, and Hankou. Furthermore, by 1933 each province would have its own school. In

³¹⁷ "Midwifery Education," (Midwifery Training School, 1930), folder 372, box 45, series 601, RG 1, RAC, 2.

addition, Beiping would be the municipal model for other cities to follow with regard to public maternal and child health, administered through the Beiping Child Health Institute (see below).

Yang was incredibly farsighted and even drafted a long-term 50-year maternal and child health plan for China. Part of this plan included opening 10 additional midwifery schools every five years for a total of 60, which would train 100,000 midwives in 50 years.³¹⁸ By 1929, Yang held joint posts as director of maternal and child health in the National Ministry of Health, director of teaching PUMC's public health courses at the Beiping Municipal Health Department, and head of the FNMS. She also continued to travel to observe and investigate various maternal and child health programs worldwide. In 1928, she made such trips throughout China and Southeast Asia, and also helped to establish the Nanjing Second Midwifery School (later called the National Central Midwifery School). Furthermore, she assisted 16 provincial, 3 municipal, and 33 private midwifery programs across the country in raising their standards to be officially registered by the national government. We can see Yang's hand in maternal and child health that the Nationalist government undertook. This later became the basis for the People's Republic of China's "barefoot doctor" campaign of the 1960s.

The purpose of the First National Midwifery School, as Marion Yang had outlined, was to serve as a "higher normal" school for other midwifery schools nationwide, a training center for midwives who would in turn train others around the country. Yang believed that "the development of midwifery practice in China should be an integral part of maternity and child health, rather than merely an obstetrical procedure as [is] the common practice in other

³¹⁸ Yang Chongrui, "Wo de Zizhuan."

countries.³¹⁹ In other words, proper midwifery techniques were crucial to improving general maternal and child health. While Yang's new midwifery utilized all the technological advances and scientific medicine, it was not to be removed from the larger national public health goals. Nor was it to be removed to the hospital whereby only those with money, connections, or in close proximity would be able to take advantage of scientific midwifery. Yang would bring her midwifery to the people, through clinics, community centers, home visits, and especially the Child Health Institute and the Health Demonstration Stations.

The Rockefeller Foundation agreed at its November 9, 1928, board meeting to cooperate for a five-year period with the Municipality of Peking and the Chinese government to establish the school. The school was opened in a temporary location in October 1929, and it moved to a one and one-half acre plot at 84 Jiaodaokou Dajie in September 1931. The buildings were Chinese residences remodeled to suit the purposes of the FNMS, with the addition of one twostory brick "foreign building" that housed the outpatient dispensary and waiting room, kitchen, dining room, and student dormitory. There were also plans for an 80-bed maternity hospital. There was central heating and electricity throughout the school. According to the Rockefeller Foundation/International Health Division's Dr. Victor Heiser, "It is amazing how economically a modern maternity hospital can be administered under Chinese auspices."³²⁰ The cost of remodeling and constructing the FNMS was \$125,000.

The Chinese government provided the land and buildings, and PUMC requested capital for equipment and teaching personnel for five years from the Rockefeller Foundation's International Health Division. The first year's budget from June 1, 1929 to May 31, 1930, was

³¹⁹ "First National Midwifery School, Peiping," (Peiping: First National Midwifery School, 1932).

³²⁰ Dr. Victor Heiser, "Excerpt from Dr. Heiser's Diary, China, November 1932," folder 373, box 45, series 601, RG 1, RAC.

\$67,608, of which \$38,080 was supplied by the Foundation (including \$27,000 for capital expenses) and the remainder by the Chinese government.³²¹ The fiscal year 1932-33 saw Chinese government contributions at \$50,640, and an additional \$24,000 from the Rockefeller Foundation's International Health Division from 1930 to 1933.³²² In 1934, financial support from the Rockefeller Foundation ceased and the FNMS operated entirely with Chinese funds. The Central Government made an annual grant of \$55,000 to the school, which included the incomes of the school and the hospital. For the year 1934 to 1935, this income amounted to 25 percent of the total budget, or \$14,000.³²³

The FNMS saw rapid growth and expansion. In 1929, the school had facilities to house 40 midwifery students. By 1934, the number of students and patients in the maternity hospital increased so much that the school had to be enlarged. The FNMS purchased and remodeled new grounds and buildings for a new 120-student dormitory. Some maternity patients then moved into the previous dormitory site for a total of 70 to 80 beds. The 1933-34 school year had 52 students attending the two-year and six-month courses, 57 students registered for the upcoming year, and 26 graduating. During the 1934-35 school year, the school purchased an additional seven *mu* (1 *mu* equals about 666.6m²) of land with several buildings on it used to house a 20-student library, and to add two classrooms, a school health room, an infirmary, two offices, a 350-seat auditorium, and dormitory space for an additional 100 students. The cost of the land, buildings, remodeling, and new furniture was \$53,867.49, all of which came from local gifts to the school.³²⁴ This addition brought the total number of hospital beds to 76, 58 of which were public beds, 14 special beds for septic cases in isolation wards, and four semi-private beds. The

³²¹ "Peking Midwifery School -- Budget and Designation," (Rockefeller Foundation/International Health Division, 1929), folder 371, box 45, series 601, RG 1, RAC.

³²² Ibid.

³²³ "Sixth Annual Report, FNMS."

³²⁴ Ibid., 1.

clinic space grew from two to five examination rooms, and the clinic records room and laboratory were enlarged, while the waiting room was reduced in size since it was not necessary for patients to wait as long because of the increased number of examination rooms.

The curricula for the different courses varied tremendously, but all courses were taught in Chinese. The Two-Year, Six-Month, and the Graduate Nurse and Midwife course curricula included "party principles," sociology, and Chinese, in addition to the science courses and practicum. In addition, the students performed physical exercises for 15 minutes every morning and attended a monthly two-hour hygiene lecture.³²⁵ Yang wanted the higher level courses – of six months and two years, respectively – to be under the auspices of the Ministry of Education. The two-month courses would fall under the jurisdiction of the local public health office, in this case the Beiping Child Health Institute. Finally, the FNMS also completed a two month Old-Style Midwife Course in 1929 in which it trained 163 midwives divided into six classes. The Beiping Child Health Institute took over old-style midwife training and regulation after 1930 (see below). The following is a description of each of the courses taught at the FNMS.

TWO-YEAR COURSE

The Two-Year Midwifery Course was the backbone of the FNMS, intended to "safeguard the qualification and the standard of the midwifery profession."³²⁶ This course, along with the sixmonth course, represented "permanent national instruction for qualification considered satisfactory" and was under the auspices of the national Department of Education.³²⁷ Its graduates "would become leaders – teachers, organizers, and supervisors of 'quantity' short

³²⁵ "First National Midwifery School, Peiping," 5.

³²⁶ "First National Midwifery School, Peiping."

³²⁷ Marion Yang, "Report of the Training and Supervision for Midwives, 1928."

course schools" throughout China.³²⁸ Entering students were required to be unmarried, between 20 and 30 years of age, of "good character and in good health," middle school graduates with primary school courses in Chinese and basic science who had successfully passed the FNMS entrance examinations.³²⁹ By 1932, 30 students had enrolled in this course.³³⁰

No tuition was charged for FNMS students, but each student had to pay \$10 for her own board and lodging for a one-month probationary period. Those who passed probation had to pay \$100 for board and lodging, \$50 for miscellaneous expenses, and \$6 for physical exercise and medical expenses, for a total of \$156 per year. Students also had to provide their own textbooks and uniforms. Furthermore, they had to supply a letter of guarantee and a deposit of \$20 to be refunded upon graduation. The letter of guarantee stated that if a student was dismissed for violating the regulations or left the school before her studies were completed, the student or her guarantor would be responsible for paying the school for expenses incurred by the student, equivalent to \$30 per semester.³³¹ This was the most expensive of the programs, costing the school \$3,036.30 per student.³³²

The curriculum was rigorous, consisting of 148.5 hours of anatomy and physiology, 142 hours of normal midwifery, and more than 3,500 hours of practical experience in the antenatal clinic, delivery room, and postnatal ward (see Table 3.1). Upon completion, these midwives would be able to attend even abnormal emergency cases. Each student was required to examine 50 antenatal, postpartum, and well-baby cases each, and attend 25 deliveries. There were eight

³²⁸ Ibid.

³²⁹ "Regulations of the First National Midwifery School," (Beiping: First National Midwifery School, 1930), folder 372, box 45, series 601, RAC.

³³⁰ "Hygiene and Public Health: The First National Midwifery School, Peiping," *CMJ*, 46 (1932): 32-33.

³³¹ "First Annual Report, FNMS."

³³² This cost was derived from dividing total yearly expenditures, plus 6 percent of the capital expense, by the number of students during the year. "Second Annual Report, First National Midwifery School, Peiping, July 1, 1930
June 30, 1931," (Peiping: First National Midwifery School, Peiping, 1931).

students in the Two-Year Course in 1931 and 14 in 1932.³³³ By 1932, there were more applications than spaces available for students, so they made the entrance examinations more rigorous. Seventy was the passing grade for all subjects, and failure in one course prevented graduation. Upon graduating, the students were eligible for registration with the National Midwifery Board. In 1935, the Ministry of Education increased the mandatory training period for midwives from two to three years at the suggestion of the National Midwifery Board.³³⁴

³³³ Ibid.

³³⁴ "Second Annual Report, FNMS."

Table 3.1: Curriculum for the Two-Year Midwifery Course of theFirst National Midwifery School, Beiping, 1932-33

	First Academic Year		Second Academic Year		Total	Total
	First	Second	First	Second		hours for
	semester	Semester	Semester	Semester		each
	Hours per week		Hours per week			subject
Anatomy	5	4			9	145.5
&Physiology						
Nursing	2				2	41
First Aid	1				1	20
Bacteriology	2				2	50
Materia Medica	4				4	82
Party Principles	1	1			2	40
Chinese	1	1	1	1	4	80
Sociology		2			2	30
Urinalysis		1			1	21
Midwifery		4	3		7	142
(normal)						
Care & feeding		2	2		4	82
of children						
Hygiene		2			2	41
Gynecology			2		2	41
Midwifery				2	2	41
(abnormal)						
Dietetics				1	1	20
Dermatology				1	1	20
Bedside			2		2	40
instruction						
Model			2		2	40
demonstration						
Clinic practice		6	6	6	18	369
(antenatal)						
Delivery room			4	4	8	190
practice						
(midwifery)						
Ward practice	30	30	42	42	144	2,952
(postnatal)						
	46	53	64	57	220	4,526.5
	= 1,015.5					
1	= 3,511.0					
Total hours =	= 4,526.5					

Reproduced from "Second Annual Report, First National Midwifery School, Peiping, July 1, 1930 - June 30, 1931," box 222, series 3, sub-series 601L, RG 5, RAC, p. 5.

SIX-MONTH COURSE

The Six-Month Midwifery Course was a short course aimed at quickly training many midwives in scientific childbirth methods, with a goal to train 60,000 of these midwives by 1958. Candidates for the course had to be unmarried women between 25 and 35 years of age, again "of good character and in good health," graduates of higher primary or junior middle schools, who successfully passed the entrance examinations. As in the Two-Year Course, there was no tuition charged, but students were held to the same letter of guarantee, deposit, and probationary period. Their fees totaled \$78, as follows: board and lodging \$50, miscellaneous expenses \$25, and physical exercise and medical expenses \$3. The cost for the school per student for this course was \$759.08.³³⁵ In 1930, there were eight graduates, all employed by municipal health authorities.³³⁶ This course had eight students in 1931 and nine in 1932.³³⁷ By 1932, a total of 46 students had been registered in this course.³³⁸

Much less emphasis was placed on science, but the practical component was significant, with 1,124 hours of antenatal, delivery, and postnatal experience required (see Table 3.2).

³³⁵ See note 318. This is the total cost per student divided by four.

³³⁶ Marion Yang, letter to Miss Mary Beard, Beiping, November 7, 1930, folder 372, box 45, series 601, RAC. ³³⁷ "Second Annual Report, FNMS."

³³⁸ "Hygiene and Public Health: The First National Midwifery School, Peiping."

	1 st	2 nd	3 rd	4 th	5 th	6 th	Total	Total
	month	month	month	month	month	month	hours	hours
	Hours/	Hours/	Hours/	Hours/	Hours/	Hours/		per
	week	week	week	week	week	week		subject
Anatomy &	2	2				4	8	24
Physiology	-	-					0	
Physiology	2						2	
First aid	2						2	3
Urinalysis	1						1	4
Bacteriology	2						2	8
Materia Medica	2						2	8
Nursing	4	2					6	24
Party Principles	1	1	1	1	1	1	6	24
Chinese	1	1	1	1	1	1	6	24
Midwifery		6	4				10	40
(normal)								
Care and		2					2	8
feeding of								
children								
Dietetics		2					2	8
Dermatology		1					1	4
Midwifery				4			4	16
(abnormal)								
Gynecology				2			2	8
Hygiene			2	2			4	16
Sociology						2	2	8
Clinical lecture			2				2	8
Clinical room		6	6	6	6	6	30	120
practice								
(antenatal)								
Delivery room			9	9	8	8	34	140
practice								
(delivery)								
Ward practice	30	30	30	42	42	42	216	864
(postnatal)								
Total	47	53	55	67	69	60	340	1364
Hours: theory	= 240							
Hours: practice	= <u>1,12</u>							
Total hours	= 1,36	4						

Table 3.2: Curriculum for the Six-Month Midwifery Course of the First National Midwifery School, Beiping, 1932-33

Reproduced from "Second Annual Report, First National Midwifery School, Peiping, July 1, 1930 - June 30, 1931," box 222, series 3, sub-series 601L, RG 5, RAC, p. 6.

Much of the anatomy and physiology was left out of this curriculum, with more focus on normal midwifery (40 hours). These students were taught to recognize and refer abnormal cases to physicians. Each student was required to make examinations of 50 antenatal, postpartum, and well-baby cases each, and attend 15 deliveries. Graduates, who must have received a passing grade of 70 in each class, were qualified to practice midwifery in Beiping municipality but had to be under the supervision of the School for a designated length of time. Graduates with creditable work were also eligible to enter the Two-Year Course without taking the entrance exams. This course was suspended in 1933.

SIX-MONTH GRADUATE COURSE FOR NURSES AND MIDWIVES (MIDWIFE RESEARCH UNIT)

The Graduate Courses for Nurses and Midwives helped to spread the ideas of the FNMS and standardize maternal and child health training and practice nationwide. By 1929, there were more than 142 nurse training schools in China, 18 of which operated a "nurse-midwifery" course consisting of one year's training in a maternity ward after completing the regular nursing course. The Nurses' Association of China "granted a special certificate to graduates of this course." ³³⁹ When the FNMS opened, there were about 150 of these nurse-midwives. When the FNMS was founded, the Nurses' Association of China turned midwifery training over to the National Midwifery Board. To meet the government requirements for midwife registration, the FNMS began a special course for such nurses and nurse-midwives who were members of the Nurses' Association of China. The Six-Month Course for Graduate Nurses admitted students who had already completed nursing school and wanted specialized instruction in obstetrics (see Table 3.3).

³³⁹ Chinese National Association for the Advancement of Education, "Statistical Summaries of Chinese Education," *Bulletins on Chinese Education* 2 (1923).

The first class opened in July 1931.³⁴⁰ The course focused on delivery room practice and community health work, for a total of 132 hours of coursework and practicum combined. Even these nurses were taught to refer abnormal cases to physicians. The curriculum was an accelerated form of the Two-Year Course.

	1 st and 2 nd month	3 rd and 4 th month	5 th and 6 th month
	Hours/week	Hours/week	Hours/week
Abnormal			3
midwifery			
Midwifery	6	6	
Urinalysis	3		
Care and feeding of	2	2	
children			
Dietetics	2		
Party Principles	1	1	
Chinese	1	1	
Sociology	2	2	
Hygiene	1	2	2
Gynecology		2	
Antenatal clinic	6	8	18
Delivery room	20	10	10
practice			
District work		10	11
Total	44	44	44

Table 3.3: Curriculum for Six-Month Course for Graduate Nurses of the First National Midwifery School, Beiping, 1932-33.

Reproduced from "Second Annual Report, First National Midwifery School, Peiping, July 1, 1930 - June 30, 1931," Appendix I, p. ii, box 222, series 3, sub-series 601L, RG 5, RAC.

A special Six-Month Graduate Course for Midwives was started in 1932 to give additional training to graduates of provincial or registered private midwifery schools, as the FNMS was the first place in the country to provide complete midwifery training with practical

³⁴⁰ "Second Annual Report, FNMS."

field work. Upon graduation, the students were to return to their home institutions to continue their work. The FNMS was thus able to extend its reach beyond Beijing. As Yang stated, "It was felt that this would be helpful in raising midwifery standards throughout the country and would also help the Central Government to enforce registration regulations of midwifery schools."³⁴¹ The National Health Administration offered fellowships to selected students. The course was limited to10 students per term, who would study "Ethics of the Midwifery Profession," obstetrics, public health, and delivery and ward practicum. Additionally, each student was required to handle10 hospital and five home deliveries, for a total of 1,198 classroom and practicum hours.³⁴² Most students in the first year were from Jiangsu province, where Marion Yang had undertaken significant consulting work to improve the area's maternal and child health services. By 1934, six rural *xian*-level maternity hospitals in Jiangsu were under the supervision of graduates from this course.³⁴³ Fourteen students were in this course in 1934-35, with 12 graduates that year.³⁴⁴

TWO-MONTH REFRESHER COURSE

The Two-Month Refresher Course was given twice yearly "as a supplementary course for midwives who have received certificates from unregistered schools."³⁴⁵ The first class of this type began in September 1932. By the time that the FNMS was founded, there were between 45 and 50 private midwifery schools in China that had issued certificates to hundreds of women, most of whom had never had clinical instruction and, according to Yang, had received only

³⁴¹ "Fifth Annual Report, FNMS," 1.

³⁴² Ibid., ii.

³⁴³ "Sixth Annual Report, FNMS."

³⁴⁴ Ibid.

³⁴⁵ "First National Midwifery School, Peiping," 7.

"poor theoretical instruction."³⁴⁶ To allow these midwives to "make up for the deficiencies of their training" and to apply for government registration, the FNMS opened a Refresher Course. By 1932, this program had 14 students from five different midwifery schools.³⁴⁷ Midwives who had successfully completed the course were eligible to be licensed and registered with the government. The course consisted of the following:

Course name	<u>Total Hours</u>
Duties of the midwife	2
Examination of pregnant woman	n2
Equipment and supplies for deli	very 2
Methods of aseptic delivery	2
Care of the newborn infant	2
Care of the postpartum mother.	2
Physiology of normal presentati	on2
Pathology of abnormal presenta	tion1
Anatomy and physiology of	
the female genitals	1
Midwifery	3
Care and prevention of infant's	
and children's diseases.	1
How to deal with and prevent	
abnormal cases from the	;
midwife's point of view	4
Total	24

In addition, each student received practical experience in handling five delivery cases on average of four hours each (20 hours), plus 20 hours of antenatal clinic and 30 hours of postpartum visits (six hours per each of the five delivery cases), for a total of 94 hours of

³⁴⁷ Ibid.

³⁴⁶ "Second Annual Report, FNMS."

coursework and practicum.³⁴⁸ It seems that this course was discontinued by 1934 and replaced by the Six-Month Graduate Course.

OLD-STYLE MIDWIFE COURSE

The Beiping Child Health Institute began courses for *jieshengpo* in November 1928 under the newly formed local Midwifery Commission that was appointed to act as an advisory committee to the Beiping Municipal Health Department. This was the only course under local, instead of national, auspices. Yang stated that "there is no way to stop the practice of existing midwives, so it is quite necessary to improve their practice by giving them a two-month course which shall be discontinued in 3 years, by which time it is hoped there will be a sufficient supply of midwives trained in the six months' course."³⁴⁹ To be more effective and efficient, this program correlated teaching with community outreach, and control and supervision of local midwifery practices. These "improved" midwives were to "serve as a screen which can detect abnormal and pathological cases and direct them to adequate medical attention.³⁵⁰ The three main topics of this course were aseptic normal childbirth, proper dressing of the umbilical cord, and the ability "to recognize danger signs in order to refer abnormal cases to physicians."³⁵¹ The course met six hours per week for two months and covered "cleanliness and asepsis, methods of conducting normal delivery, methods of tying and cutting the cord, methods of resuscitation, post-natal care, female anatomy and physiology."³⁵² The students attended lectures, demonstrations, and review

³⁴⁸ "First National Midwifery School, Peiping," 7.

³⁴⁹ Marion Yang, letter to Miss Mary Beard.

³⁵⁰ "Hygiene and Public Health: The First National Midwifery School, Peiping," 32.

³⁵¹ Marion Yang, letter to Miss Mary Beard.

³⁵² "First National Midwifery School, Peiping," 8.

sessions given by an obstetrician or a well-trained midwife, consisting of 36 to 46 hours of instruction each month, divided into two- or three-hour periods.³⁵³

Although it seems that the school was not lacking students (each month a new class of 30 students matriculated), there was a serious problem with attendance rates. The first report, dated December 1928, stated that one-third of the students could be characterized as "fair," and one-third was "learning pretty well" and attended classes fairly regularly. However, one-third of the group was an "entire failure" because "1) they do not attend class regularly... 2) they are 'too old' to see or hear as there are three students aged between 65-75, 3) they 'know too much' to learn for more."³⁵⁴ The average age of these students was 54. The second class started on January 7, 1929, with 30 students (average age of 51), 19 of whom passed the final exam (only 26 completed the course).³⁵⁵ A makeup final exam was given to those students who failed. Yang again complained of poor attendance, this time of 35 percent, which she explained by saying that the students came from a distant area, and the region was suffering from inclement weather. Only 18 of the 30 students attended regularly. In March 1929, only 60 percent of the students (18 out of 30) were allowed to take their final exams, the remainder having missed too many classes. Seventeen out of those 18 did pass the exams, five with honors (grades over 85). By March 1929, the situation was improving somewhat, with 26-29 percent absent. In the first eight months, 106 midwives had completed the course, of which 76 passed their exams and were allowed to register with the government. By 1932, the Child Health Institute had trained 268 old-style midwives, as compared to only 107 modern midwives trained in the FNMS.

³⁵³ Marion Yang, "Report of the Training and Supervision for Midwives," (Peiping: Division of Medical Service, Health Station, First Special Health Area, Department of Public Health, 1929), folder 371, box 45, series 601, RAC. ³⁵⁴ Ibid.

³⁵⁵ Ibid.

The course stressed aseptic methods of childbirth, called the "improved method," as evidenced by the final exam, which consisted of five questions. The first two were practical, and the latter two oral:

- 1. "Prepare for delivery (washing hands?)
- 2. Demonstrate method of tying and dressing a cord (cleanliness used?)
- 3. Demonstrate care of a new born (bath & prophylactic eye treatment)
- 4. State care at labour avoidance of Post partum hemorrhage, Puerperal fever
- 5. Differenciate [sic] between normal and abnormal labours and give care of each"³⁵⁶

After completion of this course, the midwives were eligible for registration with the government, but they still required close supervision. Upon graduation, the students had to purchase a "delivery bag (basket) [which] was considered absolutely necessary for students."³⁵⁷ In each graduating class, the student with the highest final exam grade received one of these as a gift from the Commissioner of Health. The delivery basket consisted of aprons, towels, sterile cord ties, scissors, medicine dropper, basin, brush, soap, Lysol, boric acid, alcohol, silver nitrate, liquid paraffin, and bottles with cork stoppers. At a cost of five dollars each, most of the midwives were unable to purchase the kit, and the school budget did not include this cost. The problem was addressed with the City Health Commissioner at the January meeting of the local Midwifery Commission in January 1929, whereupon they decided to ask for help from local officials' wives. By the end of January, the Midwifery Commission had \$430 contributed to wards purchase of the delivery baskets in Beiping. The midwives paid what they could and the Commission contributed the remainder. Other local groups and individuals also donated to this two-month retraining program. According to a 1928-29 budget, in April 1928 an "earnest

³⁵⁷ Ibid.

Buddhist" contributed \$1,000 to the Beiping Department of Police toward the training of these old-style midwives.

These midwives were trained to go into their home communities and publicize the benefits of aseptic births in order to lower maternal and infant mortality rates. According to a 1929 monthly report, the midwives were supposed to "explain to their patients the benefit of their training to prevent puerperal fever and tetanus neo-natorum and the required supervision [of labor and birth]. ...They are obliged to urge every family to adopt and to accept the 'aseptic' method." A supervisor was assigned to each student to "check technique and the quality of work by close supervision of the strict regulation [sic]," and the graduates were required to submit two reports for each birth: one within 24 hours and the second within two weeks after delivery.³⁵⁸ Furthermore, each midwife was instructed to call her supervisor for their first five delivery cases. The supervisor made sure that the newly trained midwives carried out all they had learned in their two-month course.

In February 1929 a modern trained midwife, Miss Song, had 17 of these old-style midwives under her supervision. In one month there should have been 85 deliveries among the 17, but Miss Song was called only twice in one 10-day period, meaning that she supervised only 7 percent of the births. The reasons given for this lack of compliance were that the work was new to everyone and so no one was certain how to proceed with calling the supervisor. Furthermore, Miss Song was employed on a part-time basis though she was expected to be on call full time. Finally, there were unregistered midwives who opposed this work. The latter reason stems from the fact that often several midwives were present at any given delivery. Perhaps the unregistered and untrained midwives dissuaded the newly trained ones from calling

³⁵⁸ Yang, "Report of the Training and Supervision for Midwives, 1929."

for "modern" or "Western-style" help. However, "the attitude [sic] of family and the midwife toward the supervisor were [sic] considered to be favorable."³⁵⁹ In March 1929, the supervision rate increased to 15 percent, with 13 out of 85 births under supervision.

The midwives were not supposed to charge exorbitant delivery fees (maximum two dollars) or refuse services to the poor. Following is a list of expenses for five labor and delivery cases:

"Cord-tie with abdominal binder	\$.50
Liquid paraffin	.75
Alcohol 95%	.05
Lysol pure	.15
Soap	.07
Silver nitrate 1%	.01
	\$1.53"

Thus, the average cost for each delivery was \$.30. According to Marion Yang, an average delivery fee of \$1.50 per case should have been sufficient to maintain the old-type midwives' living standards.³⁶⁰ A 1929 report suggested that the Health Demonstration Area under the Beiping Department of Public Health may provide financial aid for poor families to utilize these trained midwives' services.³⁶¹

In March 1929, the school started a weekly conference held on Fridays with the recently graduated old-style midwives in order "to let them realize that their training was not finished [and] ...to improve their practice by going over their cases with them."³⁶² The school also wanted to investigate the reasons for the old-style midwives' reluctance to be supervised. The

³⁶² Ibid.

³⁵⁹ Ibid. ³⁶⁰ Ibid.

³⁶¹ Ibid.

school wished to train them in filling out the new birth reports sanctioned in March 1929 by the Beiping Health Department and the District Health Officer. In order to better track birth rates, unregistered midwives, and infant and maternal mortality, the Division of Vital Statistics of the Health Station and the Public Health Nursing Service had established a cooperative scheme to enforce birth registration. Each midwife was supposed to fill out two reports: one within 24 hours and the other within two weeks. There were five such conferences given on Fridays in March 1929, in which the old-style midwives discussed their cases and reports. They were also "influence[d] to stand strong for their profession."³⁶³

The FNMS's reach was not limited to its midwifery students and local maternity patients. Aside from sending out its graduates to spread the word of modern maternal and child health and to train and supervise other midwives, Yang undertook an array of activities designed to improve maternal and child health throughout Beiping and nationwide. The school entered into cooperative agreements with other city institutions like the Beiping Child Health Institute and the Health Demonstration Stations, in part to provide fieldwork sites for their students and graduates, and also to spread Yang's vision of standardized maternal and child health care throughout the city.

BEIPING CHILD HEALTH INSTITUTE

The Beiping Child Health Institute was established on May 19, 1930, under the Municipal Health Department to "[investigate] conditions in Beiping relating to maternity and child health."³⁶⁴ The Beiping Municipal Health Department was established in July 1928 after China's capital

³⁶³ Ibid.

³⁶⁴ Marion Yang and I-Chin Yuan, "Report of an Investigation on Infant Mortality and Its Causes in Peiping," *Chinese Medical Journal*, no. 47 (1933): 597-604.

was moved to Nanjing, Peking's name changed to Beiping, and its status changed to a special municipality. In the same year, the local municipality appointed a Beiping Maternity Welfare Commission in order to advise the Health Department in its maternity welfare work. In 1930, the City Health Department was abolished, the Commission's name was changed to the Beiping Child Health Institute, and it fell under the domain of the Department of Public Safety. The Institute was meant to be a national model for other municipalities to follow. The FNMS cooperated with the National Midwifery Board to inaugurate the National Maternity and Child Health Programme through the Beiping Child Health Institute in July 1930. This provided the central health authorities with opportunities "to experiment with an urban plan for midwifery... and [give] the [FNMS] field training facilities."³⁶⁵ The Institute was the "administrative headquarters for city wide activities in the field of maternity and child health (at Jianlong Hutong)" and would provide practical field experience for midwifery students.³⁶⁶ It was housed near the FNMS in a city-owned building and in 1932 had one physician and three midwives on staff.

The Institute was run by the Beiping Maternity and Child Health Committee, which consisted of nine senior medical and public health personnel in Beiping who were nominated the first year by the Director of the Institute. In subsequent years, a sub-committee on election recommended members to the Director for appointment. The term of office was one year, and committee meetings were held bimonthly at the Institute. Its primary responsibility was as an advisory body to the Institute, responsible for "unifying the maternity and child health facilities

³⁶⁵ "First Annual Report, FNMS," 3.

³⁶⁶ Yang and Yuan, "Report of an Investigation," 597.

in the city, undertaking periodical investigation of problems connected with maternity and child health, and undertaking periodical supervision of midwives and maternity hospitals.³⁶⁷

The objectives of the 1932-34 Plan for the Beiping Maternity and Child Health Movement, which was essentially the plan for the Institute, was twofold. First, it would "develop a standard for urban maternity and child health that will meet local conditions and provide teaching facilities for public health [workers], midwives, and field workers." The second goal "was to develop a system of maternity and child health which will offer a full measure of protection to mothers and children under five years of age through maternity hospitals, maternity and child welfare centers, obstetricians, physicians, midwives, [and] other maternity workers."³⁶⁸ More specifically, its duties were to research nutrition, infant and maternal mortality, and birth control. The plan also called for "unifying the maternity and child health facilities in the city;"³⁶⁹ controlling tetanus neonatorum; planning the establishment of midwifery schools, hospitals, and antenatal clinics; training and registering old-style midwives; publicizing midwifery education; and devising ways to raise money for this type of education. Its activities included mothercraft classes on the most up-to-date methods of child-care, a graduate association to promote maternal and child health, regional city health clinics in anteand postnatal care, health propaganda through maternal and child health pamphlets and posters, "registration and supervision of midwives including refresher courses for modern and old-type midwives, statistics and investigation, which in addition to the general statistics, undertakes studies with relation to infant mortality, nutrition of children, and birth control."³⁷⁰

³⁶⁷ "Fourth Annual Report, FNMS," Appendix I: Suggested Plans for Places Surveyed, viii.

³⁶⁸ Ibid., Appendix I: Suggested Plans for Places Surveyed, vi.

³⁶⁹ Ibid., Appendix I: Suggested Plans for Places Surveyed, vii.

³⁷⁰ "First National Midwifery School, Peiping," 2.

The 1934-37 Three-Year Plan called for establishing two maternity hospitals and five clinics for women and children throughout the city, and providing free smallpox inoculations and soybean milk to poor mothers and infants. Operating expenses in 1934-35 were meager, amounting to \$700 per month, most of which went to the salaries of the physician (\$200), four midwives (\$50 each), five assistants (\$30 each), and two clerks (\$20 each). The remainder went to office expenses. During the following year, the capital expenditures were as follows: each maternity hospital needed \$1,800 per month, and the two soybean milk stations each required \$200 per month. In addition, operating expenses were expected to increase to \$2,000, including \$750 for salaries, \$1,000 for the maternity hospitals, and \$250 for office expenses.³⁷¹

One of the main responsibilities of the Institute was "registering, training, supervising, and controlling midwives," which it began in 1930 on behalf of the Health Department.³⁷² In fact, until 1930 this part of the Commission was called the Training Center for Old-Type Midwives. (After the Beiping Maternity Welfare Commission's reorganization, the Center expanded its duties and changed its name to the Beiping Child Health Institute.) In 1931-32, the Institute planned to enlist at least 25 midwives to care for the poor who were unable to afford the help of even old-style midwives, and to build a municipal maternity hospital with at least 200 beds.³⁷³ In 1932-33, the Institute investigated, registered, and licensed 292 old-style midwives, of which 46 were disqualified, and licensed 43 modern midwives. That year's Annual Report stated that the number of old-style midwives was decreasing, while modern midwives were increasing in number. In 1931-32, the Institute trained 49 old-style midwives and gave refresher courses to 24 "modern type" and 87 "old type" midwives. The following year included three

³⁷¹ "Sixth Annual Report, FNMS."

³⁷² "First Annual Report, FNMS."

³⁷³ "Midwifery Education."

refresher courses each for local modern midwives from unregistered schools, resulting in 19 additional registered modern midwives.³⁷⁴

The Institute also undertook initiatives in maternal health, especially regarding birth control, infant mortality, and children's nutrition. By 1932, they had published a total of 1,800 leaflets and 12 sets of posters on these issues, plus 1,000 copies of a "Mothercraft Manual," which sold out at 40 cents per copy within six months. In May 1933, a second edition of 3,000 copies was printed. The mothercraft class was "one of the most important and satisfactory of the activities," for the mothers were to "teach and influence the other women they came in contact with" about modern methods of child-rearing.³⁷⁵ After completing the FNMS course, they were expected to "form mothercraft classes in their own homes for their neighbors."³⁷⁶ Between May 1930 and June 1932, the Institute graduated a total of 59 students in seven mothercraft classes. However, 102 registered initially, so that means 43, or 58 percent, dropped out before completing the course.

The Institute operated maternal and child health clinics as well, staffed in large part by FNMS students. By 1934, three maternal and child health centers were open under the Institute's supervision in Beiping. Attendance was quite good, with 1,330 first visits and 757 return visits in 1930-31 (including antenatal, postnatal, children's visits, and inoculations). In connection with this clinic, the Institute also ran a free delivery service. In 1930-31, there were 19 deliveries, and during the following year that number grew to 88.³⁷⁷ In 1931-32, midwives and physicians at the clinic attended 206 antepartum, 33 postpartum, and 276 infant cases, and made 36 home deliveries. In 1932-33, that number grew slightly to 1,358 first visits and 614 return

³⁷⁴ "Fifth Annual Report, FNMS."

³⁷⁵ "Fourth Annual Report, FNMS," 23.

³⁷⁶ Ibid.

³⁷⁷ "Fourth Annual Report, FNMS," 25.

visits, but with 150 free deliveries, nearly double that of the year before.³⁷⁸ In 1933-34, the number of new cases was 1,861, with 363 home deliveries and 110 referred to other institutions for delivery.³⁷⁹

In 1935, the Beiping Municipality took over the running of the Institute and dedicated further personnel and budget, so the FNMS withdrew from providing assistance, and Marion Yang resigned as its honorary director. This was in accordance with the Central Government's policy, which was to initially assist in establishing maternal and child health work but to withdraw as local authorities were able to take over the work themselves.³⁸⁰

BEIPING FIRST HEALTH DEMONSTRATION STATION

Dr. John Grant persuaded the municipal police department to open the Beiping First Health Demonstration Station in 1925. PUMC contributed 60 percent and the Beijing municipality (under the police department, which oversaw public health) 40 percent of the budget.³⁸¹ The station had three divisions: medical services, general sanitation, and vital statistics/communicable diseases, and a full staff of six physicians (including one director appointed by PUMC), 17 nurses (including midwives), three sanitary inspectors, one dental hygienist, one pharmacist, one secretary, and three clerks. Its purpose was twofold: to teach public health and preventive medicine to nursing and medical students, "and to cooperate with local agencies in demonstration programs in community health practices." They also would conduct epidemiological studies and attempt to adapt "modern public health practices to local

³⁷⁸ "Fifth Annual Report, FNMS."

³⁷⁹ "Sixth Annual Report, FNMS," 27.

³⁸⁰ Ibid.

³⁸¹ Bowers, Western Medicine in a Chinese Palace, 117.

conditions.³⁸² Furthermore, the Station participated in a school health program whereby medical personnel examined school children and taught them basic modern public health methods like brushing teeth and washing hands. They also administered free inoculations, especially smallpox. In 1928, this included 25,660 home visits by nurses, 78,870 sanitary inspections, 57,787 curative treatments (which included 44,575 for trachoma alone), and 1,148 death investigations.

In 1932, the Health Demonstration Station entered into a formal agreement of cooperation with the PUMC Department of Obstetrics. The agreement provided for a maternity service run by the Health Demonstration Station to give practical experience to PUMC's medical students studying obstetrics. The Department of Obstetrics was to provide a staff member and one student to oversee one antenatal and one postpartum clinic. Each patient at the antenatal clinic was to receive a leaflet (in Chinese) stating that at the onset of labor a male or female doctor would be sent with a "public health visitor" to attend the birth. When a patient went into labor, her case was referred to the Health Station and then relayed to the information desk at the hospital, who would then call the physician and public health visitor on call. The Obstetrics Department was to provide all necessary instruments for such deliveries outside the hospital, and it would also provide ambulance service to those unable to pay for such. All records were to be kept in Chinese at the Health Demonstration Station, with a duplicate record housed at PUMC in case a patient were to be admitted to the hospital. The public health visitor would be responsible for all postnatal care and reporting the cases to the physician in charge.³⁸³

³⁸² Ibid.

³⁸³ "Minutes of the Peiping Union Medical College Committee on the Hospital," (Beiping: Peiping Union Medical College, 1932), folder 669, box 94, RG IV2B9, RAC.

In October 1933, a Second Health Demonstration Station was established by the Department of Hygiene and Public Health of the Beiping National Medical College, in cooperation with the Municipal Health Department. The FNMS organized and supervised the Station's maternal and child health clinic with one part-time physician and one full-time midwife assigned to this work. Between 1933 and 1934, total attendance at the second clinic was 779, with 53 deliveries, two of which were referred to hospital.

MATERNAL AND CHILD HEALTH OUTREACH

The FNMS created an innovative approach to maternal and child health by using various methods to spread the reach of modern midwifery and maternal and child health into local communities and nationwide. As the school grew and developed, it offered new types of activities and training designed to promote and publicize maternal and child health locally, including practicums, lecture series, and follow-up visits. A crucial part of the FNMS, as in the PUMC School of Nursing, was the students' required practicum in the Health Demonstration Station or the Beiping Child Health Institute. (Old-style midwives being retrained were exempt from this requirement.) In addition, the school also had a 45-bed teaching maternity hospital with ante- and postpartum clinic facilities, which expanded to 80 beds in later years. The FNMS hospital delivery service included normal confinements with and without antenatal care, morbid pregnancy conditions such as toxemia, threatened abortion (miscarriage), hemorrhage, early rupture of membranes, hemorrhage, febrile conditions, and contracted pelvis. The home service included normal confinements, ante- and postpartum and child welfare home visits to patients who failed make their clinic appointments, investigative visits to determine family's financial condition and cleanliness of the home to determine whether home delivery was possible, and

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educational visits to instruct mothers how to prepare for delivery and care and feeding of children.³⁸⁴ The number of confined mothers that FNMS midwives attended in 1929-30 was 214 (89 at home plus 125 in hospital). That number grew in 1935 to 1,926 (388 at home and 1,538 in hospital, see Table 3.4).³⁸⁵ The FNMS clinic gave antepartum, postpartum, child welfare, and gynecological exams. Annual clinic attendance, including return visits, grew dramatically from 956 in 1929-30 to 19,710 in 1934-35.³⁸⁶

Table 3.4: First National Midwifery School Delivery ServiceNumber of Confined Mothers and Newborn Babies

	Nov 15, 1	929 – June 30	, 1930	July 1, 1930 – June 30, 1931			
Confined	At home	At hospital	Total	At home	At hospital	Total	
Mothers	89	125	214	149	448	597	
	Nov 15, 1	931 – June 30	, 1932	July	1, 1932 – Jun	e 30, 1933	
Confined	At home	At hospital	Total	At home	At hospital	Total	
Mothers	263	826	826 1089		927	1286	
	Nov 15, 1	933 – June 30	, 1934	July	1, 1934 – Jun	e 30, 1935	
Confined	At home	At hospital	Total	At home	At hospital	Total	
Mothers	360	1281	1641	388	1538	1926	

Reproduced from "Fifth Annual Report, FNMS," 1933-34, p. 15.

The school also provided clerkships (what we today would call internships) to its own midwifery students. As discussed in Chapters Two and Four, the FNMS and PUMC were in large part feeders for bureaucratic posts in the Nationalist government, and this type of training facilitated that transfer of knowledge and personnel. The objectives of the midwifery clerkships

³⁸⁴ "Sixth Annual Report, FNMS."

³⁸⁵ Ibid., 14.

³⁸⁶ Ibid., 7.

were "to broaden the viewpoint in the future public health field, to learn the different methods of administration and teaching in other places than the Midwifery School, and to compare the financial conditions, the purposes and the results obtained in the different places."³⁸⁷ The students were to spend one week each in the Director's Office, the Registration and Records Office, and the First Health Demonstration Station; and two weeks in the Beiping Child Health Institute, PUMC's Department of OB/GYN, and the FNMS's Dean's Office. A written summary of the previous day's experiences, together with comments and suggestions, was due each morning. While at the Director's Office, the clerks followed the Director on her inspections of the city's women's hospitals and those that housed maternity wards. The Registration and Records Office showed the clerks how to keep an efficient filing and record-keeping system, which included patients' files. This kind of documentation was crucial to modern medicine, as discussed by Stefani Pfeiffer in her work on the PUMC Social Services Department.³⁸⁸ During the Health Demonstration Station rotation, the clerks accompanied "public health visitors" to schools, neighborhoods, and factories to spread the word about nutrition, hygiene, infectious diseases, and sanitation. They also assisted in the ante- and postpartum clinics, as well as the surgical clinic and school health clinic.

While at the Beiping Child Health Institute, the clerks attended mothercraft classes and demonstrations and supervised old-style midwives. They also participated in research projects and investigations and made home visits. The rotation at PUMC's Department of OB/GYN gave the clerks opportunities to observe medical obstetrical and gynecological procedures, such as salpingo-oophorectomy (removal of fallopian tubes and ovaries), hysterectomy, and cesarean

³⁸⁷ "Fifth Annual Report, FNMS," Appendix III: Instructions for Midwifery Clerkships, xix.

³⁸⁸ Stefani Pfeiffer, "Epistemology and Etiquette: Bargaining, Self-Disclosure, and the Struggle to Define the Patient Role at PUMC Hospital, 1921-1941," paper presented at the Association for Asian Studies Annual Meeting, Chicago, April 2, 2005.

section. They accompanied the attending physician on gynecology, maternity, and nursery ward rounds and attended lectures on difficult pregnancies and labor. The Dean's Office taught the students "how to [be] in charge and responsible," how to keep files and records of grades, make schedules, and run ante- and postpartum clinics – in short, how to be an effective administrator.³⁸⁹ The FNMS also offered a three-week rotation in maternal and child health for fourth-year PUMC medical students. They were to live at the school and observe administration, teaching, and midwifery practice. Furthermore, the PUMC clerks observed administration and technical and educational activities at the Child Health Institute, and made special trips to foundling homes and other organizations. Midwifery clerkships thus gave students were expected to "take their place satisfactorily in the community health organization as they must be possessed of a background which is insufficiently given only through a didactic course."³⁹⁰ To do this, they needed to learn how to run a modern clinic, health station, or school.

The school also began to offer clerkships for students in medical and public health institutions in Beiping "to enlarge their field experience and to give them a better understanding of other types of medical and public health workers and, finally, to qualify them to be workers in this initial stage of the public health field."³⁹¹ Nine such medical students completed this rotation in 1934-35.

The work of the FNMS was widely publicized, both by mothers who used its services and by annual reports in Chinese that the school distributed to educational offices nationwide. For instance, the FNMS published and distributed pamphlets to expectant mothers and their families.

³⁸⁹ "Fifth Annual Report, FNMS," Appendix III: Instructions for Midwifery Clerkships, xxvii.

³⁹⁰ Ibid., Appendix III: Instructions for Midwifery Clerkships, xxvi.

³⁹¹ "Fourth Annual Report, FNMS."

Between 1929 and 1932, the FNMS distributed a total of 13,540 pamphlets and leaflets on maternal and child health with such subjects as maintaining a healthy pregnancy, prevention of osteomalacia (caused from calcium deficiency), and infant care and feeding. They also distributed 1,000 pamphlets publicizing the opening of a new maternity hospital to meet increased community demand. In addition, the following pamphlets were available in the hospital for friends and family members to read: "Advice to the Expectant Mother on the Care of Her Health," "Infant Feeding and Care," "Mothercraft Manual," and "Child Health Association Journal." They also encouraged graduates of the Beiping Child Health Institute's mothercraft classes to "use their influence in their community with foster mothers, matrons in hostels or convalescent homes, to form mothercraft classes in their own homes for their neighbors."³⁹²

In 1932, the FNMS began a special lecture series on maternal and child health topics and professional development. The first year's lectures included "Rural Maternity and Child Health Investigation in Tinghsien [Dingxian]," "Report on Maternity and Child Health Work in Europe," "The Recognition of Women Professionally," "Four Important Points in Success," "Social Environment and Infant Mortality," and "A Review of the National Crisis."

Furthermore, the school instituted a Follow-Up Service to track new mothers and their babies. This consisted of sending out inquiry cards and letters, and making home visits. When new patients came to the clinic for a prenatal checkup, the midwife explained the importance of regular return visits. Each pregnant woman was expected to make 13 prenatal visits, as follows: Between the second and sixth months of pregnancy she should visit once per month (5 visits); between the seventh and eighth months, every two weeks (4 visits); and one visit per week during the ninth month (4 visits). Postpartum mothers were to make four visits, one at the time

³⁹² Ibid., 19.

of discharge from the hospital, one at the end of six weeks, one at the end of the sixth month, and the final one at the end of the year. Mothers were also expected to bring their infants in for 12 examinations during the first year, once per month. Two-year-olds were to make four visits, once every three months. Children three to five years old were expected to make six visits, once every six months. When follow-up visits were not made, the Service sent out inquiry cards and letters, and when they received no response, the antepartum cases were followed up by a home visit. Such calls averaged about 40-50 cases per month.³⁹³

This extensive control over and intrusion into family lives must have been, for many, at the very least an inconvenience. It is telling, for example, that public health was under the jurisdiction of the Beiping Municipal Police Department. Numerous routine prenatal, antenatal, and well-baby visits was a Western standard at a time when public health was just gaining ground in the United States and Europe. Even today, the standard maternal and child health visits in modern medical practices in the United States are not as onerous. It is no wonder that so many home visits had to be made in order to persuade the mothers to comply with these expectations. The larger question is, why did the FNMS expend so much time and energy following up with these mothers and their infants? In part, they collected scores of data on infant growth and death rates, feeding and bathing routines, environment, and physical activity.

During the 1920s and 1930s, missionary organizations like the YMCA and YWCA promoted fresh air and exercise to improve the health of China's citizens.³⁹⁴ Furthermore, efforts to improve sanitation and public health were also at the forefront, especially in cities like Beijing, Tianjin, and Shanghai.³⁹⁵ One of the criticisms by the PUMC and FNMS was that the living

³⁹³ "Fourth Annual Report, FNMS."

³⁹⁴ Gael Graham, "Exercising Control: Sports and Physical Education in American Protestant Mission Schools in China, 1880-1930," *Signs: Journal of Women in Culture and Society* 20, no. 1 (1994): 23-48.

³⁹⁵ MacPherson, A Wilderness of Marshes, Rogaski, Hygienic Modernity.

environments of Chinese children were often detrimental to their health. By going into mothers' homes on home visits (see Chapter Five) and tracking statistical information, the FNMS hoped to be able to lower the maternal and infant mortality rates and improve the health of mothers and infants nationwide. Based on office and home visitation rates, the mothers were resistant to this regimented schedule of examinations. Between November 1929 and June 1930, the service averaged only 3.7 visits per case. This did not change much over three years, for between July 1930 and June 1931 the average number of visits was 3.4, and between July 1931 and June 1932 the number was 3.7.³⁹⁶ It rose slightly in 1933 to 4.0.³⁹⁷ and by 1935 it was 4.41.³⁹⁸ Between 1932 and 1933, the FNMS tracked 1,598 confinement cases. Of these, the FNMS attended 1,057, other hospitals attended 89, other Western-trained physicians and midwives took care of 56, oldtype midwives took care of 86, relatives or neighbors attended 115, and the rest were unknown because they moved. A substantial number of confinements was still attended by old-type midwives or relatives/neighbors (12.6 percent), and we can assume that at least some of the 195 unknown cases had similar results. Of those initial 1,598 cases, the FNMS expected 11,111 antenatal visits but actually saw only 5,410 of these (48.7 percent).³⁹⁹

Numerous visitors came to the school to observe the FNMS's practices, such as the Beiping Woman's Club, the Beiping Yi Yu Hui (Mother's Club), postgraduate medical students from PUMC's OB/GYN department and Beiping Health Demonstration Station, students from Yenching University's Sociology Department, local high school students, and even students from the Shaanxi Police Training School. Marion Yang assisted these and other organizations in building and creating their maternal and child health programs. As head of the First National

³⁹⁶ "Fourth Annual Report, FNMS."

³⁹⁷ "Fifth Annual Report, FNMS."

³⁹⁸ "Sixth Annual Report, FNMS," 9.

³⁹⁹ "Fifth Annual Report, FNMS."

Midwifery School and a key player in the National Midwifery Board, Yang was in a unique position to mold China's maternal and child health services based on her ideas and desires.

Outside Beijing, Marion Yang was involved in spreading her vision of good health care for all mothers and infants nationwide. The FNMS helped to raise the standards of midwifery education nationwide and assisted the National Midwifery Board in investigating and registering such schools. In 1930, the only school that could fulfill National Midwifery Board requirements was the FNMS, but by the end of 1932 one other school was registered, the Tongde Midwifery School in Shanghai. Two others were recommended for registration: the "Kuang-ki" Midwifery School in Hangzhou, Zhejiang province; and the Zhejiang Provincial Midwifery School, also in Hangzhou. The following schools were recommended to make improvements before registering: Hangzhou Midwifery School and Jisheng Midwifery school in Hangzhou, Huimin Midwifery School in Beiping, the Huisheng Midwifery School and Dade Midwifery School in Shanghai, and the Jiangsu Provincial Midwifery School in Jinjiang. Furthermore, nine others were to be investigated. Two schools were closed after investigation: the Yenji Midwifery School in Beiping and the Guangdong Hospital Midwifery School in Nanjing.⁴⁰⁰ In 1934-35, six midwifery schools in Beiping (including a municipal one) were closed "through the influence of the standards set by the First National Midwifery School."401 The FNMS helped to reinforce government standards which, in reality, the FNMS created, through Marion Yang.

By 1932, several other organizations around the country had requested advice and personnel from the school, undertaken primarily by Marion Yang. For example, in 1932-33, Yang took five leaves of absence for a total of 50 days to go on such advising trips.⁴⁰² These

⁴⁰⁰ "Fourth Annual Report, FNMS." Chinese names were not listed for these schools, so I am unable to provide translations.

⁴⁰¹ "Sixth Annual Report, FNMS," 3.

⁴⁰² "Fifth Annual Report, FNMS," 3.

included Dingxian (see Chapter Two), the YWCAs of Wuchang (Hubei province) and Wujiang (Anhui province), Yenching University's Department of Sociology, the Local Gentry Association of Yutian (Hebei province), the Taixian County Government (Jiangsu province), the Nanjing Municipal Government, and the Zhejiang and Jiangsu Provincial Governments. Marion Yang made preliminary investigations of local conditions in each of these areas and drew up tentative plans for improving these locales' maternal and child health. Yang helped to create and open the Central National Midwifery School in Nanjing modeled on the FNMS (see Chapter Two), of which she was director for the first three months of its existence. She also gave technical assistance to numerous other fledgling maternal and child health programs around the country, such as provincial programs in Jiangxi and Jiangsu, and municipal programs like Gaoqiao Public Health Model Village in Shanghai. Yang was also very interested in improving maternal and child health in the countryside:

"It has been felt that, considering the present state of China, we give too thorough training to maternity and child health officers and workers. However, if we consider our large rural population (85%), our economic education and transportation, it becomes necessary to set up strong units in the rural centers that they may handle both physiological and pathological conditions. We can not progress by referring the pathological cases to urban hospitals."⁴⁰³

In rural areas, the FNMS assisted Dingxian and Qinghe, two model mass education movement districts (see Chapter Two), as well as providing technical assistance to rural, provincial, and urban areas around the country. Between September 1933 and May 1934 alone, Yang made technical assistance visits to Shanghai (September 29-October 8), Zhenjiang and Taixian (Jiangsu province, October 30-November 2), Nanzhang and Hankou (Jiangxi province,

⁴⁰³ Marion Yang, letter to Dr. W.A. Sawyer, Beiping, January 21, 1937, folder 374, box 45, series 601, RG 1, RAC.

November 25-December 8), Zhangzhou (March 10), and Xian (Shaanxi province, May 13-31). Marion Yang's vision was thus not limited to Beijing. She worked to extend the influence of modern maternal and child health throughout China.

Aside from the director, other FNMS staff members were often sent to fledgling programs in rural and urban areas to help administer midwifery schools and maternal and child health initiatives. For example, by 1934, all of the FNMS's senior staff was sent elsewhere. Four midwives and one physician went to the Central Midwifery School in Nanjing; one physician and one midwife were sent to take charge of the Shaanxi Provincial Midwifery School in Xian; one physician and two midwives went to the Jiangxi Provincial Midwifery School in Nanchang; and one physician and one midwife were to Lanzhou, Gansu, to open a provincial midwifery school there.⁴⁰⁴

SUCCESSES AND SHORTCOMINGS OF THE FNMS

Was the First National Midwifery School successful? Did it do its intended job of training midwives with the purpose of lowering maternal and infant mortality rates? By 1934, there were nearly 2,000 registered midwives in China. In comparison, there were an estimated 400,000 untrained midwives, who were blamed for the majority of infant and maternal deaths.⁴⁰⁵ Still, even in Peking in 1931, half of all births were attended by old-style midwives, and 25 percent by relatives or with no help from others.⁴⁰⁶

The total number of FNMS graduates was small but influential. The FNMS initially had facilities to house 40 midwifery students, and in 1929 the school had 10 students in each of the

⁴⁰⁴ "Sixth Annual Report, FNMS."

⁴⁰⁵ Dr. John B. Grant, letter to Victor Heiser, March 16, 1931, folder 373, series 601, box 45, RG 1, RAC.

⁴⁰⁶ Grant, "Midwifery Training."

Two-Year and Six-Month courses. In the beginning, the staff included two physicians, two midwives, one nurse, one secretary, one clerk, one business manager, and one matron. By 1932, the FNMS staff consisted of four full-time physicians, 17 full-time midwives, and eight part-time lecturers. That year, there were 24 students in the Two-Year Course, 8 in the Six-Month Course, and 12 in the Course for Graduate Nurses. From 1929 to 1932, the school trained 34 students in the Two-Year Course, 37 in the Six-Month Course, 12 Graduate Nurses, and 24 in the Two-Month Refresher Course. These students combined attended 1,297 antepartum and 1,055 postpartum cases, and gave 567 infant examinations and 293 gynecological exams. They delivered 826 babies in the maternity hospital and 263 in patients' homes. Forty-six students were enrolled in 1933, and 49 were registered to begin classes. There were 24 graduates in 1933.⁴⁰⁷ This number is relatively small when compared with China's entire population, but the important purpose of this school was to train the brightest and most qualified midwives and send them throughout the country to in turn train others. Between 1929 and 1935, the FNMS trained only 133 modern midwives in the four courses. Of those, 126 were practicing in 36 places in 15 different provinces, as shown below (one had died, and six were married and not practicing).⁴⁰⁸ The more remote northern and Western provinces had no midwives, and they were clustered mainly around the middle coastal areas of Hebei, Shandong, and Jiangsu provinces, as follows:

⁴⁰⁷ "Fifth Annual Report, FNMS," 4.

⁴⁰⁸ "Sixth Annual Report, FNMS," 3.

Suiyuan 3	Sichuan 5
Hebei 50	Anhui 1
Shaanxi 3	Zhejiang 5
Shandong 10	Jiangxi 4
Gansu 2	Fujian 2
Shanxi 7	Hunan 5
Henan 2	Guangdong 1
Jiangsu 26	

As we know, the high infant and maternal mortality rates can be traced back to unsanitary practices during childbirth. Old-style midwives had higher death rates from "birth injury," "convulsions," and infant tetanus. Furthermore, high infant mortality was due to *preventable* diseases and conditions – diarrhea, malnutrition, tetanus, and birth injury – that even illiterate, old-style midwives could learn to prevent. Although exact numbers are not available, Yang found that higher income families had much lower maternal and infant death rates, and that there were associated lower maternal and infant deaths among those who received antenatal care. According to Yang, "During recent years there has been a definite recognition and appreciation of modern medicine due to the benefits received, resulting in increased hospital deliveries where such facilities exist. The latter has saved many lives of both mothers and babies mainly by physiological non-interference and proper technique."⁴⁰⁹ Yang used simple techniques of aseptic births to quickly reduce maternal and infant mortality rates.

⁴⁰⁹ Marion Yang, "Letter to the Editor."

The FNMS services were popular from the beginning. The clinic saw 480 new clients between November 1929 and June 1930, with 476 additional return visits (See Table 3.6).⁴¹⁰ The hospital was expanded a few years later to house 65 beds. The delivery service between November 1929 and June 1930 delivered 126 babies in the maternity hospital and another 89 at the patients' homes.⁴¹¹ In 1930-31, there were 4.504 clinic visits and 597 deliveries.⁴¹² By 1932, students of the FNMS had attended 1,369 deliveries, and had seen 7,103 antenatal cases, 2,248 postpartum cases, and 1,826 well-baby clinic cases.⁴¹³ However, that same year the clinic attendance was about 40 percent lower than expected, due to the fact that the clinic was moved to a more distant location on Jiaodaokou in North City. Most of the FNMS's patients came from central and southern Beijing. The FNMS hoped that after the patients got used to the new location, attendance would soon grow to 25,000 with 1,500 deliveries per annum.⁴¹⁴ By 1933, the clinic saw 4,279 total new cases and 7,854 total return visits, for clinic attendance of 12,133.⁴¹⁵ That is far short of the 25,000 goal, but it is apparent that the clinic's attendance was growing steadily. One of the most telling statistics is that between 1929 and 1935, hospital deliveries rose from 125 to 1,538, an astounding increase. Furthermore, home deliveries attended by FNMS midwives increased from 89 to 388. The total number of deliveries by modern midwives from FNMS rose from 214 to 1,926 in this period, a ninefold increase in only six years (see Table 3.4).⁴¹⁶

The clinic was also successful. Of the 89 women who received antenatal care and delivered at home between 1929 and 1930, there were no maternal deaths and only six infant

⁴¹⁰ "First Annual Report, FNMS," 7.

⁴¹¹ Ibid, 8.

⁴¹² "Second Annual Report, FNMS," 7.

⁴¹³ "Hygiene and Public Health: The First National Midwifery School, Peiping."

⁴¹⁴ "Fourth Annual Report, FNMS."

⁴¹⁵ "Fifth Annual Report, FNMS," 8.

⁴¹⁶ "Sixth Annual Report, FNMS," 14.

deaths. At the hospital that year, one mother died and 17 infants died, including eight stillbirths and three "monsters" (extremely deformed fetuses, usually still-born) (See Table 3.5 on maternal and infant deaths and Table 3.6 on clinic attendance). The FNMS Annual Report explains the deaths by stating that "most of these cases were first handled and later referred to [the First National Midwifery] school by old-type midwives."⁴¹⁷ In any case, the three percent and 12 percent maternal and infant mortality rates, respectively, are substantial improvements over the usual nationwide mortality rate of 25-30 percent.

⁴¹⁷ "First Annual Report, FNMS," 8-9.

	7/1/1933- 6/30/1934					7/1/1932- 6/30/1933				7/1/1932- 6/30/1931		
	With antenatal care		Without antenatal care		With antenatal care		Without antenatal care		With antenatal care		Without	care
	Living	Dead	Living	Dead	Living	Dead	Living	Dead	Living	Dead	Living	Dead
Confined mothers	1,164	2	221	2	934	1	172	4	778	3	109	4
Newborn babies	1,291	34	254	17	1,023	26	184	17	866	14	140	15

Table 3.5: First National Midwifery School, Morbidity and Mortality of Confined Mothers and Newborn Babies (2 weeks after confinement)

	7/1/1931- 6/30/1930						/1929- 0/1930	
	With	With antenatal care Without antenatal care		With antenatal care		Without antenatal	care	
	Living	Dead	Living	Dead	Living	Dead	Living	Dead
Confined mothers	422	1	92	2	152	0	80	1
Newborn babies	462	4	88	5	150	6	42	6

(The newborn deaths include stillbirths and "monsters.") Reproduced from the "Fifth Annual Report, FNMS," 1933-34, p. 19.

		1933-	1932-	1931-	1930-	1929-
		1934	1933	1932	1931	1930
New Cases	Antepartum	2,157	1,719	1,297	731	224
new Cases	Postpartum	1,527	1,194	1,055	693	137
	Child Welfare	1,236	970	576	329	63
	Gynecological	558	396	298	188	56
	Total new cases	5,477	4,279	3,226	1,941	480
	Antepartum	5,435	3,771	3,145	1,464	355
Return Visits	Postpartum	1,228	949	765	478	75
	Child Welfare	3,811	2,653	1,325	479	38
	Gynecological	565	481	268	142	8
	Total Return Visits	11,039	7,854	5,503	2,563	476
Total Attendance		16,516	12,133	8,729	4,504	956

Table 3.6: First National Midwifery School Clinic Attendance, 1930-1934

Reproduced from the "Fifth Annual Report, FNMS," 1933-34, p. 9.

Furthermore, the number of expectant mothers who took advantage of prenatal care rose dramatically between the first and second quarters of 1930, from only seven percent in the first quarter to 69 percent in the second. Clinic attendance increased as well for prenatal, postpartum, infant, and gynecology cases, from 223 in the first quarter of 1930 to 555 in the second quarter. This is due in part to the fact that the maternity work of the First Health Demonstration Station was transferred to the FNMS in March 1930.⁴¹⁸ In 1933-34, there were only four maternal deaths out of 1,641 confined cases (2.44 percent). Two of these were cases with antenatal supervision, and two without. However, the rate of death among those without antenatal supervision was significantly higher (6.62 percent, or 2 out of 302 women who received antenatal care, both of whom had been handled by an old-style midwife). The maternal death rate among women who received antenatal care was 1.49 percent (2 out of 1,339). The number

⁴¹⁸ "Second Quarterly Report, 1930: First Midwifery School, Peiping," (Peiping: First Midwifery School, 1930), folder 372, box 45, series 601, RG 1, RAC.

of infant deaths the same year was 51 of 1,596 living births (31.95 percent), a significantly high number. The death rate of those whose mothers received antenatal care was, again, much lower, at 25.66 percent, versus 62.73 percent of those who did not. The maternal death rate for the period 1929 to 1934 was 24 out of 4,827 cases, or 4.97 percent (with antenatal care: 2.55 percent, without: 15.47 percent). Infant death rate during this period was 142 out of 4,643 living births, or 30.58 percent (with antenatal care: 21.15 percent, without: 78.36 percent).⁴¹⁹ The stillbirth rate for this period was 75 among 3,952 whose mothers received antenatal care (1.9 percent), and 159 out of 925 whose mothers did not receive antenatal care (17.2 percent).

One explanation for the high infant death and stillborn rates at FNMS is that many cases of difficult labor finally ended up in the hospital after several days of confinement, during which the mothers were attended by (in some cases numerous) old-style midwives, friends, neighbors, and/or relatives. In fact, out of the 57 stillbirths and infant and maternal deaths without antenatal care between 1933 and 1934, 35 had been handled by a relative or old-type midwife. Most of these cases had difficult presentations (transverse, breech, shoulder), cord prolapse, or twins, so any birth attendant may have had difficulty. These types of births require manipulation to turn the baby so it can be delivered, so asepsis is crucial. Unwashed hands allow bacteria to enter the mother and infect her and the infant, hence the high mortality rates.

Who utilized these services? Between 1929 and 1930, 33.7 percent of the mothers were between the ages of 20 and 24, 23.4 percent between 25 and 29, and 21 percent between 30 and 34. The 1934-35 data show that 33.4 percent were between 20 and 24, and 29.4 percent were between 25 and 29 years of age.⁴²⁰ These are normal childbearing ages, and it is not clear whether a particular age group was more likely to seek modern medical assistance for childbirth.

⁴¹⁹ "Sixth Annual Report, FNMS."

^{420 &}quot;Fifth Annual Report, FNMS."

However, the largest number of women who delivered aided by FNMS staff in 1929-30 were primiparas (41.1 percent), with only 18.7 percent of women delivering their second child. In 1932-33, the number of primiparas was 43.9 percent, with 22.6 delivering their second.⁴²¹ The trend continued in 1934-35, with 41.2 percent primipara and 23.5 delivering the second child.⁴²² This is telling because, in the earlier years, fewer women who had previously given birth came to the FNMS hospital or clinic for their subsequent pregnancies. More first-time mothers delivered at the hospital than second-time mothers. However, five years later the number of two-para women was significantly higher than it was in 1929. Although there is not enough conclusive information, the data may indicate that newly pregnant women (presumably the younger ones) may have been more likely to seek out modern medical maternal and child heatlh care. It may also indicate that perhaps primiparas in 1929 returned to the FNMS to deliver their subsequent children. Unfortunately, we have no access to medical records to determine whether or not this was the case.

Higher birth rates are inversely related to income, meaning that the poorest women may have not accessed Western medical care. In 1932-33 the FNMS published and distributed a series of pamphlets on preparing for home confinement (parturition) based on the family's socioeconomic level ("A-type" = income over \$1,500 per year, "B-type" = \$600-1,500 per year, and "C-type" = under \$600 per year). Most of the pamphlets distributed were of the A-type (69.2 percent, or 346 out of 500), with B-type distribution of 18.4 percent (92) and C-type of 7.2 percent (36).⁴²³ This could mean either that more poor patients were confined in the hospital instead of at home, or that more of the women who utilized FNMS services were of the richer

⁴²¹ "Fifth Annual Report, FNMS," 16.

⁴²² "Sixth Annual Report, FNMS," 20.

⁴²³ "Fifth Annual Report, FNMS."

classes. Based on other evidence presented throughout this work, it seems that poorer patients were more likely to give birth at home and, therefore, FNMS hospital patients were more likely to be of a higher socioeconomic class. The following year, the numbers were quite different, with 530 A-type (42 percent), 230 B-Type (18 percent), and 480 C-Type (39 percent) distributed, suggesting there was a greater effort to reach the poorer classes.

There has been much research in the past few decades on the hegemony of modern medicine in developing countries.⁴²⁴ Marion Yang and the FNMS seem to have been much more accommodating to the Chinese patients than most Western medical personnel. For example, Yang and her staff undertook investigations to solve two consistent problems within the FNMS and the Beiping Child Health Institute regarding *jieshengpo* and *zhuchanshi*. First, Yang constantly struggled with instructional and supervisory methods for *jieshengpo*, as they were illiterate. Her problems were similar to those encountered in Dingxian (see Chapter 2.C., Rural Midwifery Programs). Yang had to develop methods for registering and controlling these midwives who were so often reluctant to submit to government control. Regarding modern midwives, Yang aimed to develop curriculum to "extend their activities to include the undertaking of satisfactory antenatal and postpartum examinations that will screen out and refer abnormal cases to physicians."425 Furthermore, Yang was interested in accommodating Chinese customs and culture. She had traveled widely and studied many different public health programs around the world but did not attempt to force any Western system in toto upon the Chinese, hence the emphasis on community outreach and the training of *jieshengpo*. On the other hand, the expectation that mothers make numerous clinic visits and submit themselves and their children to frequent medical examinations seems excessive and unrealistic.

 ⁴²⁴ In particular reference to the Peking Union Medical College, see Arnove, *Philanthropy and Cultural Imperialism*.
 ⁴²⁵ "First National Midwifery School, Peiping," 8.

Marion Yang and the First National Midwifery School transformed the reputation of midwifery in China from a back-alley vocation to a modern profession, and served as a model for future CCP maternal and child health programs. Numerous works by Westerners and Chinese alike vilified the old-style midwife, while Yang, working as a bridge between the foreign, private FNMS and the Nationalist government, renovated the mechanics of midwifery and the women who practiced it. Yang and the FNMS were instrumental in the professionalization of childbirth.

It is clear that Western prenatal and obstetrical care improved maternal and infant mortality rates in China. On the other hand, childbirth became a more impersonal and medicalized experience, removed from the family and larger community. In the midst of these changes, a new profession emerged. Young, modern *zhuchanshi* replaced the old-style *jieshengpo*. Furthermore, the reluctance of Chinese women to patronize male physicians or attend male patients spurred the quick rise of women entering the medical professions, especially nursing, midwifery, obstetrics/gynecology, and pediatrics. Childbirth had become a serious business, no longer a function of merely reproducing the family. In Republican China, modern childbirth was part of a larger movement to improve the health of the country's citizens. How did this new medical infrastructure affect and influence women who entered the midwifery field? What happened to the old-style midwives as the profession grew and they were displaced by younger, trained contemporaries? I now turn to examine the development of this new and modern profession.

CHAPTER FOUR. THE PROFESSIONALIZATION OF MIDWIVES IN EARLY TWENTIETH-CENTURY CHINA

During the 1920s and 1930s, Chinese government officials and medical professionals began to exert more control over the training and licensing of midwives. Midwifery was incorporated into the ranks of the medical personnel being trained in modern medicine as part of modernization and nation-building efforts. This chapter examines how old-style midwives, elderly, uneducated, and apprenticed, were replaced by young, literate, modern midwives. How did an occupation once considered dirty and backward become a valid career choice for young Chinese women? How did government officials and modernizers create and support modern childbirth and the midwifery profession? How did women participate in childbirth, both as professionals and as patients? Given the displacement of midwives in the West, what we find is surprising: a transformation of the birth process in China based on ideas of modernization, science, and national strength. The new midwives were created by the First National Midwifery School to have higher prestige, emerging from this process stronger and better organized than American midwives of this period.

Local and national Chinese governments during the Nationalist period created and supported midwifery training programs with consistent curricula for each type of course. The body of knowledge that was given to the new midwives was regulated, standardized, and controlled, an essential part of any profession. The midwives filled a crucial slot in the development of a larger modern medical assembly. One of the main duties of midwives was the

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registration of births. In this way, they became some of the earliest actors in the broader national programs of population regulation and control. Furthermore, the government's public health efforts also proved a good starting place for midwives' entry into civil service. Many *zhuchanshi* were recruited to serve as instructors in public health programs like the Guangzhou Public Health Officer Training Institute of the 1930s. I will begin with an examination of the development of the medical profession in Europe and the United States and then look deeper into the situation in China.

MEDICAL PROFESSIONALIZATION IN THE WEST

The nursing profession in the West gradually underwent a feminization process beginning around the turn of the twentieth century. In the 1800s, nursing was a predominantly male field, as strong men were needed to lift and move patients, and women were not supposed to handle men. At this time, hospitals were breeding grounds for illness and disease and were fundamentally houses of death, where the poor and indigent went to die. Persons with means died at home attended by private physicians and nurses. Nurses during this time were usually members of religious groups, like Catholic sisters, who dedicated themselves to serving the poor and the sick. However, several changes took place around the beginning of the twentieth century that allowed for women to enter the medical profession, especially as nurses. First, secular education for girls became more widespread, and they were encouraged to assume traditionally "feminine" roles as caregivers and teachers. Second, modern medicine became more efficacious, especially with the spread of germ theory, and hospitals started to become places for healing and treatment. Finally, as the field of medicine gained more credence and began to organize and professionalize, physicians – overwhelmingly male – helped to create a subordinate "semiprofession" of nursing, and eventually other professional subfields like midwifery.⁴²⁶

The development of the medical profession, like the fields of law and architecture, began in the nineteenth century in Europe and the United States when members of various medical fields began to organize and create cohesive educational systems, ethics codes, and licensing and registration requirements. A rich field of literature, especially in the discipline of sociology, exists on the development of professions in the West and their ability to influence and control various segments of society, often using science and rationality as the basis for their expertise.⁴²⁷

According to sociologists, there are two main theses to describe the development of a profession. The first is the "attribute" approach, which claims that an occupation's unique set of traits, such as its complex knowledge and tasks, educational requirements, and public dealings, manifests itself as a profession. These unique traits set the profession apart from other occupational groups, and its dealings with the public necessitate a code of ethics. Most sociologists agree on these three basic attributes of a profession: expertise requiring higher education, a code of ethics, and a monopoly of service.⁴²⁸ The second is the "process" approach, developed as a reaction to the former model. Proponents of this model, like Andrew Abbot, argue that too much emphasis had been placed on the characteristics of professionals, and that the important questions are how and why professionalization occurs. The process of professionalization is a continuum that includes all sorts of occupations, not only the traditional professions of medicine, law, and architecture.

⁴²⁶ Anne Witz, *Professions and Patriarchy* (London, New York: Routledge, 1992).

 ⁴²⁷ Andrew Abbot, *The System of Professions: An Essay on the Division of Expert Labor* (Chicago and London: The University of Chicago Press, 1988), Eliot Friedson, *Profession of Medicine: A Study of the Sociology of Applied Medicine* (New York: Dodd, Mead & Company, 1972), Magali Sarfatti Larson, *The Rise of Professionalism: A Sociological Analysis* (Berkeley and Los Angeles: University of California Press, 1977).
 ⁴²⁸ Abbot. *The System of Professions*.

In his book on professionals in Republican Shanghai, Xu Xiaoqun utilizes the process approach as "an analysis of professionalization as a historical process mediated by class structure, the role of the state, and the acquisition and use of power by professions."⁴²⁹ He argues that while the professions of law, medicine, and journalism did not simultaneously meet all three attributes of belonging to a profession, these professions are part of a continuum. By following Xu's lead, we can examine the process of professionalization among modern midwives in China. It is certain that at various times midwives had at least some of the necessary attributes of a profession. They organized to form professional organizations, sought government regulation of curricula and licensing, and created and upheld a code of ethics. This was a complex process that ultimately led to the demise of old-style midwives. But let us first return to the field of medicine in the West.

With medical professionalization came specialization. Until the twentieth century, most women worldwide gave birth at home with the help of midwives. However, in the 1900s more and more physicians – general practitioners – began attending birthing women in the United States. According to a report by J. Whitridge Williams, by 1912 "most physicians did deliver babies as a part of their medical practices, and they spent on the average approximately 30 percent of their time attending childbirth."⁴³⁰ According to Leavitt and Numbers, "At the turn of the twentieth century physicians delivered approximately half of [the United States's] babies. Most of these births took place in the woman's home and combined... aspects of traditional and modern techniques."⁴³¹ We can assume that a good portion of the other half were delivered by

⁴²⁹ Xu, Chinese Professionals.

⁴³⁰ Leavitt and Numbers, eds., Sickness & Health in America, 63.

⁴³¹ Ibid., 61.

midwives or with the help of relatives. In the United States, over half of all births took place in hospitals by 1940; by 1950, that had risen to 88 percent.⁴³²

Physicians were more apt to intervene in childbirth than were traditional midwives. After all, family members expected doctors to *do something* to aid the birth. As Leavitt illustrates, these physicians' mortality statistics in the 1800s and early 1900s were at least as bad, and probably worse, than those of midwives because they were more invasive. Problems with cleanliness and sanitation were compounded by their use of non-sterile instruments like forceps, especially before germ theory began to gain ground in the mid-nineteenth century.⁴³³ Even well into the twentieth century, the United States Children's Bureau's Obstetric Advisory Committee's 1927-1933 study found that most of the country's 7,537 maternal deaths were caused by puerperal sepsis due to "ill-judged or botched surgical interventions by physicians."⁴³⁴ In many cases, modern childbirth was not all that efficacious. These statements mirror the accusations of medical personnel criticizing *jieshengpo* in China. There seemed to be an ideal combination of sanitation and intervention that improved normal childbirth conditions; when birth attendants moved beyond that to more invasive procedures – whether they were old or new midwives or modern physicians – maternal and infant health was jeopardized.

In the early 1900s in the United States and Europe, a profession-wide move towards medical specialization began. Especially from the 1920s onward, more and more physicians began to focus on one area. Prior to the late nineteenth century, a self-proclaimed specialist was considered a quack or someone who was incompletely trained. This idea was abandoned as specialists gained more prestige. According to More, in 1928 general practitioners made up

⁴³² Ibid., 171.

⁴³³ Ibid., 56, 152.

⁴³⁴ More, *Restoring the Balance*, 154.

three-quarters of the profession, but by World War II more than half of physicians in the West considered themselves to be specialists.⁴³⁵ This is when the gynecologist/obstetrician began to take over the general practitioner's role as birth attendant. The American Board of Obstetrics and Gynecology formed in 1930 as the second specialty board in the United States (the first was Ophthalmology in 1917). It "immediately became important as a certifying agency of competence as a specialist for those physicians who passed the examinations."⁴³⁶ There was also an expansion of hospitals during this time and a move away from charity hospitals, which allowed women of other socioeconomic classes more hospital birthing options.⁴³⁷ Most OB/GYN physicians during this time were men, although more and more women continued to specialize in pediatrics and OB/GYN in the late nineteenth century.

Discrimination kept most American women physicians from participation in hospitalbased and specialty practices in the early twentieth century. It was difficult for women to get residencies and appointments at hospitals as hospitals gained professional importance for training physicians. Before WWI, hospitals in the United States were charity hospitals for chronically ill and impoverished people who could not afford private care in their homes. There were fewer than 200 hospitals nationwide in the 1870s. Around this time, hospitals started to become independent from almshouses, some privately owned by philanthropists or religious groups, and others owned by the physicians who operated them. People gained more trust in hospitals as medical advances provided cures rather than only care. By 1904, there were approximately 1,500 hospitals in the United States. Residencies grew as an important part of medical training, and medical schools started affiliating with hospitals. Johns Hopkins

⁴³⁵ Ibid.

⁴³⁶ Taylor, *History of the American Gynecological Society*, 32-33.

⁴³⁷ Leavitt and Numbers, eds., Sickness & Health in America, 176-77.

University was the premier medical school at this time and the first to establish a medical residency program.⁴³⁸ At this stage, residencies were few and generally unavailable to women. The first nurse training schools were founded in the 1870s. Prior to this, "attendants were drawn from the ranks of the almshouse inmates."⁴³⁹

American women also had strong connections with public health and preventive medicine. Public health and education were widely regarded as valid career paths for women physicians. According to many physicians, it was the duty of women physicians to teach public health. The Female Medical College of Pennsylvania (later the Women's Medical College of Pennsylvania, WMCP) established the first professorship of hygiene in the country in 1850, "thus acknowledging the woman physician's special responsibility for preventive medicine." These professors "increasingly emphasized the moral necessity of teaching hygiene rather than expanding the bacteriological study of infectious agents."440 In 1909, the American Medical Association established the Public Health Education Committee and urged women physicians to "take the initiative." They were instructed to educate the public by working with mothers' associations, women's clubs, and girls' schools and colleges to prevent disease and improve general hygiene. They held public lectures on various topics including infant and child health, nutrition, and hygiene; health during menstruation; and sexually transmitted diseases, as well as cold prevention, early cancer diagnosis, and tuberculosis, among others. Male physicians also participated in these lectures, but by 1913 there were twice as many women lecturers.

⁴³⁸ More, *Restoring the Balance*, 79-80, 107.

⁴³⁹ Ibid., 105-06.

⁴⁴⁰ Ibid., 79.

MEDICAL PROFESSIONALIZATION IN CHINA

We now return to the issue of professionalization, this time looking at China. In traditional China, Confucian learning emphasized "pure knowledge" of the Four Books and Five Classics, divorced from practical knowledge in such fields as medicine, science, or engineering. After the fall of the Republic in 1911, the new government sought to reform the educational system in favor of more practical and applied, or "modern," curricula, versus the traditional Confucian education system that focused on memorizing ancient Chinese texts. By the time the Nationalist government was established in 1927, the reformed educational system resembled an American version, "with an emphasis put on strengthening the pure and applied sciences vital to economic modernization."441 Chinese Nationalist leaders' desire for a modern education system and a "system of professions" was bolstered by the Rockefeller Foundation's China Medical Board and its wide-ranging plans for a new medical system in China.

However, medical professionals in late nineteenth-century China had a difficult time recruiting suitable nursing and midwifery students. Traditionally, as in Europe and the United States before the nineteenth century, medicine was not a very respectable profession, and nursing and midwifery even less so. Caring for sick people and handling bodily fluids and flesh was looked upon as dirty work. According to one medical missionary, "Until recent years our difficulty has been in securing those whom we considered to be suitable candidates for training. Such work was considered to be beneath the dignity of most", the "most" usually referring to literate young men and women from good families.⁴⁴² Therefore, in the early days, medical

⁴⁴¹ Ruth E.S. Hayhoe, "China's Higher Curricular Reform in Historical Perspective," *The China Quarterly*, no. 110 (1987): 203. ⁴⁴² W. Arthur Tatchell, "The Training of Male Nurses," *CMJ* 26, no. 5 (1912): 271.

missions got most of their students from affiliated mission schools and orphanages. Chinese Christian families were more eager to send their daughters to Western schools.

This situation began to change in the early twentieth century. By 1914, there were 657 officially registered medical students in China, not including nursing and midwifery students,

"and in many cases we have been told of large numbers of candidates for admission being rejected. While in some few [sic] schools the enrollment is artificially stimulated by the free tuition and board and lodging offered, it is fair to say that the practice of medicine is already being regarded by many students in strictly Chinese schools as a dignified occupation for which they would like to prepare themselves. ...The extent of the interest which the Chinese medical schools have aroused in the student class is, however, worth noting."⁴⁴³

Similarly, according to Shanghai physician Dr. S.M. Tao in 1934, "In professional education, medicine stands way ahead of any other professions for women at present."⁴⁴⁴ How did the profession gain status in China?

By mid-nineteenth century, physicians, barber-surgeons, and apothecaries in the United States and Europe had merged to form a relatively well-organized medical profession, with nurses and midwives in support roles.⁴⁴⁵ As we shall see, however, along with the physicians, journalists, lawyers, pharmacists, and dentists, midwives and nurses in China also actively carved out their own professions, complete with the organizational characteristics of the other professions.⁴⁴⁶ The reasons for this are varied. First, it was Westerners who introduced modern medicine into China in the mid-1800s, and by this time the organization of the medical profession in the West was already well established. Therefore, Western physicians carried and

⁴⁴³ Rockefeller Foundation, *Medicine in China*.

⁴⁴⁴ Tao, "Medical Education of Chinese Women," 73.

⁴⁴⁵ Abbot, *The System of Professions*.

⁴⁴⁶ Xu, Chinese Professionals.

applied their organizational structures directly to China. For example, the China Medical Missionary Association was founded in 1886 in Canton, and the organization immediately began to lobby for the restriction of traditional Chinese medical practitioners and old-style midwives, whom they viewed as charlatans and crooks, or even murderers. According to the early Western physicians in China, modern medicine was the only valid treatment for disease and illness. Eliminating competition and defining one's skill set is a crucial part of creating a profession.

DEVELOPMENT OF THE CHINESE MIDWIFERY PROFESSION

This does not explain why the Chinese midwives professionalized, while in the United States and Europe they were displaced by physicians. If China's modern medical model was Western, with nurses and midwives subordinate to and often displaced by physicians, why was this not the case in China? From the 1920s there was a deliberate attempt to create a new, respected midwifery profession in China. Western and Chinese modern physicians understood that there was no way for the very limited number of doctors to attend all births in China, so they developed programs that trained new midwives, *zhuchanshi*, and old-style midwives, *jieshengpo*, to help reduce the high maternal and infant mortality rates. The First National Midwifery School was the leader in the midwifery profession and the model for other schools. The trained OB/GYN physicians who ran FNMS like Marion Yang applied their knowledge of the medical field to the midwifery school and thus helped them to professionalize. Marion Yang understood that midwives needed legitimacy among the people. She believed that if they were seen as *professionals* who were attached to the Western medical institutions that were gaining confidence among the people, then they would eventually gain legitimacy. The women trained as *zhuchanshi* were young, unmarried, childless. Who would trust them with their labors and births if the midwives were not legitimated through professionalization? At the same time, because of a dearth of resources

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and personnel, China could not rely on highly trained nurses to deliver babies, as the Nurses' Association of China wished. The Nurses' Association of China had initially claimed sovereignty over childbirth as part of its own legitimizing campaign.

The dean of PUMC's School of Nursing, Gertrude Hodgman, complained that her "greatest challenge" was "alter[ing] the Chinese concept of nursing as an impossible profession for women."⁴⁴⁷ Nurse Hodgman would have done well to remember that nursing in Europe and the United States had gone through its own crisis to become a valid career choice for women. To help change the common perception of nurses, Hodgman traveled to middle schools throughout northern China to teach students and their families about the virtues of the nursing profession, as a means to "relieve human suffering and prevent disease."⁴⁴⁸ She noted that the "students were far more easily persuaded than their parents."⁴⁴⁹ In order to keep the standards high, the School of Nursing insisted on university status. In 1937, the Ministry of Education attempted to reorganize the school as a "*zhuanshou*" or special school in order to quickly increase the number of graduates. This would have lowered the entrance and curriculum requirements and decreased its status to that of a vocational/technical degree-granting institution. In the end, PUMC prevailed and was able to maintain its distinction as a high-level program whose goal was to provide graduates to enter positions of leadership in nursing and in public health.⁴⁵⁰

Yang recognized that Chinese medical schools lacked both time and resources to fully train skilled nurses like those who graduated from PUMC's nursing school. The Nurses' Association of China had issued a resolution "that the Nurses' Association of China cannot

⁴⁴⁷ Gertrude Hodgman, personal communication, as quoted in Bowers, *Western Medicine in a Chinese Palace*, 208.

⁴⁴⁸ Ibid.

⁴⁴⁹ Ibid.

⁴⁵⁰ Ibid., 209.

participate in any scheme which prepared to train non-nurses in the science of midwifery.^{••451} In response to this, Yang submitted an editorial to the *China Medical Journal* (hereafter CMJ) claiming that no industrialized nations held such high standards for their midwives. Holland, Denmark, and France all used midwives who were not nurses, with very good results. Furthermore, in England and the United States pregnant women were attended by physicians. By what logic could poor, backward China, whose births numbered 12 million per year, expect to achieve standards higher than those of Europe or the United States? According to European maternal and child health criteria, one midwife could safely attend 120 to 150 deliveries per year, and China would thus need 64,000 midwives to deliver the goal of at least 80 percent of all babies. It would be impossible to give 64,000 women high-level nursing training when China's high maternal and mortality rates called for immediate action. She pled for professional recognition of *midwives*, even those with minimal training, to help improve the safety of childbirth.⁴⁵² After all, as Yang stated, "Midwifery is one of the professions.^{**453}

Marion Yang and John Grant of PUMC discussed at length how to address the high infant and maternal mortality rates in China. In an autobiographical essay reflecting on her career, Marion Yang explained her thoughts on creating a midwife training program for China. Because in Chinese society the birth process was considered dirty, she was unsure how to recruit midwife students. She and Grant originally thought to accept women with elementary school educations and give them abbreviated basic training, perhaps for two to six months. However, Yang worried that these women would soon be lost to social and scientific advances, and that the career of these semi-trained midwives would soon die out. She decided to create a program that

⁴⁵¹ Quoted in Bullock, An American Transplant, 173.

⁴⁵² Marion Yang, "Letter to the Editor," *Chinese Medical Journal* 42 (1928): 554.

⁴⁵³ Marion Yang, "Report of the Training and Supervision for Midwives, 1928."

would accept women with high school educations and give them longer and more extensive training. Members of this new profession would be well-educated and well-trained, could keep up with advances in medicine, and could "stand on their own two feet" (*keyi liwen liang jiao* 可 以立稳两脚).⁴⁵⁴ These midwives – both new and old-style – were definitely subordinate to physicians. This is shown by the numerous regulations prohibiting midwives from using instruments like forceps; requiring that they call on a physician for difficult cases or if any real intervention, such as version (manually turning an infant in the womb from breech or other undesirable position), were required; and forbidding them from calling themselves "doctor" (*yisheng* 医生).

This brings me to the terminology used to describe and delineate the activities of the new midwives and the old-style midwives. *Jieshengpo* literally means "old woman who receives the birth." Note the "old woman" connotation. This term refers to a likely uneducated peasant woman with no official training, other than as an apprentice. *Zhuchanshi*, on the other hand, literally means "birth helper." The *shi* suffix is a term denoting a scholar, an educated person. The change has come about dramatically, from an uneducated old woman to a *scholar* delivering a child. Not incidentally, the modern word for nurse, *hushi*, also contains the *shi* suffix. This naming is an important characteristic of the new, modern, scientifically-trained *zhuchanshi*, separating them from the activities of the old-style *jieshengpo*.

⁴⁵⁴ Yang Chongrui (Marion Yang), "Wo De Zizhuan," in *Yang Chongrui Boshi: Danchen Bai Nian Ji Nian (Dr. Marion Yang: 100 Year Commemoration)*, ed. Yan Renying (Beijing: Beijing yike daxue, zhongguo xiehe yike daxue lianhe chubanshe, 1990), 147.

THE CHINA MEDICAL BOARD AND PEKING UNION MEDICAL COLLEGE

It is impossible to separate Chinese government policy from the Rockefeller Foundation and its China Medical Board. The CMB played a key role in professionalizing medicine both in the United States and abroad and was the primary architect of China's model hospital and medical school, Peking Union Medical College.⁴⁵⁵ The First National Midwifery School, the model institution of its kind in China, was affiliated with PUMC's departments of public health, nursing, and obstetrics and gynecology. With PUMC came important changes in the medical field in China. In fact, before PUMC, there was no medical profession in China. It was not legalized, institutionalized, or standardized. PUMC granted the first government-sanctioned medical diplomas in China. Its physicians and administrators promoted medical professionalism and opened careers for women.⁴⁵⁶

A case in point: PUMC actively discouraged the hiring of male nurses, who had been common in China before the 1920s, over female nurses. This decidedly American characteristic enforced a gender hierarchy at PUMC, like its role model Johns Hopkins University, whereby female nurses would be subordinate to primarily male physicians.⁴⁵⁷ Furthermore, the China Medical Board enforced a hierarchy of medical schools and itself acted as the archetype of medical training throughout China. The CMB classified the preexisting medical schools, colleges, and training programs in China according to the quality of their curricula, faculty and staff, and facilities. Most of the schools were deemed inadequate, even those run by Western missionaries. The Japanese schools were especially criticized. In addition, Johns Hopkins University Medical School was the American counterpart to PUMC. Dr. J. Whitridge Williams,

 ⁴⁵⁵ Browning, "Notes of Cases."
 ⁴⁵⁶ Jiang, "Cross-Cultural Philanthropy," 166-68.

⁴⁵⁷ Michelle Renshaw, "Accomodating the Chinese: The American Hospital in China, 1880-1920" (PhD dissertation, University of Adelaide, 2003).

Dean of the Johns Hopkins School of Medicine 1911-1923, was a key player in the development of the First National Midwifery School. Williams had widely lectured and published on the abhorrent state of maternal and child health in the United States (his *Williams Obstetrics* is still in print in its 22nd edition), and he started the first academic department of obstetrics in the United States at Johns Hopkins.

Furthermore, PUMC served as a training ground for some of the most influential public health personnel in China. C.C. Chen, a graduate of PUMC, was simultaneously appointed in 1936 the superintendent of both the Peking First Health Demonstration Station and the Dingxian Rural Health Station. J. Heng Liu, former director of PUMC hospital, was also Vice-minister of Health and later Director of the National Health Administration.⁴⁵⁸ Marion Yang, a PUMC obstetrics/gynecology graduate, was director of the First National Midwifery School from 1929 to 1936.

Perhaps most importantly, the China Medical Board and the PUMC graduates like those listed above advised the Nationalist government on local and national health policy. Dr. John Grant, Professor of Public Health at PUMC, stated in a letter to Dr. Victor Heiser of the Rockefeller Foundation's International Health Division that he was anxious to get his star OB/GYN physician Dr. Marion Yang entirely into government service.⁴⁵⁹ According to C.C. Chen, initial Guomindang support of health projects was minimal and the Ministry of Health was weak. Chiang Kai-shek had first given the Ministry of Health to "a warlord as a token of appreciation for his support of the party."⁴⁶⁰ However, party leaders were not interested in the Ministry, so the new warlord minister turned to PUMC to staff his agency and to help formulate

⁴⁵⁸ Liu Ruiheng was head of the Chinese Ministry of Health 1928-31 and the National Health Administration-Central Field Health Station 1931-37.

⁴⁵⁹ Grant, letter to Dr. Victor Heiser, 1926.

⁴⁶⁰ Chen, Liu, and Liang, "An Investigation on Dow Hospital in Peking (Beijing)," 61.

health policy. In fact, in the 1930s PUMC administrators grew concerned about Guomindang pressure on physicians to leave PUMC to go into government service. After PUMC graduate J. Heng Liu became Minister of Health, he eagerly "reach[ed] out for all of [PUMC's] men who can be diverted into Government service."⁴⁶¹ China Medical Board director Henry Houghton in 1937 expressed "fears about the pressure that is being put upon our senior Chinese staff members to leave here for the educational service of the Government in Central China."⁴⁶²

The CMB and John Grant were very involved in community health and helped to establish health projects in Dingxian and the First Health Demonstration Station in Beijing. The latter is especially important because it contained a considerable midwifery component. Many of the students and graduates from the First National Midwifery School worked there. Grant also placed several PUMC graduates in important positions. Liu and Grant "guided the establishment of new municipal and province-level health administrations, placing many former students in these agencies as well."⁴⁶³ Through these activities, the CMB and PUMC greatly influenced the Nationalist health administration and health policy. Furthermore, PUMC graduates and students were also crucial to the growth of the Chinese Medical Association and other professional organizations.

PROFESSIONAL ASSOCIATIONS

A key to improving the medical profession's status lies in the development of professional associations. Although women physicians in the United States professionalized early on, American midwives did not. Cultural ideas about gendered knowledge prevented midwives from becoming professional; midwives could only be women and, therefore, according to male

⁴⁶¹ Henry S. Houghton, letter to E.C. Lobenstein, October 11, 1937, folder 669, box 94, RG IV2B9, RAC.

⁴⁶² Ibid.

⁴⁶³ Chen, Liu, and Liang, "An Investigation on Dow Hospital in Beijing (Peking)," 61.

physicians, could not grasp the scientific childbirth methods that physicians could. According to Charlotte Borst, the reason physicians displaced midwifery in the United States is that the latter failed to professionalize, especially by establishing educational institutions.⁴⁶⁴ Magali Sarfatti Larson, in a study of the growth of professionalism, states that

"education plays a key role in the institutionalization and legitimation of a profession. Historically, instruction for many occupations has evolved from the relative informality of apprenticeships to formal training based on the standardization and codification of knowledge. ...Once established, this school-based education has then been the main support of a professional subculture. In addition, ... professional development has also needed to claim an exclusive body of knowledge. To then achieve a monopoly over practice, the profession needs to control both the 'production of knowledge and the production of producers."⁴⁶⁵

The apprentice-trained midwives in the United States did not qualify for such professionalization. They did not control the means of education, and they did not form strong professional organizations. By the 1920s and 1930s, physicians were already beginning to displace midwives in the birthing room, and women had long been excluded from the maledominated professional organizations. More recounts that "as late as 1929, according to the well-known Chicago obstetrician-gynecologist Bertha Van Hoosen, women 'were not regarded as eligible for membership' in the national obstetrical and gynecological societies."⁴⁶⁶ The American Gynecological Society, which was created in 1876, did not elect its first female member (Dr. Lillian K.P. Farrar) until 1921. The second was elected in 1971. Three more were elected in 1980. The official history of these two organizations, published in 1985, maintains that "the Society's slowness in incorporation of women into membership should change in the

⁴⁶⁴ Borst, *Catching Babies*.

⁴⁶⁵ Larson, *The Rise of Professionalism*.

⁴⁶⁶ More, Restoring the Balance, 49.

future, since one-third of present medical students are women and 50 percent of residents training in obstetrics and gynecology are women."⁴⁶⁷ Women in the United States as midwives and even as physicians were excluded from being fully accepted into their professions.

In China, the professional medical associations attempted to monopolize their power by drawing distinctions between educated medical personnel and uneducated quacks through licensing and membership restrictions. Governments backed these organizations because of the importance of public health and sanitation, especially during periods of epidemics. Chinese professional associations were sanctioned by and worked closely with the Republican government in legislating licensing and membership restrictions, and in public health and sanitation efforts.⁴⁶⁸ Furthermore, midwifery and nursing associations created forums for discussing and organizing around political and social issues, published journals that promoted their profession, and established and oversaw educational programs. The discussion of Chinese organizations can be supplemented with data from the national Chinese Medical Association and the Nurses' Association of China, both founded by Westerners but later taken over by Chinese physicians and nurses. These national groups served as models for the local ones, and by their association helped to improve the standing of midwifery and nursing.

Many graduates of PUMC became leaders of the Chinese Medical Association. This group was a merger of the Western-run China Medical Association, originally formed in 1886 as the Chinese Medical Missionary Association, and the Chinese-led National Medical Association of China. In 1932, these two organizations joined to form the Chinese Medical Association. By this time, most of its leaders and members were Chinese, either medical scientists or public health physicians, many trained at PUMC. Its membership grew to 1,700 members by 1935. In

⁴⁶⁷ Taylor, *History of the American Gynecological Society*, 28.

⁴⁶⁸ Rogaski, Hygienic Modernity, Yip, Health and National Reconstruction.

1928, Robert S.K. Lim was elected president, and the Association's emphasis began to transition from social to scientific issues. The leaders were very public minded, and the association began to influence the national health administration and its policies. They formed a committee on public health that was active in prevention of tuberculosis, venereal disease, and cholera, and in promoting maternal and child health. They also supported the central Ministry of Health in implementing health measures and creating criteria to evaluate municipal health administrations.

The Chinese Midwifery Association was established in the spring of 1933 by FNMS graduates with the goals of "undertaking research into the science and art of midwifery, the cultivation of friendship among our fellow workers, and the promotion and development of midwifery education."469 It was headquartered at the First National Midwifery School in Beiping. Membership included all midwives who had passed examination, either in China or abroad, and had been recommended by two or more members of the Association. Membership came in three different classes: 1.) Regular Members, who paid regular membership fees of \$6 per year, were eligible to make recommendations and attend meetings; 2.) Permanent Members, who had paid a lifetime membership fee of \$60, helped to promote interests of the Association, give advice, and "strengthen the foundation of the Association;"⁴⁷⁰ and 3.) Honorary Members, who were advisors to the Association and included some non-midwives. Its advisors were Drs. Marion Yang and Yang Baozhun. According to an FNMS annual report, the Association published a quarterly journal beginning in June 1933. Unfortunately, there was no other mention of this organization in any FNMS report issued after 1933, and I have been unable to locate any other information on the Association.

 ⁴⁶⁹ "Fifth Annual Report, FNMS," Appendix III: Outline of Organization of the Chinese Midwifery Association, viii.
 ⁴⁷⁰ Ibid

Local midwifery organizations could be very influential in improving the professional and social conditions of midwives, as well as furthering the cause of improving maternal and child health. As an example, the Guangzhou Midwifery Association was a well-organized institution with over 400 members by 1947. Their stated missions were to create and regulate midwifery examinations, establish fees, represent Association members in legal matters, help unemployed members find jobs, and generally improve the conditions of midwives.⁴⁷¹ This organization was affiliated with the Guangzhou Physicians' Association and worked with doctors and hospitals to help place midwives in both urban and rural settings. A professional affiliation such as this was invaluable in popularizing and promoting midwifery in Guangzhou. Its members published a magazine entitled Guangzhou MunicipalMidwifery Association Periodical (Guangzhoushi zhuchanshi gonghui tekan 广州市助产士公会特刊) that discussed new technologies and pharmaceuticals, methods to facilitate childbirth, and examinations and regulations. The magazine was also a forum for promoting *professional* midwives, creating a new arena for them apart from the old-fashioned *jieshengpo*. The Association's function of representing members in abortion cases and wrongful death lawsuits gave them official, legal

backing. Furthermore, the organization publicized and politicized midwives during public discussions of board member election disputes that were reported in the daily newspapers.⁴⁷²

By 1934, there were 1,883 registered midwives in China and 136 licensed midwifery schools to attend the more than 2 million births per year.⁴⁷³ This number was woefully inadequate, though according to contemporary woman physician S.M. Tao of the Woman's

⁴⁷¹ Xie Ruiyi, "Yi Zhounian Huiwu Baogao," *Guangzhou shi zhuchanshi gonghui tekan*, chuang kan hao (Guangzhou City Midwifery Association Periodical, inaugural issue) (1947).

⁴⁷² "Zhuchanshi Gonghui Jiufen An: Pang Fu'ai Zai Fa Shengming (Midwifery Association Dispute: Pang Fu'ai Issues Another Statement)," *Qianduo ribao*, Tuesday, September 16, 1947, "Guangzhoushi Zhuchanshi Gonghui Lishizhang Pang Fu'ai Zhongyao Shengming (Important Declaration of Guangzhou Midwifery Association Board Member Chief Pang Fu'ai)," *Daguangbao (Guangzhoubao)*, Saturday, September 13, 1947.

Christian Medical College, and *Chinese Medical Journal* editor Lee T'ao, the medical profession was the fastest growing and most welcoming professional field for young women.⁴⁷⁴ In 1933, there were 28 medical schools in China, and only two did not accept women: the Army Medical School in Nanjing and Aurora University College of Medicine, a French-run institution in Shanghai. (Interestingly, the Yunnan Army Medical College in Kunming did accept women and had eight female students in 1931.) Women were encouraged to go into the fields of public health, OB/GYN, and pediatrics. The emphasis on such courses is evident when we compare the number of hours required for each subject in women's colleges and coeducational institutions. For example, Hackett Medical College for Women in Guangzhou required 674 hours of obstetrics and gynecology, while the coeducational St. John's University College of Medicine in Shanghai only listed 96 such hours of instruction. Hackett's pediatrics curriculum was 252 hours versus 33 hours at St. John's.⁴⁷⁵

The professionalization process did not come without drawbacks. Female nurses and midwives were often underpaid and worked under difficult conditions, especially in the early years when they worked in mission hospitals.⁴⁷⁶ Even Chinese physicians in medical missions did not receive equal pay to Western physicians for doing the same job. Women medical professionals also had to juggle the triple burden of family member care, housework, and a professional career. In addition to being family caretakers, women bore the burden of being caretakers of the nation and the nation's future population. Furthermore, as Paul Bailey has illustrated, there was no linear progression from house bound Chinese woman to socially

⁴⁷⁴ T'ao, "Some Statistics on Medical Schools in China for 1932-1933," Tao, "Medical Education of Chinese Women."

⁴⁷⁵ Tao, "Medical Education of Chinese Women," 1034.

⁴⁷⁶ Rong Wangxi, "Jiu Shehui Hushi De Shenghuo" (The Life of a Nurse in the Old Days) in *Huaxian Wenshi Ziliao* (Huaxian Gazetteer), vol. 5, (Henan sheng, Huaxian: Zhengxie huaxian weiyuanhui wenshi ziliao yanjiu weiyuanhui bian, 1989): 100-03.

supported career woman. Several contemporaries disparaged women's "modern" schooling, asserting that if given Western-style education they would fail to fulfill their motherly and wifely duties. At least some of these new midwives and other new professionals had to contend with social ostracism for their choices.⁴⁷⁷ What prompted women to enter the profession?

BIOGRAPHICAL SKETCHES

One of the goals of this history is to uncover the voices of the midwives and the women who patronized them. Perhaps because physicians are perceived as more prestigious than midwives, they have received the most attention from biographers. In addition, English language sources for these women physicians are more readily available from the missions and Western universities that sponsored them. Some historians have written in English about the earliest Chinese female missionary physicians Kang Cheng (Ida Kahn康成 or甘介后) and Shi Meiyu (Mary Stone 石美玉),⁴⁷⁸ and there are a few biographies and reminiscences in Chinese on obstetrician/gynecologist physicians from the 1930s and 1940s, like Marion Yang and Lin Qiaozhi (Kha-t'i Lim, 林巧稚).⁴⁷⁹ The backgrounds of these women physicians were especially auspicious. They were raised by missionaries or Christian families and were given every opportunity for the best education.

The most well-known Western-trained Chinese physicians are Kang Cheng and Shi Meiyu, two Chinese Christian women who were raised by missionaries and attended mission schools in China. They both went on to study medicine at the University of Michigan and

⁴⁷⁷ Paul Bailey, "'Unharnessed Fillies': Discourse on the 'Modern' Female Student in Early Twentieth-Century China," in *Wu Sheng Zhi Sheng (lii): Zhongguo De Funu Yu Wenhua 1600-1950 (Voices Amid Silence (lii): Women and the Culture in Modern China 1600-1950)*, ed. Lo Jiu-jung and Lu Miaw-fen (Taibei shi: Zhongyang yanjiuyuan jindaishi yanjiusuo chuban, 2003): 327-57.

⁴⁷⁸ Shemo, "'An Army of Women.'"

⁴⁷⁹ Guo Jianyao, *Lin Qiaozhi: Zhongguo Jiechu Fuchanke Nu Yisheng (*Lin Qiaozhi: China's Outstanding Female Obstetrician/Gynecologist) (Hong Kong: Xin ya wenhua shiye youxian gongsi, 1990).

returned to establish medical mission work in Jiujiang in 1896. Kang and Shi were two of the earliest advocates of medical education for Chinese women. According to Connie Shemo in her study of these two women, they saw Chinese nurses as fulfilling two crucial goals: modernizing the nation through health and saving souls through Christ.⁴⁸⁰ Kang and Shi envisioned a new Chinese womanhood of educated women, some of whom would marry and reproduce more educated Christians, others who would devote themselves to public health work and evangelism controlled by "Chinese women medical professionals." Central to their mission was nurse training, which necessarily included midwifery education. They encouraged women to become nurses instead of physicians because the nurse training period was shorter and could more quickly satisfy China's desperate need for Western-trained medical personnel.

Kang and Shi had started their medical work in Jiujiang in 1896 with three students from the affiliated Jiujiang Mission School run by American Methodists. This school provided the primary source of nurses for Danforth Hospital. Their training was rudimentary at first, comprising working in the dispensary, filling prescriptions, attending patients, and reciting daily lessons."⁴⁸¹ Shi reported her first class of five graduates in 1909 from Jiujiang's Danforth Memorial Hospital, where she treated over 24,000 cases in her lifetime. Danforth also contained "an excellent school for the training of midwives."⁴⁸² In 1903, Kang moved to Nanchang to start her work there, and Shi opened Bethel Hospital (*Boteli yiyuan* 伯特利医院) with her partner Jennie Hughes in Shanghai in 1920. Shi eventually had over 200 students per year at Bethel in the attached nursing school and school of obstetrics (*hushi chanke xuexiao* 护士产科学校).⁴⁸³

⁴⁸⁰ Shemo, "'An Army of Women.'"

⁴⁸¹ Ibid., 159.

⁴⁸² Balme, China and Modern Medicine, 111.

⁴⁸³ Shemo, "'An Army of Women," 195, Shanghai boteli yiyuan hushi chanke xuexiao (Students of Bethel Schools of Nursing and Obstetrics), eds., *Boteli Niankan* (Bethel Annual), (Shanghai: Boteli yiyuan, 1936).

Bethel trained nurse-evangelists to return permanently to their hometowns to provide medical care and proselytize. Their training focused on public health and hygiene, and probably aseptic deliveries, and focused on bringing heatlh care to the masses. Nurses were to act as purveyors of modern medicine to provide care for the whole community. The nurses also held weekly public health meetings in Shanghai. Many of these, mainly on hygiene, sanitation, and vaccination, were directed at women who in turn could shape others' perceptions and eventually affect the state of health of the entire country.⁴⁸⁴

Other less well-known Chinese women physicians trained in the United States are Jin Yamei (Y. May King金韵梅) and Cao Liyun. Little information is available on these women, but we do know that they trained medical personnel in their hospitals. Jin Yamei was the adopted daughter of medical missionary Dr. Divie Bethune McCartee of Ningbo and the first Chinese female to graduate from an American medical school, the Women's Medical College of the New York Infirmary in 1885.⁴⁸⁵ After traveling for many years in the United States and Europe, and then working with the Reformed Church in Amoy, in 1907 she opened a nursing school and hospital at the East Gate in Tianjin City with a 20,000 tael grant from Viceroy Yuan Shikai. According to Peabody, "The Viceroy of Chili was anxious for her to start a medical school, but she said she could not do that but would start a hospital and training school for nurses. She began in an old Chinese house which was once used for a children's home."486 The hospital was called the Peiyang (Beiyang) Hospital for Women and Children, and the school was

⁴⁸⁴ Shemo, "'An Army of Women," 454.
⁴⁸⁵ Balme, *China and Modern Medicine*, Tao, "Medical Education of Chinese Women."

⁴⁸⁶ Francis W. Peabody, "Visit to Peiyang Hospital for Women and Children: Tientsin," 1914, folder 322, box 19, series 1, RG 4, RAC.

called a Chinese Medical College but was actually a nurse and midwife training school with a capacity of approximately 30 students.⁴⁸⁷

The head of the nursing school was a graduate of Guys Hospital in London. Dr. Anna Gloss wrote that although it was "called a Medical College, after the manner of the Chinese, ... it still does not attempt to give a full medical course."⁴⁸⁸ According to a 1914 visit by Francis Peabody of the China Medical Board, Dr. Jin had one assistant, Dr. Wang, a graduate of the women's medical college in Peking, and was expecting another graduate from that institution. The government supported the hospital. Peabody continued,

"With the centralization of the government and the consequent lessening of the income of the provincial government there has been a reduction in the sum of money. It now amounts to about \$12,000 (gold) given the hospital a year. To this is added, however the money obtained from fees for out calls and a small amount collected from the dispensary patients. Dr. Kin has rather close connections with the government officials and especially with Yuan Shih K'ai. This may account for the fact that she has been able to keep the hospital going and get money through rather troublesome times. She would be very glad to co-operate in any way or 'turn the whole property over to the Rockefeller Foundation."⁴⁸⁹

In 1932, she was listed as the only female honorary member of the Chinese Medical Association.⁴⁹⁰

Cao Liyun, the daughter of a rich Chinese Christian family from Suzhou, and whose father was a doctor, was educated in mission schools in China. She graduated from the Woman's Medical College of Philadelphia (WMCP) in 1911 and started work at the Friends'

⁴⁸⁷ Gloss, "Medical Education for Women in North China."

⁴⁸⁸ Ibid., 423.

⁴⁸⁹ Peabody, "Visit to Peiyang Hospital."

⁴⁹⁰ Chinese Medical Association, *The Chinese Medical Directory*, 3rd ed. (Shanghai: The Chinese Medical Association, 1932).

Mission Hospital of Nanjing. She taught at the affiliated Nanking Union Training School for Nurses (the Nanking Union Nurses' School), which graduated its first class of six nurses in 1912.⁴⁹¹ After treating the wife of the local health officer, Cao enlisted the help of the Nanjing Board of Health to open a Midwives' School in 1914 in which she trained 22 midwives. She also created public health exhibits and city sanitation projects. In 1917, at the urging of the health officer, a Tianjin native, she moved to Tianjin to assume superintendence of the Beiyang Women's Hospital, the only government-supported hospital for women in China at the time. According to her biographer, Mary H. McLean, she "came to be much sought after by the gentry, and by wealthy citizens, for her medical, surgical and obstetrical judgment and skill," using fees collected by the wealthy to fund her free service to the poor.⁴⁹²

Lin Qiaozhi came from a Christian family in Fujian and attended Peking Union Medical College after graduating from Amoy Girls' High School in 1921. In 1929 she was the first woman to win PUMC's Wenham prize awarded to the student with the highest standing throughout the five years of medical school and residency. She did postgraduate work in England and returned to PUMC to head the OB/GYN program. She later joined the Chinese Communist Party and became a member of the People's Committee.⁴⁹³

These were remarkable women who dedicated their lives to treating patients and furthering medical care throughout China, often at the expense of their personal lives. But what about the women and girls whose aspirations and opportunities were not as great? What prompted them to get an education and enter the medical field as midwives? The most difficult part of this project has been to try to unearth the stories of the midwives and their patients.

⁴⁹¹ Mary H. McLean, *Dr. Li Yuin Tsao: Called and Chosen and Faithful* (St. Louis, MO: Mary H. McLean, MD, 1925), 31.

⁴⁹² Ibid., 78.

⁴⁹³ Guo, Lin Qiaozhi.

Materials on women like this are very limited or nonexistent. Name lists from professional associations and training schools record birthplaces and dates of their members and students. School records and yearbooks, articles from professional journals, and an occasional short life story give us a glimpse into the lives of the midwives themselves. Finally, missionary hospital reports occasionally give statistical information about the women who patronized them. We can also make some inferences about the midwives based on information we have about their training programs.

The requirements to enter medical school were strenuous and therefore were open only to the most advantaged women. Admission requirements for the North China Union Medical College for Women in Beijing (established in 1908) included three years of English study. All coursework was in Mandarin, but students were expected to read English to keep up with the medical literature. It was a six-year course, with the first three consisting of lectures and clinical work at the Methodist and Presbyterian women's hospitals. In addition to the medical college, there were also two nearby boarding schools where girls could study Mandarin or make up for other educational deficiencies. In 1908 they had two students from two provinces, and in 1910 the school had at least six students from four provinces.⁴⁹⁴

In contrast, admission requirements for midwifery schools were not as stringent, allowing girls with less education to attend. For example, the Central Field Health Station (Central Field Health Station) Central Midwifery School in Nanjing curriculum was more easily accessible. Junior middle school graduates could take a three-year course, and primary school graduates could enroll in a six-month course in hygienic midwifery.⁴⁹⁵ Some schools, like the Central

⁴⁹⁴ Gloss, "Medical Education for Women in North China."

⁴⁹⁵ LON-HO, "Collaboration with the Government of China: First Report of the Central Field Health Station," C.H. 1195, (League of Nations Health Organization, 1934).

Field Health Station and the FNMS, also taught old-style midwives. In 1899 at Ningbo Hospital, Dr. Smyth's first midwifery class was comprised of "11 middle-aged women," presumably oldstyle midwives.⁴⁹⁶ Although the requirements for midwifery programs were not as arduous, even some of the more informal ones required previous schooling. Dr. Mabel C. Poulter began midwife training in 1908 at the Women's Hospital (established in 1901) in Fujing, near Fuzhou in Fujian province, with a class of three students. Dr. Poulter allowed only women who had gone through three years of nurse training to enroll in the midwifery program.⁴⁹⁷

What was the socioeconomic status of a typical *zhuchanshi* student? We can assume that many of them would have had similar backgrounds as the nursing students. According to Shemo, Kang Cheng's and Shi Meiyu's students at Danforth Memorial Hospital in Jiujiang were mainly girls from poor families who needed income to help support their families before they married. Requirements for the school in 1914 were that the girls be at least 20 years old, "sound physically, and Christians." In addition to the poor girls, there were also some daughters of officials. Those who were not Christians often did not finish their training. One nurse was the abused ex-wife of a rich Jiujiang businessman who divorced her because she was childless.⁴⁹⁸ Another girl, Ho Yin, was the eldest daughter from a poor Christian family across the river from Jiujiang. She had been betrothed at birth to a poor orphaned "ignorant country boy." After her father died, she helped to pay for his tuition along with that of her two younger brothers. Neither of these women had family support and had to make a living on their own. Other nurses and midwives may have had family support. The member lists for the Guangzhou Midwifery Association show a large number of women from Shunde (Cantonese *sundak*, 顺德), the same

⁴⁹⁶ Wong and Wu, *History of Chinese Medicine*, 370.

⁴⁹⁷ Ibid., 398.

⁴⁹⁸ Shemo, ""An Army of Women," 199.

district of silk weavers that Marjorie Topley and Janice Stockard researched in their studies of marriage resistance among silk weavers.⁴⁹⁹ These women were literal spinsters in that they often did not marry and instead lived together in same-sex communities. We can infer that the Shunde midwives were from communities that encouraged, or at least did not discourage, women from attending school and working outside the home. Furthermore, as the Chinese silk industry declined, many of the spinsters may have moved into midwifery. After all, the spinster and the midwife were similar in their respective asexuality, for it was uncommon for women of either profession to marry.

The women whom Kang Cheng and Shi Meiyu trained in their hospitals were more like early twentieth-century American public health nurses than the hospital nurses we see today. Many of them were from mission schools affiliated with their hospitals; their families were Christian. However, according to Shemo, a few non-Christian daughters of officials started but did not complete their training. They gave lectures on morals and methods of hygiene, delivered babies, and proselytized to their patients about the evils of grime and germs. Kang and Shi taught their nurses self-reliance, autonomy, and decision-making skills, and to refer to Western physicians only for difficult cases. In the 1910s, Shi had her graduates set up their own dispensaries. By this time, their nurses in Jiujiang had seen over 14,000 patients in the hospital, in dispensaries, and on home visits.⁵⁰⁰

Requirements for nursing school entrants at Peiyang Hospital in Tianjin, run by Jin Yamei, were that they be five feet tall, have unbound feet, and be able to write a 100-character essay in Chinese. The curricula included courses in Chinese, anatomy, physiology, and

⁴⁹⁹ Janice Stockard, *Daughters of the Canton Delta: Marriage Patterns and Economic Strategies in South China, 1860-1930* (Hong Kong: Hong Kong University Press, 1989), Marjorie Topley, "Marriage Resistance in Rural Kwangtung," in *Women in Chinese Society*, ed. Margery Wolf and Roxane Witke (Stanford: Stanford University Press, 1975): 67-88.

⁵⁰⁰ Shemo, ""An Army of Women," 98, 159.

pharmaceutics. According to Peabody, "Many of them get married [and stop practicing] but some few go into practice or study on in the hospital. ... Dr. [Jin] says that there is no difficulty about teaching men and girls medicine together. She always calls on a man to assist her in the performance of difficult operations."501

The employment possibilities for *zhuchanshi* were varied, unlike the traditional *jieshengpo*. They could work in a regular hospital, women's hospital, or dispensary. By 1947 the Guangzhou Midwifery Association had helped to place 20 of its member midwives in hospitals in and around Guangzhou.⁵⁰² They could have worked in rural and urban health demonstration stations that were being established throughout the country. Graduates of the advanced course of the First National Midwifery School could teach in other midwifery programs. As stated above, *zhuchanshi* could also fill government positions in the provincial and national public health administrations. Many of these women moved around from post to provincial post, whereas the old-style *jieshengpo* were firmly rooted in their local communities. For example, a graduate from Shandong of the First National Midwifery School in Beiping worked at the Beiping Municipal maternal and child health Bureau (Beiping shili gonganju baoying shiwusuo 北平市立公安局保婴事务所) for one year, then at the Nanjing Central Midwifery School (the Second National Midwifery School, Zhonghua di er zhuchan xuexiao + 华第二助产学校), then for the Fujian Provincial Nursing and Midwifery School, finally migrating to Guangdong to work for various posts in the Guangdong Provincial Public Health Administration. This is one way that childbirth became more impersonal with the advent of the *zhuchanshi*. The childbirth attendant was no longer a long-term member of her local community with its associated responsibilities, ties, and relationships.

 ⁵⁰¹ Peabody, "Visit to Peiyang Hospital."
 ⁵⁰² Xie, "Yi Zhounian Huiwu Baogao," 21.

The socioeconomic status of nurses and midwives was relatively low compared to other professions. In Shanghai in the 1930s, a trained nurse employed by the Shanghai Municipal Council earned 50-100 yuan per month, as compared with a senior engineer who made 300-500 yuan per month, or a typist whose salary was 50-60 yuan per month.⁵⁰³ A Minister in the Shanghai government at the same time made around 800 yuan per month, while branch staff made 60-180 yuan per month.⁵⁰⁴ Xu Xiaoqun has figured that Shanghai physicians could make between 300 and 3,000 yuan per month in the 1930s.⁵⁰⁵ We can assume that trained midwives would make approximately the same salary as a trained nurse. According to a survey of 230 families, the average monthly income among Shanghai textile workers was 31.877 yuan. A skilled worker spent on average 19.26 yuan per month on living expenses.⁵⁰⁶ A modern trained midwife in Shanghai, employed by the government, could have made enough money to have a relatively comfortable existence. The 17 midwives on staff at the FNMS in 1932-33 made a total of \$10,320, for an average individual annual salary of \$607. In comparison, the four physicians on staff made a total of \$7,680 (\$1,920/each).⁵⁰⁷

The patients of modern midwives came from various socioeconomic groups, though it is not always clear what events or ideas prompted them to patronize modern medicine. We can glean some information about their socioeconomic status from hospital records and reports. The early mission hospitals treated gentry women, as well as those from the poorest classes. Often only the poor would go to the free mission hospitals, but many medical missionaries wanted women physicians to proselytize to rich women who could in turn increase the missionaries'

⁵⁰³ Yun Qin, "Renshen De Weisheng Yu Taijiao (Hygiene and Fetal Education During Pregnancy)," *Dongfang Zazhi* (*Far Eastern Miscellany*) 34, no. 7 (1937): 257-60.

⁵⁰⁴ Ibid.

⁵⁰⁵ Xu, Chinese Professionals, 57.

⁵⁰⁶ Sheng Jun, "Index of Living Cost in Shanghai," (Shanghai: The National Tariff Commission, 1930).

⁵⁰⁷ "First National Midwifery School, Peiping," (Peiping: First National Midwifery School, 1932), folder 373, box 45, series 601, RG 1, RAC.

social standing in their community. The Canton Hospital was the first Western hospital in China, established in 1835 by Dr. Peter Parker. Chinese women began to patronize Canton Hospital's Western male physicians early on despite cultural taboos that limited male-female contact. In fact, almost 30 percent of the hospital's first 925 patients were women, mostly from the lower classes.⁵⁰⁸ Most of the women who patronized the hospital did so for non-intimate problems, however, as childbirth was still taken care of by midwives at home.⁵⁰⁹ While childbirth was not common at Canton Hospital, reproductive diseases had been treated there almost since its inception. After the Hackett Medical College for Women broke away of the Canton Hospital in 1902, women of all backgrounds patronized its affiliated hospital, the David Gregg Hospital for Women and Children. In 1915-1916, the hospital admitted 140 confinement cases.⁵¹⁰

Most baby deliveries by Jiujiang's Danforth Memorial Hospital patients were made at the patients' homes attended by nurses, with physicians attending the more difficult cases. Similarly, midwives from the First National Midwifery School-affiliated First Health Demonstration Station in Peking also attended women in their homes, except in abnormal or dangerous cases, which were referred to a hospital physician. In Nanchang, Kang Cheng aimed to educate nurses, what we would today call nurse-midwives, who would eventually replace old-style midwives and work primarily in patients' homes. Kang stated that because she had often been called on to "save women who had been nearly killed by the ignorant midwives,...if our

⁵⁰⁸ Tucker, "The Canton Hospital," 358.

⁵⁰⁹ Ibid., 360.

⁵¹⁰ "Bulletin of the Hackett Medical College for Women, the David Gregg Hospital for Women and Children, and the Julia M. Turner Training School for Nurses" (Canton, China: 1916-1917).

hospital cannot do a single thing but train our nurses to go out and do good midwifery we are doing a splendid piece of constructive work."⁵¹¹

The number of patients that modern midwives saw was very small. Especially in rural areas, women were reluctant to rely on young, unmarried (and therefore childless) women to attend their births. But the midwives did not give up. They made home visits to get acquainted with the patients, gave them checkups, and encouraged pregnant women to be attended by midwives at their births. According to one account from the Wuxing County Rural Clinic and Dispensary (*Wuxing xianli xiangcun zhenliaosuo*吴兴县立乡村诊疗所), the midwives on home visits gradually developed relationships with families by visiting them several times to gain their trust. They "talked slowly to convince" these women of the importance of prenatal care and aseptic birth.⁵¹² This approach must have worked. In Nanjing, the total number of births attended for free by trained midwives in 1930 was 22, and by 1934 that number had grown to 2,122. The number of prenatal checkups in 1930 was 70, and by 1934 it was 11,719. Postnatal checkups numbered 16 in 1930, and rose to 972 in 1934.⁵¹³

We have thus far focused our attention on the midwives themselves and discussed their legislation, regulation, and training programs. The other primary actors in these tranformations were the mothers and pregnant women themselves. During the Nationalist period we see new attention aimed at the mothers of the new nation. Literature on modern births and modern midwives, especially on *taijiao* (胎教), or fetal education, grew in popularity during this period. While Yang was working to spread modern obstetrical methods in order to lower the maternal and infant mortality rates nationwide, and midwifery was emerging as a profession, New Culture

⁵¹¹ Shemo, ""An Army of Women," 404.

⁵¹² Neizhengbu, Neizheng Nianjian, G234.

⁵¹³ Ibid., G27. It is probable that the number of prenatal visits outweighs the number of actual women seen, for most were seen more than once.

leaders penned treatises on the importance of healthy mothers to produce healthy babies, who in turn would help China grow into a strong nation.

CHAPTER FIVE. THE MOTHER AND THE MODERN: MATERNAL AND CHILD HEALTH IN REPUBLICAN PRINT MEDIA

Beginning in the early 1900s with the rapid rise of the popular press, maternal and child health became a common topic in women's and family magazines and public health publications. At the same time, issues of science and modernization were at the forefront of political and social conversations about China's future. This chapter explores ideas of modernization gleaned from the new print media with regard to pre- and postnatal care, childbirth, and the postpartum period. The pamphlets, handbooks, and articles on scientific reproduction shed light on these changing ideologies about maternal and child health and the role as social reproducers that the Chinese government and modernizers asked women to assume. This work shows how modernization discourse in the Chinese popular press of early twentieth-century China called upon women to utilize scientific prenatal care (*taijiao*) in order to have healthy babies. Furthermore, the literature on *taijiao* and child-care is part of a larger discourse on scientific modernization of childbirth. In this regard, I discuss modern midwifery techniques and training curricula, the public image of midwifery programs, and an analysis of the appeal of science and its relation to nation building.

There was no unified or regulated movement to promote maternal and child health in Republican China. Several different groups of people contributed to this movement: Westerners – medical personnel, social scientists, and religious evangelists – as well as nationalist Chinese modernizers and government officials, some of whom were trained in

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traditional Chinese and/or scientific medicine. This chapter looks at various types of publications on midwifery and maternal and child health, including local handbooks, government proclamations, popular treatises on prenatal care, newspaper inserts, magazine supplements, and popular stories about old-style childbirth practices meant to humor or frighten. Some were translations of works by Western authors, and others were originally published in Chinese. By using varied sources, we can get a clearer idea about popular, as well as privileged, notions of modern maternal and child health in early twentieth-century China. This literature that sprung from many different sources was perhaps more widespread than if it had come from a single institution. As Lee and Nathan and others have written, the urban reading public devoured popular literature, newspapers, bulletins, and fiction, and then passed along worn copies for use in less developed areas.⁵¹⁴ Storytellers related the information to the illiterate. Newspapers and journals exploded in number around the turn of the twentieth century. According to Britton, there were 15 reported periodicals in China, but by 1898 there were 60. By 1912, that number had grown to 487.⁵¹⁵ Information about science, modernity and nation building – including treatises on modern prenatal care and child-rearing methods - was readily available, especially in the cities. According to a 1935 study, of 345 magazines published by Shanghai Magazines Company (Shanghai zazhi gongsi上海杂志公司), 27 had titles related to "Medicine and Hygiene," while in 1936 the Life Publications Company (Shenghuo shudian 生活书店) had 13 titles on this subject, out of a total of 255.516

Women formed a new audience for the print culture that grew around the end of the Qing dynasty. As Barbara Mittler has examined, some Chinese newspapers and magazines catered to

⁵¹⁴ R.S. Britton, *The Chinese Periodical Press, 1800-1912* (Taipei: Chengwen, 1966), Lee, *Modern Canton*.

⁵¹⁵ Britton, The Chinese Periodical Press, 1800-1912, 127.

⁵¹⁶ Weindling, "Philanthropy and World Health."

a female readership, thus helping to define and describe these new readers.⁵¹⁷ These modern newspapers in China – aimed at larger audiences and filled with sometimes trivial news and advice - were a Western phenomenon. In fact, Shenbao, one of the most well-known Chinese newspapers, was founded in 1872 by Ernest Major, a British merchant. Mittler notes the parallels between the content of Western women's magazines and of those in China, namely what she calls the "three C's of the traditional female role: cooking, cleaning, caring."⁵¹⁸ A reading public was modern, and so was talking about women's issues. The very existence of magazines for women was, as Charlotte Beahan writes, "revolutionary," as previous literature for women such as the *Lienü zhuan* (Biographies of Exemplary Women 烈女传) did not bring news from the outside world.⁵¹⁹ Magazine covers often featured images of reading women. Mittler suggests that these new publications for and about women may have created a new readership: "It may have made them read (or at least be read to). This is all the more probable since the newspaper, as an alien medium in China, had the potential to create a new audience of newspaper readers."520 Although gentry women had been reading for centuries, these newspapers targeted lower-class women, along with merchants and peasants.⁵²¹ They sometimes used a pictorial format and either vernacular or a simplified form of *wenvan*, classical Chinese, in order to make the literature more accessible to a broader, less educated audience.

That said, however, the number of women who read (or were read) articles and advertisements about childbirth and child-rearing was a small but significant minority, though

⁵¹⁷ Barbara Mittler, A Newspaper for China? Power, Identity, and Change in Shanghai's News Media, 1872-1912 (Cambridge: Harvard University Asia Center, 2004). ⁵¹⁸ Ibid., 255.

⁵¹⁹ Charlotte L. Beahan, "Feminism and Nationalism in the Chinese Women's Press, 1902-1911," Modern China 1, no. 4 (1975): 379-416.

⁵²⁰ Mittler, A Newspaper for China?, 246.

⁵²¹ Frank Dikötter, Sex, Culture and Modernity in China: Medical Science and the Construction of Sexual Identities in the Early Republican Period (Hong Kong: Hong Kong University Press, 1995), Susan Mann, Precious Records: Women in China's Long Eighteenth Century (Stanford: Stanford University Press, 1997).

the rate was probably higher in urban areas. Rawski notes that late nineteenth-century female literacy is estimated at 1 to 10 percent, but we can assume that rose somewhat by the 1920s or 1930s with the increase in female education (see Chapter Two).⁵²² In addition, literacy rates for women varied greatly by region, and women's access to print materials on maternal and child health often depended upon their proximity to the clinic or midwifery school that published and/or distributed them. Most of these institutions were in or near urban areas, like the Chinese-run Nantao Christian Institute in Shanghai. Their weekly bulletin, published in Chinese and English and posted and distributed in their area, contained notices of Mothers' Clubs meetings, baby clinics, and child-rearing classes, as well as information on healthy modern living.

In literature such as this, women were called upon to help strengthen the race and build the nation, often as "mothers of citizens" (*guomin zhi mu* 国民之母). As Joan Judge has examined, reformers stressed the importance of education for women so they would in turn create and educate new citizens of China.⁵²³ I would also add that some modernizers in the 1910s and 1920s went beyond advocating nationalistic education for women. Li Hongzhang, Liang Qichao, Kang Youwei, Yuan Shikai, Sun Fo, and Chiang Kai-shek all at various times either advocated or tried to implement systematic education for *some* Chinese women. They wanted to create not only "mothers of citizens" but citizens in their own right who could help in nation-strengthening efforts outside the hearth and home. For example, as discussed in Chapters One and Two, in many instances gentry reformers, writers, and political figures contributed towards building women's hospitals and women's medical schools. Although their curricula nearly always included nationalist rhetoric, these women were trained to be active participants

⁵²² Evelyn S. Rawski, *Education and Popular Literacy in Ch'ing China* (Ann Arbor: The University of Michigan Press, 1979), 6-8.

⁵²³ Joan Judge, "Citizens or Mothers of Citizens? Gender and the Meaning of Modern Chinese Citizenship," in *Changing Meanings of Citizenship in Modern China*, ed. Merle Goldman and Elizabeth J. Perry (Cambridge, MA: Harvard University Press, 2002): 23-43.

outside the home in nation-building efforts. Furthermore, most women who went into public health or medical service did not marry, or stopped working once they did marry. As in the United States and Europe, married women in China did not normally pursue a profession. In fact, one of the requirements of most medical training schools, including midwifery programs, was that its students be single, and those who married while in training would be dismissed. The most famous Western-trained Chinese women physicians, like Marion Yang, Ida Kahn, and Mary Stone, never married, but dedicated their lives to serving others. It is beyond the scope of this project to try to uncover how these women – unnatural in the Confucian sense of being single and childless, yet revered because of their dedication to their nation – were viewed by others in Chinese society. This is an area for further exploration. What we do know is that sometimes reformers used the popular press to encourage women to fulfill roles other than those of traditional wife and mother, in some cases by entering the medical field.

BIOLOGICAL DETERMINISM IN THE REPUBLICAN PRESS

Scientific medicine created enormous social upheavals in early twentieth-century China. Many famous modernizers like Chen Duxiu, Lu Xun, and Hu Shi heralded science as the savior of the "sick man of Asia" and promised a linear progression towards modernity and its attendant prosperity and health for all.⁵²⁴ So dire was China's state of health that one of its most famous modernizers, Kang Youwei, envisioned a utopia in his treatise *Datong shu* (One World), completed in 1898. In this work on ending world suffering, he dedicated a large part to relieving the burdens of women. He called for limited contract marriages agreed upon by both parties, as well as a "human roots institution" to care for expectant and parturient women and their infants.

⁵²⁴ D.W.Y. Kwok, *Scientism in Chinese Thought, 1900-1950* (New Haven and London: Yale University Press, 1965).

Ono Kazuko's translation reads, "Because childbirth is a public act in which a mother, as heaven's surrogate, gives birth to a human being, the surroundings naturally have to be prepared in full by society."⁵²⁵ Pregnant women would enter this institution and receive prenatal care and education. After the birth, they would remain with the child there until it was weaned at three to six months, at which time the mothers would be honored for their great deed. The children would then be placed in a "child-rearing institution" until the age of six, when they entered primary school. The teachers would be honored for assuming the care and educational responsibilities of these children. This vision was progressive, indeed, but not feasible for a country ravaged by war and unstable governments. The closest thing to Kang Youwei's vision in China were the kindergartens established in 1930s Canton as part of the city's progressive Three-Year Plan.

Dikötter has explored in his works on race, eugenics, and sexuality in Republican China how, in the scientific medicine rubric, health is an individual concern.⁵²⁶ Instead of demonic spirits or evil humors acting upon a powerless person to cause disease, individual measures of sanitation and cleanliness could go a long way to prevent illness. Fatalism was replaced in part by individual or social control over one's health. Furthermore, scientific medicine emphasized a sharper delineation between the body and the environment. Disease could come from within the body and was in part dependent upon one's own actions. This is not too far removed from traditional Chinese medical ideals about balance or imbalance within the body engendering health or disease. TCM has a long history of maintaining an internal balance of yin and yang through ingesting foods and medicines. However, knowledge of anatomy and bodily functions

⁵²⁵ Ono Kazuko, *Chinese Women in a Century of Revolution, 1850-1950*, ed. Joshua A. Fogel (Stanford: Stanford University Press, 1989).

⁵²⁶ Dikötter, Sex, Culture and Modernity in China, and Imperfect Conceptions: Medical Knowledge, Birth Defects, and Eugenics in China (London: Hurst & Co., 1998).

in scientific terms presented an entirely different worldview. This is evidenced most clearly in anatomical depictions of the developing fetus in utero, x-rays of internal cancerous growths, and photographs of dissections of tumors removed from patients. One of the primary producers of such images was the *China Medical Journal*, a joint Chinese-Western publication of the China Medical Society affiliated with Peking Union Medical College. We will discuss these images and their effects later in this chapter.

Chinese notions about reproductive health institutionalized during the Song dynasty shifted in the twentieth century with the advent of scientific medicine. Song era reproductive health was based on an androgynous view of the body that corresponded to the cosmos. In the field of *fuke*, literally "women's medicine," blood and qi must be kept in harmony for good health and reproductive capabilities. Much of *fuke* dealt with regulating the menses and ensuring fertility.⁵²⁷ The rise of Neo-Confucianism during the Song period also reinforced women's social role as reproducers of the family and propagated cultural constructions of gender propriety. Furth and Bray have found that women alone were responsible for gestation and reproduction of male heirs. Song and later *fuke* texts focus on menstrual cycles and fertility, indicating women's important social roles as reproducers of the family.

Biology offered an explanation for the general inferiority of women. As many Western scholars have examined, the female body in scientific literature of the nineteenth and twentieth centuries is often presented as a deviant form of the male body.⁵²⁸ In fact, men were at the top of the evolutionary scale, while women and "savages" fell below the male ideal. Women's skulls were smaller; thus, they had less brain capacity than men. Women's bodies were smaller, and

⁵²⁷ See Furth, A Flourishing Yin, Wu, "Transmitted Secrets," and Bray, "A Deathly Disorder."

⁵²⁸ Elisabeth Fee, "Nineteenth-Century Craniology: The Study of the Female Skull," *Bulletin of the History of Medicine* 53, no. 3 (1979), Emily Martin, *The Woman in the Body: A Cultural Analysis of Reproduction* (Boston: Beacon Press, 1992), Stephanie A. Shields, "The Variability Hypothesis: The History of a Biological Model of Sex Differences in Intelligence," *Signs: Journal of Women and Culture in Society* 7 (1982).

therefore they had less life- and strength-giving blood, making them naturally weaker. Dikötter illustrates how this literature influenced Chinese scientific and popular writing in the Republican era. According to Gu Shi,

"... The body of man has been shaped for movement, whereas that of woman is made for reproduction. Man is dominated by action, woman by patience. Man has a tendency to go to extremes: he can become a genius, a psychotic or a moron. Women are generally more constant and are not subject to extreme changes. These are due to the structural differences which exist between male and female."529

Not only was biology held responsible for gender differences, but it was also the basis for social proscriptions. There was a widely held belief in telegony in China, brought from Europe and the United States, that a woman's previous sexual partners could affect her offspring with later partners. The semen was believed to remain in the woman's bloodstream and reappear again during pregnancy. Therefore, in order to improve the race or prevent racial degeneration, women should most certainly be virgins upon marriage because, after all, one could never know the true characteristics of a woman's previous lovers, or even whether a potential wife was being honest about her prior sexual experiences.

Scientific models of evolution and eugenics disrupted the Chinese public's views of society. As Dikötter states, "Human biology replaced Confucian philosophy as the epistemological foundation for social order."⁵³⁰ Evolutionary theories proposed infinite progress instead of the cyclical rise and fall of dynasties or the changing of the seasons. Widespread

⁵²⁹ Gu Shi, Rensheng Erbainian (Man May Live Two Hundred Years), 1st edition 1916 (Shanghai: Shangwu yinshuguan, 1929), as quoted in Dikötter, *Sex, Culture and Modernity in China*, 38-39. ⁵³⁰ Dikötter, *Sex, Culture and Modernity in China*, 9.

beliefs in the early twentieth century of the low physical and mental quality of the Chinese population, especially peasants, led to explorations of eugenics policies. These policies were never widely enacted, though there is a considerable amount of popular literature on the subject.⁵³¹ According to some modernizers like Kang Youwei, there was an urgent need to improve the racial makeup so that China could be a strong and modern nation. Dikötter showed that Chinese modernizers were most influenced by Herbert Spencer's theories of group evolution. Many Chinese saw the Chinese race and nation as running the risk of further degeneration or even extinction unless extreme measures were taken to improve the racial makeup. As in Nazi Germany, eugenics ideas were combined in China with a call of duty to the nation-state. Republican modernizers called upon women to fulfill their biological reproductive duties in order to strengthen the race and ultimately improve the nation. It was not only science that replaced Confucianism: another layer of duty to the nation – the nation-family – was added to women's reproductive responsibilities.

Even the Peking Union Medical College, through its First National Midwifery School, had a birth control and eugenics program called the Maternal Health Society. Its goals were "to increase individual happiness through economic, social, and eugenic improvements," to diminish social and personal misery, and "to avert danger of over-population of China."⁵³² Its first Five-Year Plan on Birth Control aimed to decrease unnecessary maternal deaths and to promote mental, physical, and spiritual social standards by way of literature distribution and counseling pregnant women. The literature on science and eugenics included exhortations, lessons, and instructions for women to assume the burden of improving the Chinese nation through healthy births and modern child-rearing. Theories of acquired inheritance, the belief that improvements

531 Ibid.

⁵³² T'ao, "Some Statistics on Medical Schools in China for 1932-1933."

to oneself could be passed on to one's offspring, were common as well. Educated and active women who were free from the tethers of bound feet would engender strong, healthy, educable offspring.

FETAL EDUCATION IN THE REPUBLICAN PRESS

Furthermore, the theory of *taijiao*, or prenatal care (also translated as "prenatal education"), was widespread. This idea claimed that the fetus was highly impressionable by outside forces. Pregnant women were advised to avoid strong emotions and horrific sights for fear of causing the fetus to be born with epilepsy or another malady. Frog and rabbit meat was to be avoided to prevent a colicky baby or one born with a harelip, respectively.⁵³³ Poetry and music, on the other hand, could engender peaceful and intelligent offspring. Ideas of *taijiao* have been around for centuries and were even mentioned in classical texts. For example, the Lienü Zhuan (Biographies of Exemplary Women), written during the Former Han dynasty (202 BCE-9 CE), explains the principles of *taijiao*: "A pregnant woman's eyes shall not see revolting colors, her ears shall not hear obscene sounds, her mouth shall not speak perverse words; this is *taijiao*."⁵³⁴ In addition, the *Liji* (Collection of Treatises on the Rules of Propriety and Ceremonial Usages) written during the Zhou dynasty elaborates on *taijiao* in the chapter *Neize* (The Pattern of the Family): "A pregnant woman when sleeping shall not sleep on her side, shall not sit askew, shall not slouch or stand askew, shall not eat unhealthy foods, nor eat food that is cut irregularly, nor sit in a crooked chair or at a crooked table."⁵³⁵ By doing these things, a woman would have a smart and handsome (and ideally male) child. The woman was held completely responsible for

⁵³³ The word for frog, *wa* (蛙), has the same pronunciation in Mandarin as the word for a baby's cry, *wa* (哇). ⁵³⁴"及其有娠, 目不见视恶色, 耳不听淫声, 口不出敖言, 能以胎教" from Scroll 1, "Mothers of Zhou," http://etext.lib.virginia.edu/chinese/lienu/browse/LienuTextTOC.html.

⁵³⁵"妇人任子,寝不侧,做不边,立不跸,不食邪味,不正不食,不正不坐" as quoted in Yun, 258.

the health of the fetus. If she bore a female child, or one with a disability, it was because she did not follow the *taijiao* restrictions and/or she had performed a bad deed or had had licentious or evil thoughts.

In her study of hygiene education and physical education, Sarah Stevens explains that Chinese modernizers justified schooling women in methods of *taijiao* for the sake of the nation. In a 1923 article on women's physical culture, Xie Siyan proffered that women "bear a great responsibility for childbirth and must understand proper reproductive health" and they must improve their "hygienic habits [in order to] ensure that their future children have a proper role model."⁵³⁶ Stevens focuses on the paternalistic and subordinating language in these articles that utilized women as "public wombs" to improve the race-nation.⁵³⁷ I am interested here not in the subjugation of women, but how *taijiao* developed from traditional beliefs – denounced by modernizers as superstitious – into a modern ideology based on scientific principles, in much the same way that the new *zhuchanshi* displaced the old-style midwives. For during the Republican era, a new and modern *taijiao* emerged distinct from the superstitious *taijiao* of the past. In this new *taijiao*, the fetus was still impressionable, but the effects were explained in medical and scientific terms. Traditional Chinese beliefs were justified by science.

For example, in an article on *taijiao* and hygiene during pregnancy, Yun Qin, along with her discussion on avoiding sex, spicy food, and hard work during pregnancy, also talks about the importance of environment on the fetus. Yun states that it is "very important for pregnant women to be careful to maintain an emotional balance, no matter the time or place, in order to

⁵³⁶ Xie Siyan, "The Question of Women's Physical Culture (*Nuzi Tiyu Wenti*)." *Ladies' Journal (Funu Zazhi)* 9, no. 7 (1923): 2-5, as cited in Sarah E. Stevens, "Making Female Sexuality in Republican China: Women's Bodies in the Discourses of Hygiene, Education, and Literature" (PhD dissertation, Indiana University, 2001), 89.

⁵³⁷ Also see Stevens, "Making Female Sexuality in Republican China," especially Chapter Two, pp. 70-75, "Fetal Education and the Public Womb."

give the fetus favorable emotional effects.⁵³⁸ She goes on to say that it is not only *taijiao* that makes a child strong or weak, bright or stupid, but that its influence is very important and should not be ignored. According to Yun, the evidence is quite clear: the offspring of loving and harmonious couples who pay attention to *taijiao* are simply smarter than the children of couples who do not have loving relationships and who do not practice *taijiao*.⁵³⁹ The idea here is that a loving and harmonious family life will keep the woman's extreme emotions in check; she will maintain emotional balance throughout pregnancy and thus will engender the same in her offspring. Yun goes on to explain the scientific basis for *taijiao*: "Sociological research has shown that when a person is happy his muscles become tensed, the heart beats rhythmically and excitedly, the blood circulates vigorously, and the appetite is stimulated."⁵⁴⁰ Sadness or worry causes the opposite, adverse effects. Blood vessels shrink, muscles wither, and appetites wane, all factors contributing to unhealthy fetuses.

Not everyone subscribed to the modern scientific notions of *taijiao*, however. Stevens notes that some writers of the period asserted that there is "absolutely no 'medical' base" to *taijiao*.⁵⁴¹ Furthermore, biologist Chen Jianshan dismissed *taijiao* as superstition in his 1930s writings on Mendelian theories of inheritance, and believed that children inherit their mother's nature (characteristics) "as the grass and trees receive the effects of the soil."⁵⁴² According to Chen, therefore, although the sounds and sights an expectant woman is exposed to do not affect the fetus, it is still important for mothers to care for themselves with a good diet and regular moderate exercise. Genetics and heredity are of utmost importance too. With good genes from

⁵³⁸Yun Qin, "Renshen de weisheng yu taijiao" (Hygiene and Fetal Education during Pregnancy), *Dongfang Zazhi* (Far Eastern Miscellany) 34, no. 7 (1937): 257-58.

⁵³⁹ Ibid.

⁵⁴⁰ Ibid., 259.

⁵⁴¹ Stevens, "Making Female Sexuality in Republican China," 71.

⁵⁴² Chen Jianshan, *Taijiao* (Fetal Education) (Shanghai: Shanghai Yinshuguan, 1925), 4.

both father and mother, combined with a healthy lifestyle, mothers are able to bear vigorous and intelligent children. The message here is the same as in traditional and Republican *taijiao* texts: the mother is responsible for the well-being of the fetus and infant. Although other women in her family, especially her mother-in-law, may have had considerable input, if something went wrong with the pregnancy or birth, the blame almost certainly rested upon the mother herself. She was also responsible, again with help from other female family members, for the children's upbringing.

Modern methods of child-rearing and family life were spread through the popular press. Susan Glosser has described You Huaigao's attempts to market milk in 1930s Shanghai. After attending Cornell's agricultural school, You returned to China and purchased a dairy farm. To market his milk, he published a weekly pamphlet entitled *Jiating xingqi* (Family Weekly 家庭星 期) that illustrated the modernity of consuming dairy products, and addressed other modern issues like home economics and "scientific" child care within a nuclear family.⁵⁴³ Like You Huaigao, other Chinese emulated and spread Western ideas about home economics and family life. Zhang Xiaohuai translated into Chinese a popular parenting book by Dr. Frank Howard Richardson, a prolific author and a specialist in child and family health. In his preface, Zhang wrote that sex, childbirth, and love for one's spouse and children are all natural and instinctual processes; however, the Chinese sages never wrote about these issues, so the people lack this knowledge. Youth in schools are taught sex education, but nothing on proper child-rearing, which is the culmination of sex and a crucial part of a harmonious society. Zhang goes on to say that "the capitalism and imperialism of Europe and the United States is already a curse on the

⁵⁴³ Susan Glosser, "The Business of Family: You Huaigao and the Commercialization of a May Fourth Ideal," *Republican China* 20, no. 2 (1995): 80-116.

weak nations of the East, but we can still more or less trust the results from their patient scientific research."⁵⁴⁴

ADVERTISING MODERN MOTHERHOOD

In addition to the books and articles devoted to having healthy children and a modern family life, there were also numerous advertisements for improving reproductive health that became widespread in the 1920s and 1930s. Many medicines, both foreign and Chinese, were aimed at women, especially their reproductive functions, like the ubiquitous Dr. Williams' Pink Pills for Pale People (marketed in 82 countries between 1890 and the 1930s), and medicines for infertility. Barbara Mittler examined the voice of the advertisements and their intended audiences and found that early ads for women's products were addressed to husbands.⁵⁴⁵ For example, in an advertisement for a fertility medicine, the husband addresses the reader: "After more than10 years of trying, [my wife] has not become pregnant," but after treatment with Dr. Shen's medicine, she gave birth to a son.⁵⁴⁶ Another treatment, for yeast infection, states that women with such an affliction are infertile, and again addresses the husband, "who is being told how to recognize certain symptoms of an incapacitating disease in his wife and what to do in case such symptoms appear."⁵⁴⁷ Mittler noted that after the turn of the twentieth century, such ads dealing with reproductive issues began to speak directly to women, for example the one advertising "the

⁵⁴⁴ Frank Howard Richardson MD, *Fumu Zhi Dao*, trans. Zhang Xiaohuai (Shenzhouguo guang she chuban, 1930), Zhang Xiaohuai, "Yi Zhe Xu (Translator's Preface)," in *Fumu Zhi Dao* (Shenzhou guo guang she chuban, 1930), 1-2. Thanks to Yang Mei for help in clarifying this passage.

⁵⁴⁵ Mittler, *A Newspaper for China*?, especially Chapter 4, "Fair-Sexing It," 246-311.

⁵⁴⁶ Shenbao 30.4.1877, as quoted in Mittler, 260.

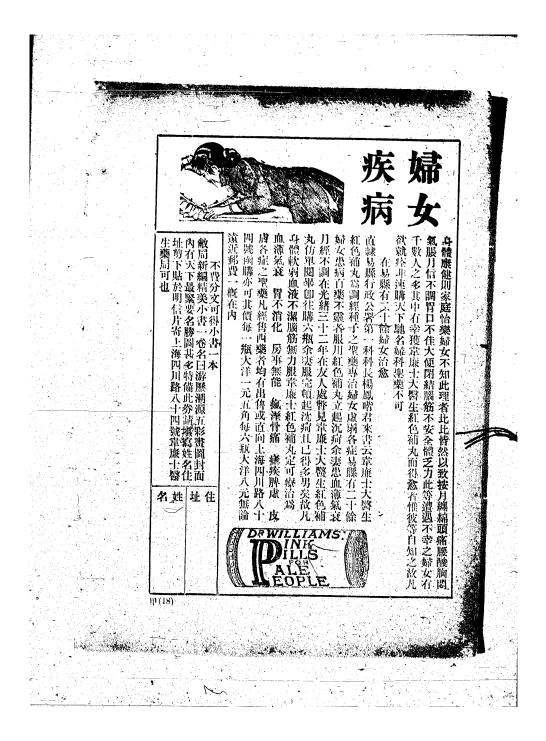
⁵⁴⁷ Mittler, 261.

best women's medicine of all time," which speaks to "all the women who want to have children."548

Many Republican ads utilized Western medical technology, like Dr. Williams' Pink Pills for Pale People (see Figure 5.1), or the Western product Hormotone, both for "women's illnesses" (funu jibing妇女疾病).549

⁵⁴⁸ Shenbao 23.5.1902, as quoted in Mittler, 262.
⁵⁴⁹ Funu zazhi 1.1.1915. Also see Stevens, "Making Female Sexuality in Republican China," 140-41.

Figure 5.1: Advertisement for Dr. Williams' Pink Pills for Pale People, Ladies' Journal (Funu zazhi) 1.1 1915



These drugs were American patent medicines that claimed to cure nervous headache and tremors, and amenorrhea and dysmenorrhea, respectively. Other advertisements were for Japanese products, like Chujoto, "the best medicine for female complaints in the world," which pictured a happy family as well as English transliterations of Japanese words (see Figure 5.2).⁵⁵⁰ In this image, a man is shown holding a happy baby while the woman looks on. This Japanese herbal supplement, to help restore women's hormonal balance and promote relaxation, is still being sold today. These products, which were widely marketed in the U.S. and abroad, are not so different from the advertisements in women's magazines in the twenty-first century that peddle pharmaceuticals to combat depression, obesity, allergies, and headaches.⁵⁵¹ In some newspapers, advertisements for fertility clinics appeared side-by-side with those for a syphilis specialist, illustrating the connection between sexually transmitted diseases and infertility. A couple could partake of one-stop shopping: the husbands went to one clinic to be treated for syphilis, while their wives, who had acquired the disease from their husbands and had subsequently become infertile, went next door to be treated not for the disease but for the inability to conceive.

⁵⁵⁰ Funu zazhi 1.1.1915.

⁵⁵¹ Thanks to Susan Sommers for this insight.

Figure 5.2: Advertisement for Japanese pharmaceutical Chujoto, Ladies' Journal (Funu zazhi 妇女杂志) 1.1 1915



MODERN IMAGES OF CHILDBIRTH

Modernity is a commodity to be produced and consumed. Its presentation is itself an aspect of modernity. According to Qin Shao, "After all, modernity is a fashion that requires validation – to be modern is to be seen, judged, consumed, and thus legitimized as modern by the public."⁵⁵² This is applicable both to modern obstetrics wards and obstetrical methods, as well as to the modern midwives with their fashionable bobbed hairdos.

One of the primary sources of scientific obstetrics (and gynecology) was the *China Medical Missionary Journal*. The history of this professional medical journal, affiliated with the Chinese Medical Association, deserves a separate research project in its own right. The CMJ was started in 1887 by medical missionaries in Canton. Initially, it was run solely by Western medical personnel and focused largely on social issues: marriage, death, and birth notices; arrivals and departures of medical men and women; problems of doing medical work in (backward, dirty, uncivilized, heathen) China. However, as it grew and became multicultural, with Chinese contributors and editors, its focus shifted by the 1900s to become a scientificminded publication. It published scientific articles on sanitation and public health, obstetrics and gynecology, cancers, nutrition, and all other manner of health-related topics. It also came to include columns for hospital reports and the Nurses' Association of China.

Part of the reason for the turn to science was the editorship of Dr. Robert S.K. Lim, who was elected president of the Chinese Medical Association in 1928. He drew heavily from Peking Union Medical College's research, scholarship, and its students, graduates, and faculty. By 1935 the association had 1,700 members and, according to contemporary C.C. Chen, began to "have a

⁵⁵² Qin Shao, *Culturing Modernity: The Nantong Model, 1890-1930* (Stanford: Stanford University Press, 2004).

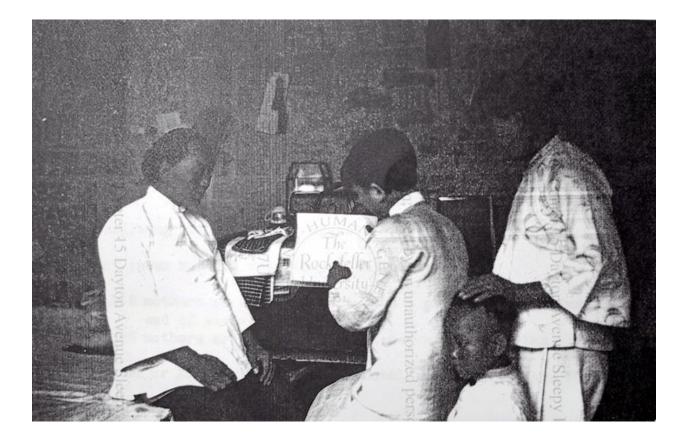
major impact on health policy and administration" in the Chinese government.⁵⁵³ During Lim's tenure, the CMJ devoted entire issues to public health and improving maternal and child health. In the process, it modernized and scientized these fields. The CMJ's readers included OB/GYN, nursing and midwifery students and faculty, and in many cases we can see the flow of information from the journal to the people (mainly women) on the street.

For in addition to the written word, by the 1930s China also had a growing cadre of newly trained midwives to instruct and inform Chinese women about the science of reproduction and child-rearing. Furthermore, women could choose to give birth in a hospital or a maternity institution, patronize physicians versed in the latest breakthroughs in reproductive technology, and attend meetings that taught the most up-to-date child-care methods. By the 1930s, the number of women enrolled in midwifery schools was very small. Most programs had fewer than 30 students in each class, and while the number of such schools was growing, modern midwifery still affected only a small minority of women. However, these women were a significant force in spreading ideas about modern childbirth, maternal and child health, and child-rearing.

Let us turn to the image of a First National Midwifery School graduate on a home visit (Figure 5.3).

⁵⁵³ Chen and Bunge, *Medicine in Rural China: A Personal Account*, 63.

Figure 5.3: "Health teacher showing the pregnant mother a picture of the foetus in utero."



Reproduced from "MCH-PH Visiting Report," Health Station Annual Report, 1931, folder 472, box 67, RG IV2B9, RAC, p. 100.

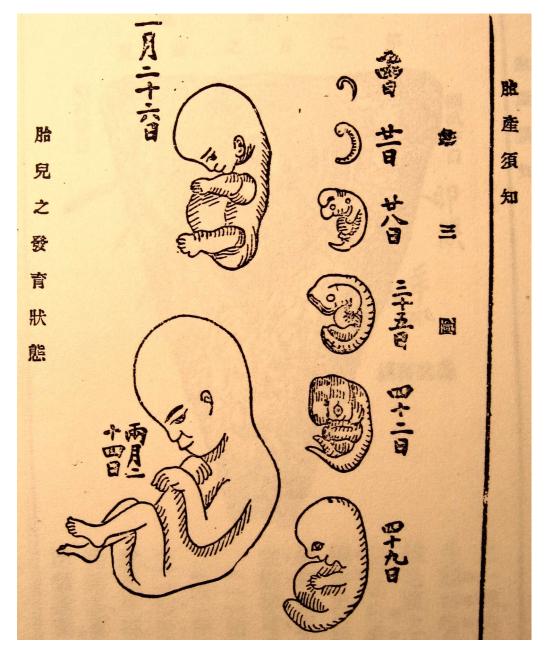
This photograph, taken from the *1931 Beijing Health Demonstration Station Annual Report*, is subtitled "Health teacher showing the pregnant mother a picture of the foetus in utero." These images are similar to illustrations from the CMJ, and also to those in nursing and midwifery classrooms at the FNMS and other medical schools. This mechanistic view of the female reproductive process is jarring when taken out of the classroom or the medical journal. In the photograph, the expectant mother is seeing what we are not meant to see – the inside of a body and an unborn fetus. Does she believe what the midwifery student is telling her? On one hand, the modern midwifery student looks professional and scientific enough in her white coat and hat. She has the images and documents to back up her stories about fetal development, childbirth, and child-care. On the other hand, the modern midwives were, for the most part, young, unmarried, and childless. What could they possibly know about birth? It is no wonder that some women, especially in rural areas, did not readily accept modern midwives. Furthermore, these images are, frankly, frightening, perhaps even moreso to the majority of Chinese women who had not been desensitized, as we have today, through physiology and dissection classes in school.

As we have seen in Chapter Two, by the Nationalist era, education for women was still not widespread. For those women who did attend school, biology and physiology were not standard subjects of study. In fact, most students – male or female – would not have received education in these subjects unless they were attending preparatory courses to enter medical school.⁵⁵⁴ Diagrams like these were found primarily in medical school textbooks like *Essentials of Obstetrics* and *Childbirth and Nursing* (See Figures 5.4 and 5.5).⁵⁵⁵ Such images are absent from the pamphlets, journals, and handbooks geared to the layperson, and remain absent from general knowledge even during the CCP era of barefoot doctors. The images here are arrayed in a controlled fashion – because we all know childbirth is anything but controllable – illustrating that science has won over the human body.⁵⁵⁶ Science has taken over the baby-making machinery, and here is its proof: we have captured the images for all to see.

⁵⁵⁴ Hsu, Ou Yang, and Lew, "Education of Women in China," Schneider, *Biology and Revolution*.

 ⁵⁵⁵ Lu and Mai, Shengchan Yu Yuying (Childbirth and Nursing), Su, Taichan Xuzhi (Essentials of Obstetrics).
 ⁵⁵⁶ Judith Farquhar, "For Your Reading Pleasure: Self-Health (Ziwo Baojian) Information in 1990s Beijing," Positions 9, no. 1 (2001): 105-30.

Figure 5.4: Fetal development



Reproduced from Su Yaochang. *Taichan Xuzhi (Essentials of Obstetrics)*. Ed. Yu Yunsiu. 6th ed., *Medical Series*. Shanghai: The Commercial Press, Ltd., 1929, p. 8.

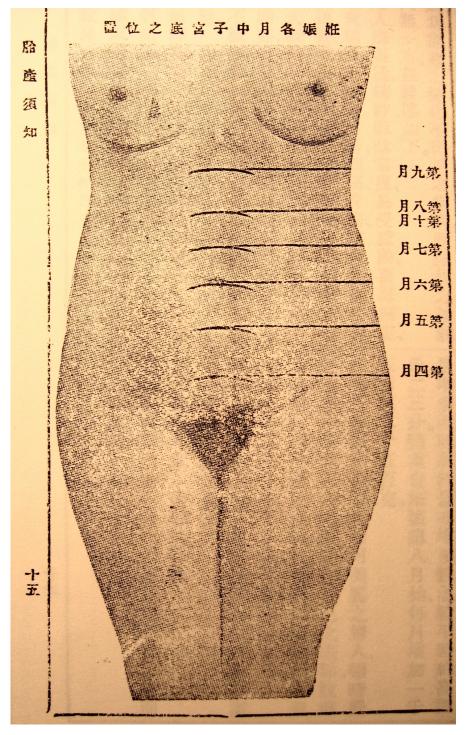


Figure 5.5: Monthly position of pregnant woman's uterus

Reproduced from Su Yaochang. *Taichan Xuzhi (Essentials of Obstetrics)*. Ed. Yu Yunsiu. 6th ed., *Medical Series*. Shanghai: The Commercial Press, Ltd., 1929, p. 15

After learning about the inner workings of her body, the expectant mother could choose (if she had the money and means) to give birth in a hospital, or at least be attended in her home by a modern midwife or physician. If she chose this route, she was likely subjected to a series of tests and measurements. Republican-era scientists and pseudo-scientists took measurements of every possible bodily characteristic that represented the physical and mental ideal of the strong, healthy, intelligent human. Male and female infants, children, and adults were not exempt from this scrutiny of cranium size, breast size, amount of body hair, body odors, height, weight, length of menstrual cycle, and so on. Babies in health clinics were weighed and measured, schoolchildren were subjected to extensive physical exams, and adults who patronized modern hospitals (or sometimes quack doctors) sometimes underwent embarrassing and uncomfortable tests, all in the name of nation building and modern scientific progress. Again, we encounter the idea of controlling the body, controlling the birth, by measuring, photographing, illustrating, describing, drawing.⁵⁵⁷

After the baby was born, the mother could choose to attend Well-Baby Clinics or Mothers' Club meetings. There were also mothers-in-law meetings, for they often had control over their daughters-in-law and were seen as more resistant to change. Figure 6 shows such a meeting with grandfather sitting in, perhaps to make sure nothing suspicious was underfoot in this gathering of women. These clubs, which were usually run by hospitals or midwifery or nursing schools, were intended to reduce the high infant mortality rate and to introduce septic and modern methods of child-care. In addition to baby weight checks, cursory physical examinations, and inoculations, the mother could learn how to care for her child. For example,

⁵⁵⁷ Farquhar, "For Your Reading Pleasure;" Sarah Franklin, "Postmodern Procreation: A Cultural Account of Assisted Reproduction," in *Conceiving the New World Order: The Global Politics of Reproduction*, eds. Faye D. Ginsburg and Rayna Rapp (Berkeley: University of California Press, 1995): 323-45, Martin, *The Woman in the Body*.

we can see in Figure 5.6 a clothesline with clean clothes, a baby bathtub, crib, bassinet, and diapering paraphernalia. Some of these organizations, like one at the Shanxi Hua County Public Health Station, distributed clean gauze with which to wrap the umbilical cord.⁵⁵⁸ (A common method of tetanus transmission was the mud or dung often used to pack the cord stump.) The Mothers' Club attached to the Cheeloo Medical School in Jinan, Shandong Province, intended to "[lay] the foundation stone for the child's habits."⁵⁵⁹ They gave demonstrations and lectures on the following topics: suitable food and clothing; daily routine at birth, 6 months, and 12 months; clean water and its appropriate vessels; infant skin care; infant formula preparation; fresh air and sunshine; dental hygiene; and development.

The Mother's Association in Nanjing (Nanking), financed and staffed by the Nanjing Public Health Bureau, taught weekly classes in mothercraft, including "marriage problems, child welfare, family budget and house-keeping, general hygiene, disease prevention, first aid, and other kindred subjects."⁵⁶⁰ The First National Midwifery School, under the Beiping Child Health Institute, began similar mothercraft classes in 1930 because "it is the mothers who can actually practice child health and it is the mothers who build toward 'school' and 'adult' health. Before the mothers can be expected to undertake this responsibility they must be 'health conscious."⁵⁶¹ The mothers were expected not only to learn modern methods of health and child care, but also to spread this knowledge in their communities. The FNMS also distributed informational leaflets on maternal and child health, with such titles as "Important Hints for Expected Mothers, Parturient Mothers and On the Care of Infants," "How to Maintain Health and Prevent Abnormalities for Antepartum, Partum, and Postpartum Mothers," and "Hints on Proper Food

⁵⁵⁸ Neizhengbu, Neizheng Nianjian.

⁵⁵⁹ Annie V. Scott MD, "Well Baby Clinic: Its Organization and Aim," *Chinese Medical Journal* 50 (1936): 620-22. ⁵⁶⁰ "Mother's Association in Nanking," *Chinese Medical Journal* 47 (1933): 418.

⁵⁶¹ LON-HO, "Collaboration with the Government of China."

During Pregnancy [with] Special Emphasis on Osteomalacia.³⁵⁶² In addition, the institute encouraged its graduates to form additional mothercraft classes in their own neighborhoods.



Figure 5.6: Mother's Club, Peking Health Demonstration Station

Reproduced from "Fourth Annual Report of the Peking Health Demonstration Station, 1929" folder 470, box 67, RG IV2B9, RAC, p. 26.

⁵⁶² "Fifth Annual Report, FNMS."

A similar organization in Changsha, Hunan, distributed fliers such as the one shown in Figure 5.7, titled "Good Methods for Protecting Newborns and Infants" (See Appendix C for a complete translation). It instructed mothers on caring for their infants' eyes and umbilical cord, gave advice on proper bathing, nursing, feeding, sleeping, environment (including fly elimination), and treating illness. It is hard to say which of these exhortations were overkill and which were necessary based on the environmental conditions at the time. For example, the flier describes how to clean the infants' eyes with a boric acid solution. Eye infections were rampant in 1920s China among children and adults. The routine use of silver nitrate eye drops at birth to prevent the transmission of eye diseases was just becoming common in China among trained midwives during this time. It also instructs caregivers to bathe the infant daily. In locations where a clean change of clothes is readily available, this is probably not necessary. Lesson number six tells parents to provide fresh air for their infant at all times regardless of season or time of day. This is contrary to traditional Chinese beliefs about illness being caused by drafts, and the lack of air circulation was one of the main complaints that Western medical personnel had about Chinese households: they were too stuffy and claustrophobic and thus ripe for breeding disease. Whether or not fresh air prevents disease or causes it is still up for debate.

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Figure 5.7: "Good Methods for Protecting Newborns and Infants"

Reproduced from Changsha Mother and Child Assistance Organization, folder 254, box 16, RG 4, RAC.

Articles about these clubs in Western publications like *The Chinese Medical Journal* were extremely patronizing: "Women are even in greater need of enlightenment on the duties and responsibilities of motherhood."⁵⁶³ These classes sought to teach Chinese women Western methods of child-care, while further burdening them with being solely responsible for the health of the fledgling Chinese nation. Chinese mothers got it from both ends: the Chinese modernizers and the Western public health and medical personnel.

CREATING A PUBLIC IMAGE

One of the most interesting and valuable types of sources that I located during my research is school publications. These included the school yearbook and, especially in the case of the First National Midwifery School, annual reports. Together these documents presented coherent, progressive, and thoroughly modern institutions. The yearbooks seem to be modeled on American high school or college yearbooks. They include individual and group photographs, a school anthem, and poems and stories written about the school. Some contain faculty and honor student profiles. Others include school curricula and/or photographs of their modern medical equipment and facilities. The 1940 yearbook of the Shanghai Zhongde Professional Midwifery School even contains one-act plays portraying the disagreements among family members over childbirth.

One such play, entitled "Old and New," by Zhu Xiaxian and Wang Yongwei, depicts a struggle between the generations.⁵⁶⁴ The elders are Grandfather (Lao Ye), Grandmother (Lao

⁵⁶³ "Mother's Association in Nanking."

⁵⁶⁴ Zhongde gaoji zhuchan zhuanye xuexiao weiyuanhui (Zhongde Professional Midwifery School Association), eds., *Zhongde gaoji zhuchan zhuanye xuexiao 15 zhounian jinian kan* (Zhongde Professional Midwifery School 15th Anniversary Commemorative Publication) (Shanghai, 1940).

Taitai), both in their fifties, and a 60-year-old midwife. The younger generation is portrayed by their three children in their twenties and a 22-year-old modern midwife. The play opens with the eldest brother's wife in labor off stage while Lao Ye and Lao Taitai pray at their family altar to Guanyin and send for Old Midwife Wang. Their eldest daughter, Wenxin, tells them that elder brother wants his wife to deliver in a hospital, not at home attended by a dirty (angzang肮脏) old-style midwife. There is much arguing between the daughters and their parents (evidenced by an overabundance of exclamation points in the text), and a great deal of worried looks, wringing of hands, and crying. Lao Taitai says, "The *jieshengpo* is old and experienced. How could a young girl know anything about childbirth?" Later, elder brother's wife is in prolonged labor and is too exhausted to even support herself. Younger daughter secretly calls for the new midwife next door, who performs a caesarean section and saves both mother and baby (a son). Another play, called "Renewal," has a similar plot with an auntie in labor and a daughter, a high school student, pleading with her mother to utilize a modern midwife: "Jieshengpo only know how to scam money. They know nothing about cleanliness or disinfection."565 One of the projects of the Beiping Child Health Institute and similar institutes sent public health nurses to local schools to collect vital statistics, administer health checkups, and give vaccinations, along with providing instruction in hygiene and sanitation. The student in this play would have attended such a class at her high school.

These plays serve as guides for students to deal with relatives and friends of patients in their care who are reluctant to utilize the new midwives' training. They also provide insight into the reasons behind the struggle between old and new midwives. The young ones could not possibly know anything about birth, while the old ones were dirty and backward. In these texts,

⁵⁶⁵ Ibid., 25-30.

we can see a struggle not just over childbirth, but also a battle between the identity of an old, traditional China versus a new and modern nation dependent on youth. Obviously, the midwife training schools were part of the latter.

Why did these schools publish such texts? Who was the intended audience? In her work on the Chinese women's press, Charlotte Beahan wrote that women's journals (and I would add school publications here too) "promoted a feeling of group identification and [provided] new alternatives to a physically and mentally confining life dictated by social custom."⁵⁶⁶ These women belonged to a new and progressive professional group. I argue that this group identity was crucial to the formation of a strong midwifery profession. Together with other members of their group, they did not see themselves as outsiders, but as an important part of new China. This type of group identity led to the creation of a professional identity, along with professional organizations that wielded political and social power (see Chapter Four).

Yearbooks were meant primarily for current students, but they were also good advertising. Yearbooks and annual reports were sent to prospective donors and school supporters, and were also used to increase enrollment. Both types of documents are advertisements for the services the midwifery schools perform, namely maternal and child health care and obstetrics. The schools very deliberately presented themselves as modern, professional establishments, most notably through the use of photographs, a modern, Western invention. One could argue that the midwives were Western-trained, and that they would necessarily use Western photography because it had been imported by Westerners and was present in their schools. However, the Tuqiang Advanced Midwife Training School, for example, was always an independent Chinese institution, albeit one that trained women to use Western scientific

⁵⁶⁶ Beahan, "Feminism and Nationalism," 380.

methods of obstetrics and maternal and child health. Tuqiang used photography in its yearbooks to carve out an image of itself and to present this *modern* image to the world.

The most striking image upon opening the 1936 yearbook of the Guangzhou Tuqiang Midwifery School is of the honor students. Clad in *qipao* or fur-collared jackets, with permed coiffures, plucked eyebrows, and makeup, these women are differ radically from the traditional *jieshengpo* (Figure 5.8). These midwives are young, attractive, educated, urbane women. They look confident, like they know what they are doing, though some look better suited to the pages of a fashion magazine than a delivery room. Nonetheless, the image these photographs portray is one of modernity. As an FNMS quarterly report stated, photographs such as these "show that an intelligent type of young Chinese woman is being attracted to the midwifery course."⁵⁶⁷

The Chinese have long enjoyed forming and joining group organizations. This is not a new phenomenon, but traditionally this type of cohort formation applied to males. What is different here is the way these groups, the graduating classes of midwives, present and represent themselves. These are *women* who are forming new public, social, professional, modern groups. The Tuqiang women, and the school, were attempting to create a modern, public image. The idea of a class photo in itself is a modern contrivance. The leaders of the First National Midwifery School no doubt wished to convey modernity to their first class of modern-trained old-style midwives with a class photo (Figure 5.9), just as the Tuqiang photos imbue the new graduates with a measure of respectability and cleanliness, even glamour. These images represent the rapid transformation of childbirth in China in just a few short decades.

⁵⁶⁷ Yang, "Control of Practising Midwives in China."

Figure 5.8: Tuqiang Advanced Midwifery School graduates

Reproduced from *Tuqiang gaodeng zhuchan xuexiao #50 jie biye tongxue lu* [图强高等助产 学校 #50 届毕业同学录], Guangzhou, 1936, p. 17-18.

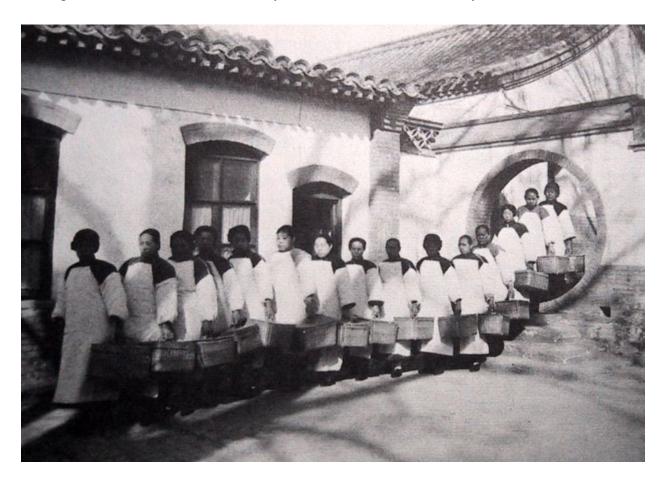


Figure 5.9: First National Midwifery School class of trained old-style midwives, ca. 1929

Reproduced from John Z. Bowers, *Western Medicine in a Chinese Palace: Peking Union Medical College, 1917-1951* (The Josiah Macy, Jr. Foundation, 1972).

Along with images of people, these school publications nearly always include photographs of the schools' very modern equipment and facilities. See, for example, Figure 5.10, a collage of the Guangzhou Municipal Hospital's Obstetrics and Gynecology Department from its 1935 Annual Report. What young woman considering the medical profession would not want to be associated with this prestigious facility with its modern equipment? Schools and hospitals like Tuqiang and the Guangzhou Municipal Hospital adopted the most modern and scientific Western medical practices and equipment as they became available. Figure 5.10 shows a modern birthing room, department head Dr. Huang, the obstetrics ward, a newborn examination, and an examination of a pregnant woman at the Guangzhou Municipal Hospital OB/GYN ward.

From the First National Midwifery School in Beijing, notice how all the equipment in Figure 5.11 is arrayed neatly on the sterile, white cloth-covered table. The kit includes a razor for episiotomy or other small incisions, a pair of scissors for cutting the umbilical cord, artery clamps in case of heavy bleeding, hypodermic needle and medicine dropper to administer medication to the mother and baby, sterile pads to clean or to halt bleeding, a scale to weigh the infant and possibly the placenta, and silver nitrate eye drops to prevent eye infections.

Although we have no photograph, imagine what the old-style midwife's equipment may have looked like, and how it may have been arranged. She most likely carried with her some special medicines, herbs, and charms, perhaps some rope or cloths. Most of her equipment was probably fashioned from whatever household utensils the family had: a pan of boiling water, a sharp knife. Dr. Marion Yang wrote in 1928 that in the past, the traditional *jieshengpo* "never furnished anything, only borrowing the following implements from the patients: 'House hold'

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[sic] scissor, a piece of 'color silk' and cotton, a pair of iron coal chopsticks, and an iron hook for abnormal cases."⁵⁶⁸ She certainly had no sterile table on which to work. The tools, if any, would have been placed on a table, the floor, or the *kang*, a type of platform bed heated from below with fire from the cooking stove. Again, as in the fetus illustrations, we see a flattening of the images – two-dimensional representations of three dimensions, laid out for all to see – for modern medicine to co-opt and control.

Which Chinese women chose to give birth on the dusty *kang* or in the sterile delivery room at the Guangzhou Municipal Hospital, and why? This question is difficult to answer. However, we do know that in China today, urban women overwhelmingly deliver in hospitals. The caesarean section rate in China by some estimates is as high as 70 percent.⁵⁶⁹ Furthermore, according to one report, 60 percent of women in Shanghai choose to give birth by caesarean section, citing fear of pain as the main reason.⁵⁷⁰ Medicalized childbirth attended by a *zhuchanshi* or physician has become the norm rather than the exception.

⁵⁶⁸ Yang, letter to Dr. John B. Grant(?).

⁵⁶⁹ Qian et al., "Evidence-Based Obstetrics."

⁵⁷⁰ "Easier Delivery," *Shanghai Star*, 11-11-2004. In Beijing in 2004, a caesarean birth cost 6,000 yuan, or US\$750, versus 2,400 yuan (US\$300) for a vaginal birth.



Figure 5.10: Guangzhou Municipal Hospital Report

Reproduced from the Written Report of the Guangzhou Municipal Hospital, 1935 (Guangzhou shi shili yiyuan baogao shu 广州市市立医院报告书) 1935.

Figure 5.11: "Visiting bag with equipment for prenatal and postnatal care, First National Midwifery Training School, Peking"



Reproduced from Mary Brown Bullock, *An American Transplant: The Rockefeller Foundation and Peking Union Medical College*, Berkeley: University of California Press, 1980, p. 177.

MODERN CURRICULA

The curricula that modern midwifery schools created and instituted were based on Western scientific principles of childbirth in which the mother's body was treated as a reproductive machine, and the pregnant body as ill or diseased. This critique of modern medicine creating a vision of the pregnant body as abnormal, diseased, a body to be controlled and manipulated, has been applied to modern obstetrics in the West by such scholars as Emily Martin and Sarah Franklin.⁵⁷¹ It is clear that such beliefs were adopted in midwifery school curricula in China, though it is unclear whether or how much the modern midwives altered their daily practices when treating their pregnant and parturient patients. Judging from some of the midwifery school yearbooks discussed above that contain writings by their students, the new midwives seem to have wholeheartedly adopted modern medical beliefs. These publications are necessarily polemical, as they are, after all, the products of modern midwifery schools.

The six-month advanced maternity course offered by the First National Midwifery School illustrates the focus on the scientific nature of childbirth. The 136 hours of coursework included anatomy and physiology of female reproductive organs, embryology, abnormal labors, hemorrhage, puerperal sepsis, pregnancy toxemia and eclampsia, heart disease, tuberculosis, the use of instruments, labor induction, caesarean section, reconstructive operations, use of drugs during pregnancy and labor, extrauterine pregnancy, twins and "monsters," antenatal care, urinalysis, and diseases of the newborn. A class in Chinese "character" was also included.

Topics of the six-month basic midwife course included pelvic deformity, hemorrhage, "fits" (possibly eclampsia?), swelling of legs and genitals, purulent genital discharge, abnormal presentation, retained placenta, fever, and "white leg" (perhaps a blood clot?). The books used

⁵⁷¹ Franklin, "Postmodern Procreation," Martin, The Woman in the Body.

were Evans' *Obstetrics, The_Reproductive System, Obstetrics for Nurses* by Phillips, and *Midwifery For Nurses* by Lyon. Antenatal topics included injuries sustained during birth, eye inflammation, and skin eruptions. The first month consisted of 20 hours of lectures per week, four hours per day. In the second and third months, students would receive one hour per day of lectures and demonstrations of labor cases in the hospital. The students would then go on outside delivery cases with the midwives. The fourth and fifth months were dedicated to conducting outside cases under supervision, as well as antenatal clinic training. In the sixth month, students attended lectures in obstetric pathology and pediatrics, pursue further antenatal work, and take final exams. The graduated midwives were not allowed to use instruments or do version unless the mother's life was in jeopardy and no other medical help was available.⁵⁷² There were no courses in psychology, bedside manner, grief counseling, pain management, or other means to make the birth more comfortable for the mother or her family members.

MODERN EQUIPMENT

A list of "technical equipment needed for a small maternity center" written by PUMC OB/GYN physician J. Preston Maxwell reads as follows:

"Sterilization

- Bramhall Deane, United States A, Sterilizing outfit with petroleum heating and No. 1 B
 Dressing Sterilizer
- Utensil sterilizers, No. 3, to be heated by petroleum

Instruments

- (a) Two sets of instruments for in and out use, consisting of:
 - Barnes' midwifery forceps with Simpson's handles and Neville Axis Traction

⁵⁷² J. Preston Maxwell, "Scheme for a Six Months' Course in Midwifery for Midwives in Training" (Peking Union Medical College, Beiping, 1926), folder 601, box 45, Series 371, RG 1, RAC.

- Simpson's straight perforator
- Sharp decapitating hook
- Barnes' craniotomy forceps
- Churchill's craniotomy forceps
- Braxton Hicks' cephalotribe
- Blunt hook and crochet
- Long curved scissors, 10 inch.
- Chapetier de Ribes' bag and introducer, 2 bags
- (b) Diagnostic instruments consisting of:
 - Martin's Pelvimeter, three
 - Williams' Pelvimeter, three
- (c) Minor instruments for labors in and out, as follows:
 - 4 rubber catheters
 - 4 metal female catheters, long
 - 12 pairs Rochester Carmault clams
 - 6 pairs blunt pointed scissors
 - needles
 - 3 needle holders
 - 12 sponge holding forceps
 - 4 pinch forceps with teeth

(d) Other instruments, as follows:

- Apparatus for infusion of saline
- Uterine packers, two

Maternity outfits

Cases, etc. for outside work. Two.

Teaching Apparatus

Phantome (Maison Matheiu, Paris)

Foetus, with compressible head

Female pelvis

Foetal head at term

Totals for Technical Equipment

Sterilizers	Approx.	\$1,200
Instruments		475
Outside cases		100
Teaching apparatus		200
		1,975
Carriage and customs 25 percent		494
Total		\$2,469 Mex

Plus books of \$200 and surgical equipment: delivery bed (\$600) and operating table and instruments (\$600), bringing the total cost to Mex\$3,869."⁵⁷³

The first part of this list reads like a torturer's dream: craniotomy forceps, perforator, decapitating hooks, curved scissors. These, of course, were most often used in cases where the infant had died in labor, for example when the mother's pelvis was too narrow to allow the infant passage, or in the case of "monsters." Narrow or deformed pelvis was a common cause of maternal and infant mortality due mainly to the lack of calcium and Vitamin D in Chinese diets. This situation could be more easily managed if caught early during prenatal visits so that a caesarean section could be scheduled. Many early medical missionaries recounted horrible tales of prolonged labor during which the infant had died and had to be decapitated and removed in pieces. Sometimes the *jieshengpo* would attempt such a removal, or in trying to speed things along pull too hard on the infant and end up retrieving a disembodied arm, or leg, or a head. This naturally caused great distress – not only psychologically – to the mother, as a decomposing infant in the vaginal canal is a sure incubator for septic infection. With a list like this, one

⁵⁷³ John B. Grant, letter to Victor Heiser, September 20, 1926.

wonders how a *jieshengpo* could have affected any type of labor and delivery given her "'house hold' scissor, piece of 'color silk' and cotton, pair of iron coal chopsticks, and iron hook."⁵⁷⁴

The newly minted modern midwives from the First National Midwifery School had to follow a delivery room and labor routine, a common curriculum issued from the National Midwifery Board and part of the more general regulations controlling midwifery education. As soon as labor commenced, the patient was to be assigned to a labor room and watched continuously by the assigned student. When labor pains were strong with a four-centimeter cervical dilation, the patient was transferred to the delivery room. Depending on whether or not this was the mother's first birth (primipara), she may have been able to walk around if certain conditions were met: "slight pain, membranes intact, head engaged," and a less than fourcentimeter cervical dilation. If the primipara or multipara experienced bleeding or membrane rupture, then she was to lie in bed. In addition, the parturient woman was not allowed any food after the first stage of labor. After the membranes ruptured, the midwife was to monitor the fetal heart every hour. The midwife was to perform an internal (rectal) and external exam upon admission to the labor room and then every two hours until delivery. The midwife or other deliverer was to soak her hands in a Lysol solution before the internal examination done every two hours and also every half-hour regardless of her activities. The first stage of labor was allowed to "go on indefinitely" provided the following conditions were met: "membranes intact, general condition satisfactory, foetal heart well heard, temperature under 37.4 C."⁵⁷⁵ If no progress had been made after two hours at the second stage of labor, or if the placenta had not been delivered a half-hour after delivery, then the attendant was to report the case to her supervisor or physician. After the baby was born, the midwife was to clean its mouth with gauze

⁵⁷⁴ Yang, letter to Dr. John B. Grant(?).

⁵⁷⁵ "Regulations of the First National Midwifery School."

and add one drop of silver nitrate 1% in each eye as soon as the cord was tied, then give baby a routine bath. The baby's name was to be attached to the right wrist and transferred to the nursery where the baby would then be weighed, measured, and recorded.

The ward routine was similar. All patients had to give a urine specimen, have their temperatures and blood pressure readings taken and their diets adjusted. Cases with skin lesions, a respiratory illness, or sexually transmitted disease were isolated from the other patients. All cases examined outside (presumably by an old-style midwife) also had to be isolated. Clothing was furnished by the maternity department, and the patients' own clothing was sent back home. Although patients could walk around in the courtyard, they were not allowed to leave the hospital grounds. The regulations also stipulated very detailed methods of patient and infant examination in the clinic and hospital.⁵⁷⁶

Modern images of childbirth, midwives, and midwifery schools as put forth in the Republican era press served to both create new methods of childbirth and maternal and child health, as well as reflect rapidly occurring changes in these fields. Scientific medicine attempts to mechanize and control the human body and its functions, which may be considered a form of cultural imperialism. Several scholars have questioned the assumed intrinsic goodness of Western medicine and looked at the degrees of contestation and syncretism between colonizers and colonized.⁵⁷⁷ Andrews and Wu have expanded these theories to China.⁵⁷⁸ For instance, the ineffectiveness of some nineteenth- and early twentieth-century medicine may have hindered its acceptance in China, such as the English physician Benjamin Hobson's ice water douches to

⁵⁷⁶ Ibid.

⁵⁷⁷ Arnold, *Colonizing the Body*, Cunningham and Andrews, eds., *Western Medicine as Contested Knowledge*, Curtin, *Disease and Empire*, Pyenson, *Cultural Imperialism and Exact Sciences*.

⁵⁷⁸ Bridie Andrews, "Judging Western Medicine by Chinese Values: Zhang Xichun and His Work," paper presented at the Association for Asian Studies Annual Meeting, Chicago, March 22-25, 2001, Wu, "Introducing the Uterus to China."

relieve pregnancy discomfort. Furthermore, much Western obstetrics was counterintuitive to Chinese traditional cultural norms and ideas about the body and health, such as the Chinese emphasis on avoiding cold water during pregnancy.⁵⁷⁹

New technologies were (and still are) used to explain racial and cultural differences in biological instead of social terms, "endow[ing] medical authorities and government with greater powers of intervention in the regulation of reproduction."⁵⁸⁰ Dikötter looked at how social problems in China are attributed to scientific causes, namely the poor quality of lower class and minority groups.⁵⁸¹ Anagnost showed that these beliefs are still prevalent in China today.⁵⁸² This focus on biological explanations moves the responsibility of China's development and modernization from the state onto the people. The irrefutability of science in the Republican era reinforced racial, cultural, and gender stereotypes.

In holding biology as the embodiment of physical and mental worth or deviance, and the physical body as the site of technological change, differing perceptions of the body, sexuality, and reproduction emerge. These new technologies and perceptions have led many scholars to explore the social framework on which scientific language and culture is based. Whereas in the past, "nature" was the moral and ethical norm, in Republican China science and technology began to take on that role and were often considered unassailable and irrefutable. However, scholars recently have begun to deconstruct the way biological processes are portrayed, not in Republican China per se, but in the West, uncovering cultural biases that often reveal gender and class prejudices. Emily Martin has paved the way in this field with her analysis of the

⁵⁷⁹ Wu, "Introducing the Uterus to China."

⁵⁸⁰ Dikötter, Frank, "Reading the Body: Genetic Knowledge and Social Marginalization in the People's Republic of China." *China Information* 13.2/3 (1998): 1-99.

⁵⁸¹ Dikötter, Sex, Culture and Modernity in China and Imperfect Conceptions.

⁵⁸² Ann Anagnost, "A Surfeit of Bodies: Population and the Rationality of the State in Post-Mao China," in *Conceiving the New World Order: The Global Politics of Reproduction*, ed. Faye D. Ginsburg and Rayna Rapp (Berkeley: University of California Press, 1995): 22-41.

"romance" of the egg and the sperm.⁵⁸³ She shows how biological processes are endowed with gendered characteristics, with slower or passive elements endowed with feminine qualities, and masculine qualities ascribed to faster or stronger components. In addition, active characteristics of the feminine elements were downplayed, while the passive parts of the masculine segments were highlighted. In early twentieth-century China, bodily functions and elements also had gendered anthropomorphic characteristics, taken in part from the patriarchal scientific medicine in the West, and also from China's traditional patriarchal views of passive women and active men.⁵⁸⁴ As biology became more important in discourses of health and the body, the paradigms of reproduction and fertility shifted, while women's social roles as reproducers for the family were overlaid with responsibilities to the nation-state.

⁵⁸³ Martin, *The Woman in the Body*.

⁵⁸⁴ See Dikötter, Sex, Culture and Modernity in China.

CONCLUSION

Childbirth in China underwent remarkable transformations in the early twentieth century. The development of modern midwifery was a larger part of the modernizing movement in the Republican and especially the Nationalist eras. State control over birth is part of the modernizing agenda in any locale, and in China there was a definite move towards state-run midwifery after 1911. By the Nanjing Decade, modern midwifery was an integral part of improving China's health, and national midwifery schools and midwife examinations and regulations were firmly in place. The First National Midwifery School, under the newly formed Ministries of Health and of Education, was the national model for all other midwife training programs. State-run provincial and municipal midwifery schools followed, and private schools also flourished in the 1930s. The belief in science, in this case modern medicine, to cure China's ills was also prevalent among modernizing intellectuals. Popular publications devoted to public health sprung up in urban areas. Women's magazines exhorted their readers to utilize modern methods of childbirth and child rearing in order to save the nation.

Philanthropy was extremely important in these improvements to public health. Missionaries, local gentry, and warlords first contributed to bettering the maternal and child health of China's citizens by donating funds to build hospitals and clinics. Afterwards, the Nationalist government welcomed assistance from the Rockefeller Foundation's China Medical Board and International Health Division in the creation of the First National Midwifery School and other midwife training programs around the country. Instead of imposing a hegemonic

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Western medical model, Dr. Marion Yang was able to fine-tune her national midwifery program to best suit China's needs. The relationship between the Guomindang administration, the Rockefeller Foundation, and Peking Union Medical College was intricately connected, as personnel trained at PUMC with Rockefeller money often held Chinese government posts. However, this blending of Western technology with Chinese needs, and the relationships between all three organizations, led to a particularly successful national midwifery program. This result was not necessarily imperialistic, as Yang worked within the system to adjust training and supply to China's particular needs. The point is, maternal and infant mortality rates in areas served by Yang's midwives were dramatically lowered. Furthermore, a complete Western model was not adopted, as Chinese midwives remained the primary birth assistants in China, in contrast to American midwives' displacement by male physicians in the same period.

The roles of both the midwives and the patients were altered. Women remained the primary birth providers in China, although the organizational structure of midwives changed. Traditional *jieshengpo* received no formal training and were rarely, if ever, regulated. They had no one to oversee their work. The development of modern midwifery in China, however, was part of an overall restructuring of health care, with modern physicians in the top echelon, and members of sub-fields like nursing and midwifery decidedly subordinate. Like *jieshengpo*, *zhuchanshi* probably had quite a bit of autonomy in their practices. They were not often supervised by physicians, though they had to keep records of their activities and report to their supervisors. They also had to submit to examinations and registration in order to practice midwifery. The professionalization of midwifery gave these women the means to enter social, economic, and political arenas. They could contribute to the modernization of the new China.

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often moved around for jobs or took government posts. *Jieshengpo*, although of low social status, had carried out important social duties regarding birth rituals. The role of the local community midwife eventually disappeared and was replaced by a modern professional located in a hospital. Furthermore, the *jieshengpo* were responsible for only a short period in the mother's and infant's lives, while probably remaining an important part of their social life. The *zhuchanshi*, however, extended their control to encompass the period from conception to birth and beyond, while their broader community role diminished. The role of the patients, too, underwent important changes. Women had primarily been reproducers of their families, with their importance attached to carrying on the family name. In the twentieth century, women also became important as reproducers of the nation. Their burden as reproducers doubled to include supplying the state with the next healthy, intelligent generations.

It is useful to compare China's situation with that of the United States, because much of China's medical modernization came from America. India also provides an important comparison, because both China and India experienced varying degrees of colonial medicine. In the United States, male physician-assisted births rapidly became the norm beginning in the early 1900s and extending to the 1970s, when the feminist movement to regain control of birth began. In China and other developing countries like India, midwives remained the primary birth assistants, whereas in the United States male physicians increasingly took over that role. On first glance, we may conclude that the reason for the difference is that gender distinctions in China and India are more traditionally-based and more resistant to change. On the other hand, specific circumstances in these developing countries may have created this difference. After all, China in the early twentieth century did not have the resources or the manpower to train enough physicians to attend all births. *Jieshengpo* were re-trained temporarily, only until enough *zhuchanshi* could be produced, so it was only out of necessity that women remained the primary birth attendants. On closer inspection, however, worldwide trends suggest that the period of male physician-dominate childbirth in the United States was an anomaly. In the United States, China, and India, the field of medicine is becoming increasingly feminized, and a growing proportion of obstetricians/gynecologists are women. As hospital births become more common in China and India, especially in urban areas, women physicians are stepping in to replace the role of traditional midwives. We see the same trends in the United States, with female ob/gyn physicians (and midwives) replacing male physicians as birth attendants.⁵⁸⁵

In comparison with the Rockefeller Foundation's efforts in other countries, we see that the Chinese situation was unique.⁵⁸⁶ The Rockefeller Foundation's International Health Division contributed to public health initiatives on every continent. They focused almost exclusively on the control of infectious diseases like the hookworm eradication campaign in the American South and malaria control in Latin America. However, the International Health Division's, and especially the China Medical Board's, efforts in China included broader public health goals, such as the creation of the Peking Union Medical College, rural reconstruction programs, and funding maternal and child health efforts. Much of this difference was due to the planners of the China programs, like PUMC's John Grant and Marion Yang, important leaders within PUMC, with connections to the Guomindang government and Rockefeller money. Furthermore, John D. Rockefeller Jr. had a particular interest in China.⁵⁸⁷

⁵⁸⁵ According to surveys by the American College of Obstetricians and Gynecologists, the proportion of female ob/gyns increased from 21% in 1991 to 39% in 2003. ACOG, "Profile of Ob/Gyn Practice," http://www.acog.org/from home/departments/practice/ProfileofOb-gynPractice1991-2003.pdf.

⁵⁸⁶ Socrates Litsios, "The Rockefeller Foundation's 'Other' Approach to Public Health," *Bulletin of the History of Medicine* 79, No. 2 (2005): 295-318.

⁵⁸⁷ See Mary Brown Bullock, *An American Transplant*, for a more detailed explanation of the Rockefeller Foundation's efforts in China.

My research ends in 1937 at the Japanese invasion of China, and it is beyond the scope of this dissertation to explore in detail the difficult period between 1937 and 1949. In addition to the Sino-Japanese War, the Guomindang and the Chinese Communist Party were engaged in civil war off and on until 1949, the year that the Chinese Communist Party founded the People's Republic of China. However, there are a few studies of the Sino-Japanese War period which show some development, or at some least continuation of, maternal and child health programs under the Guomindang and in CCP-controlled areas.

Scattered sources show that the First National Midwifery School and some Guomindang ministries continued to function. It is remarkable that the First National Midwifery School, and any maternal and child health projects at all, remained in place after the Mukden Incident in 1931, as there was much political disturbance in northern China during the 1930s.⁵⁸⁸ From January to May 1933, the FNMS operated at a reduced capacity due to these tulmultuous times. Seventy percent of the staff and 85 percent of the students remained to work and study after the Incident.⁵⁸⁹ In 1939, two years after the start of the Sino-Japanese War, the First National Midwifery School eliminated its winter entrance examination because of a decrease in number of applicants (it previously admitted one class each in spring and winter). The school graduated only five students in winter 1938 and had only 36 undergraduates enrolled, half the number of the year before. Its staff also had problems placing new graduates, as hospitals, schools, and clinics closed or were occupied by Japanese forces. Plans to further develop graduate-level midwifery instruction for government maternal and child officers were postponed, partly because

⁵⁸⁸ On September 18, 1931, a section of Japanese-owned railroad was blown up, ostensibly by Chinese dissidents. This served as the pretext for Japan's annexation of Manchuria and led to increasing hostilities between the two countries.

⁵⁸⁹ "Fifth Annual Report, FNMS," 2.

of staff changes within PUMC's Department of Obstetrics.⁵⁹⁰ Most medical personnel worked towards saving lives and treating wounds of civilians and soldiers injured during the war.

When the Japanese invaded China in 1937, Marion Yang was on another international tour of public health programs. While she was in Europe, the FNMS was cut off from Nanjing, and because it was funded by the central government's Ministry of Health, it was questionable whether or not it would continue to operate. A small group of PUMC staff organized an interim trustee body and registered the school with the local educational authorities. They authorized the use of the reserve fund and asked the CMB and the IHD for an emergency appropriation to continue operating the school. They also cabled Dr. Yang, who immediately left Europe to return to Peking. However, on September 24, 1937, the acting head of the FNMS, a Dr. Chow, received a letter from the Nanjing government "instructing her to close the School and to transfer the staff to Wuchang."⁵⁹¹ In addition, Ministry of Health head J. Heng Liu cabled Henry Houghton of the Rockefeller Foundation's International Health Division to "instruct the staff of the Midwifery School to close up and move back to Wuchang."⁵⁹² Houghton was reluctant to urge the staff and students to attempt such a hazardous journey to a place rife with wartime danger.

Even during the conflict, Yang remained committed to China's women and children. She immediately returned to China during the Second Sino-Japanese War to "devote my heart and soul to my country."⁵⁹³ She continued her efforts to improve maternal and child health, teaching obstetrics and gynecology classes at universities and local public health departments, and writing and disseminating pamphlets and posters on modern maternal and child health methods. After

⁵⁹¹ Houghton, letter to Lobenstein.

⁵⁹⁰ I.C. Yuan, letter to John B. Grant, Beiping, March 21, 1939, folder 374, box 45, series 601, RG 1, RFA, RAC.

⁵⁹² Yang, "Wo de Zizhuan."

⁵⁹³ Ibid., 151.

1941, she helped to establish Sichuan's first rural maternity hospital, a 10-bed unit, part of the Maternal and Child Welfare Center of Bishan and Suiding counties. She also assisted in establishing Maternal and Child Welfare Centers in Lanzhou and Chengdu, Sichuan. In Zhongqing, Sichuan, she helped to found a 30-bed maternity hospital as well as the public health division of the Municipal Health Department. During the Japanese surrender, Yang went to Beijing, Tianjin, Shanghai, and other cities to undertake maternal and child health work and to help re-establish the FNMS, which the Japanese had taken over. She also helped to open a Maternal and Child Welfare Center under the auspices of the Shanghai Municipal Health Department.

After the war, Yang went on yet another tour, this time of public health programs in the United States and Canada, to investigate the relationship between population and the state of maternal and child health. During this time, in 1947, Yang was invited to become a member of the International Health Board (later the World Health Organization) as an international maternal and child health expert. At the first meeting she attended in Geneva, she assisted the board on matters of maternal and child health standards and facilities. Soon afterward, she received another fellowship to study midwifery education in Europe. In 1949, Yang was still in Geneva.

In her memoirs, Yang states that she did not understand the political situation in China in 1949 because the newspapers in Geneva gave conflicting reports. (This part of Yang's autobiography reads like a self-criticism, perhaps justifying her work with foreigners and her delay in returning to China after the founding of the PRC.) At first she wanted to go to the United States, where the newspapers were "well-informed" and where she could access Chinese papers. However, her friends who had already returned to China had written her letters, so that she "gradually understood" the situation and "knew that the new government had the spirit of

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serving the people and they worked hard in this regard...." Furthermore, she "knew that the government would welcome skilled people to return to China and join in the rebuilding process! Especially in the field of medicine, improving maternal and child health was an important program."⁵⁹⁴ Yang resigned from her post at the IHB and returned to China. In her autobiographical sketch, written in October 1949 (on the eve of the founding of the People's Republic of China), Yang says that she was "still fulfilling her dream today" and that "under the government's strong lead," completion of health work for the people would be rapid and successful.

In fact, by 1948 Marion Yang's vision of national midwifery for all was well on its way to fruition. Her goal as head of the National Maternity and Child Health Programme, established in 1930 under the former Ministry of Health, was to train 100,000 college-grade midwives within 50 years (1929 to 1979) with the hope that these midwives would attend 80 percent of China's total annual births (12,000,000 out of 15,000,000).⁵⁹⁵ In 1948, there were 6,000 well-qualified midwives registered with the Ministry of Health, up from 1,883 in 1934.⁵⁹⁶ The country had 30 government-sponsored midwifery schools with attached maternity hospitals that turned out about 1,000 midwives per year. This was down from the pre-war figure of 54 schools with an annual graduation of 4,000 midwives. Yang hoped to reopen all the schools closed during the war and add more for a total of 100 schools with 5,000 annual graduates.

In addition to provincial midwifery schools, Yang planned for each municipality with populations of one million or more to have a maternity and child health institute that provided "complete care from conception to 5 years of age."⁵⁹⁷ The Ministry of Health also ran medical

⁵⁹⁴ Ibid., 152.

⁵⁹⁵ Yang, letter to Whitacre.

⁵⁹⁶ "Fifth Annual Report, FNMS."

⁵⁹⁷ Yang, letter to Whitacre.

centers that included maternal and child health institutes. These were concentrated mainly in the urban areas, where they reached about 40 percent of the population. Yang estimated that only five percent of the rural population had access to such services. In addition, the government's National Maternity and Child Health Programme was still active in investigating and conducting research on maternal and child health issues. In 1948, it was conducting the following investigations: stillbirth and neonatal death in Beiping; infant mortality and its causes in Lanchow, Beiping, Dingxian, Pishan, Chengfu, Guiyang, and four counties in Fujian province; soybean nutrition (as a replacement for breast milk); maternal mortality; and various studies on traditional customs and superstitions surrounding childbirth.

Furthermore, the Ministries of Health and Education were still operating at reduced capacity. The Ministry of Health still administered five hospitals in Nanjing, Tianjin, Lanzhou, Chongqing, and Guangzhou with 250-500 beds each, including a total of around 600 maternity beds out of a total of 2,000. Throughout China, maternity beds totaled only about 6,000. Yang estimated needing 60,000 if only10 percent of expectant mothers had to be hospitalized. Most births, especially normal ones, were still taking place at home, and there were no plans to change this. The infant mortality rate in the areas served by these facilities decreased from 200 to 114 per 1,000 births, and maternal mortality was reduced from 15 to 4 per 1,000 births.⁵⁹⁸ The Ministry of Education still planned to create five national college-level midwifery schools, which translates as 12 years of primary and secondary education, plus three years of professional training. It also intended to open 30 vocational-level provincial and 15 municipal midwifery schools (nine years primary and secondary education, plus three years of professional training).

The curriculum included 2,200 hours of classroom lecture and 3,000 hours of practicum in midwifery and public health.

In the Chinese Communist Party-controlled areas, midwifery took a slightly different turn, back towards *jieshengpo* who were given training in aseptic techniques. Karen Minden examined CCP healthcare efforts in the Shensi-Gansu-Ningxia border region, which encompassed 35,000 square miles and had a population of 1.5 million people. Minden found that between 1936 and 1949, health policies were a crucial part of CCP success in these rural areas.⁵⁹⁹ Improving maternal and child health was a component of these efforts: pregnant and post-partum women received better rations of meat, cooking oil, salt and vegetables, and newborns were given "35 feet of spun cloth and five catties of raw cotton."⁶⁰⁰ According to Kim Taylor, during the civil war (1945-1949), Chinese communists in rural areas like Yan'an began to utilize and support traditional Chinese practitioners, and opposed the "evil, imperialist" Western medicine.⁶⁰¹ Mao Zedong in 1944 stated that "We must call on the masses to arise in struggle against their own illiteracy, superstitions and unhygienic habits...This approach is even more necessary in the field of medicine....Our task is to unite with all intellectuals, artists and doctors of the old type who can be useful, to help them, convert them and transform them..."⁶⁰²

However, as Minden and Taylor both have noted, necessity, not only ideology, drove the movement to utilize traditional Chinese medical practitioners, as there were not enough modern physicians to serve this large rural area. The CCP set up short-term training programs for paramedical personnel to establish medical co-ops in their villages, and Minden found that many of

⁵⁹⁹ Karen Minden, "The Development of Early Chinese Communist Health Policy: Health Care in the Border Region, 1936-1949." *American Journal of Chinese Medicine* VII, No. 4 (1979): 299-315.

⁶⁰⁰ Minden, "The Development of Early Chinese Communist Health Policy," 303.

⁶⁰¹ Kim Taylor, *Chinese Medicine in Early Communist China (1945-1963): Medicine of Revolution*. New York, NY: Routledge, 2004.

⁶⁰² Mao Zedong, "On the United Front in Cultural Work," in *Selected Readings*, Peking: Foreign Language Press, 1967, pp. 185-6, as quoted in Minden, "The Development of Early Chinese Communist Health Policy," 304-5.

those trained were midwives or "young peasant boys." In fact, one of the primary goals of the CCP rural health movement was to reduce infant mortality by training midwives in aseptic techniques, and by encouraging pregnant women to utilize trained midwives as their birth helpers. Midwives and other auxiliary health personnel were encouraged to establish cooperative training programs administered by the people (*min ban* 民办).

In addition, school children were taught hygenic habits like washing daily and trimming fingernails, "lessons devoted to making the children of peasants recognize the need to be 'self-supporting, modern, and healthy."⁶⁰³ This striving for modernity harks back to previous decades with Chiang Kai-shek's New Life Movement. This also points to the fact that traditional Chinese physicians had long ago begun to adopt some scientific medical practices and theories, such as anatomy and surgery. Furthermore, many of the *jieshengpo*, if they were utilized, must have assumed some aseptic methods in their work, as they have today.

Although the war hindered maternal and child health work, surprisingly it was not stopped altogether. The policies and institutions implemented in the Nationalist era and during the Sino-Japanese War formed the basis for public health programs after the CCP gained power in 1949. There are important continuities between the Guomindang era and the Communist era in their plans for improving maternal and child health. The CCP's "barefoot doctors" of the 1960s and 1970s are very similar to Yang's para-medical personnel who had received abbreviated training to fufill a critical and urgent need. Furthermore, the structure of the CCP's health care system, especially in rural areas, is comparable to the hierarchical structure in Dingxian and other rural reconstruction experiments of the 1920s and 1930s. Wartime efforts to improve public health may have given the CCP an even greater basis on which to build its

⁶⁰³ Jack Belden, *China Shakes the World*, New York: Monthly Review Press, 1949, p. 119, as quoted in Minden, "The Development of Early Chinese Communist Health Policy," 306.

medical system, in terms of working with limited resources in a fragmented and unstable situation.

Finally, people like Lin Qiaozhi and Marion Yang, both PUMC-trained physicians, continued to work under the CCP administration. One of the "three most respected women in China [in 1972],"⁶⁰⁴ Lin became a member of People's Committee and remained on staff at PUMC after 1949. She was instrumental in promoting maternal and child health throughout the 1960s and 1970s, and was one of the architects of the CCP's family planning strategy.⁶⁰⁵ Yang lived until 1983. Upon her death, she left 69,000 yuan, which in 1988 was used to establish the Marion Yang Endowment (*Yang Chongrui Jijinhui*杨崇瑞基金会), administered by the First National Midwifery School Alumni Association of Beijing Medical College Alumni (*Beijing yike daxue jiaoyou zonghui guoli di yi zhuchan xuexiao xiaoyou gonghui* 北京医科大学校友总 会国立第一助产学校校友分会). The endowment operated a scholarship fund for young women to pursue maternal and child health studies. In 1990, the Alumni published a book dedicated to Yang, filled with glowing remembrances of a dedicated teacher and activist who worked to further maternal and child health in China.⁶⁰⁶ More research on this area is needed in order to fully explore the relationship between the Guomindang and CCP public health systems.

Where does this leave us today? By 1997, over 60 percent of women in China delivered their babies in hospital facilities, with 76 percent of urban women delivering in hospitals. The number of hospital births has continued to rise. In the largest urban centers like Shanghai, nearly

⁶⁰⁴ Bowers, Western Medicine in a Chinese Palace, 222.

⁶⁰⁵ Guo, Lin Qiaozhi.

⁶⁰⁶ Yan Renying, ed., Yang Chongrui Boshi: Danchen Bai Nian Ji Nian (Dr. Marion Yang: 100 Year Commemoration) (Beijing: Beijing yike daxue, zhongguo xiehe yike daxue lianhe chubanshe, 1990).

all women go to hospitals to have their babies.⁶⁰⁷ Nurses, or nurse-midwives who have received additional training in obstetrics, assist in all hospital and clinic births, with physicians making decisions on medical interventions like caesarean sections. The maternal and infant mortality rates in China after modernization of childbirth are much lower than in the days of the *jieshengpo*. Before this period, and in areas without modern medical resources, infant mortality was estimated in the range of 250-300 per 1,000 births, and maternal mortality at 15 per 1,000 births.⁶⁰⁸ In 1948, the infant mortality rate in areas served by modern midwives was an estimated 114 per 1,000 births, and maternal mortality was 4 per 1,000 births. In 2000, infant mortality was 32 per 100,000 births, and the maternal mortality rate in China was 70 per 100,000 births.⁶⁰⁹ Maternal and infant mortality has declined markedly. However, the system in China, as in the West, is not perfect, even after decades of public maternal and child health work.

Modern medical childbirth did indeed lower maternal and infant mortality rates in China, especially because of the easily attained goal of maintaining an aseptic, or at least relatively clean, birth environment. Old-style midwives, when instructed to wash hands and all utensils before handling the mother or newborn, could quickly reduce the risk of infant tetanus and puerperal sepsis infections. Nonetheless, as late as 2002, the Chinese government was attempting to "dramatically improve the health of pregnant women and children" based on a

⁶⁰⁷ Maternal and Child Health Department of Beijing Medical University, "Report on Analysis of Maternal and Child Health Routine Collection Data in 1997."

⁶⁰⁸ Marion Yang, "Midwifery Training in China," CMJ 42 (1928): 768-75.

⁶⁰⁹ "China Vows Health Care for 900 Million," *China Daily Online*, June 11, 2002. As a comparison, UNICEF reports United States infant mortality rate in 2004 was 7 per 1,000 births; maternal mortality was 17 per 100,000. Japan's rates were 3/1,000 infant mortality and 10/100,000 maternal mortality for the same dates. See http://www.unicef.org/infobycountry. The higher maternal mortality in the U.S. is due in part to racial disparities in health care and advanced maternal age. African-American women are nearly four times as likely to die from pregnancy-related conditions as are white women, the most common causes of death being hemorrhage, embolism, and pregnancy-induced hypertension. If monitored and treated, the risk of maternal mortality rises after age 30. D. Hollander, "Maternal Mortality Exceeds U.S. Goal; Age and Racial Differences Are Marked," *Perspectives on Sexual and Reproductive Health* 35, no. 4 (2003).

"health-for-all" World Health Organization initiative.⁶¹⁰ The modernization of childbirth in China is widespread in urban areas, but China's poorest regions still do not have affordable maternal health care. Only in 2004, Qinghai province began a pilot program to provide low-cost or free maternal health services for its impoverished herder women.⁶¹¹ There have been significant advances, but still the mortality rates are relatively high, especially in impoverished regions.

Today, few *jieshengpo* exist in China. They are in many cases associated with back-alley practices of dealing with unwanted pregnancies. But these old-style midwives are not the same as they were around the turn of the last millennium: they use relatively aseptic techniques to deliver babies at home. They are still vilified, however, as unsanitary and superstitious. In 2002, Ministry of Public Health Official Fu Wei attributed China's high maternal mortality rate to midwifery malpractice.⁶¹² China's 1995 Law on Maternal and Infant Health Care allocated more money to build rural health care facilities across China. As more and more clinics are established in rural areas, *jieshengpo* are being displaced by modern trained *zhuchanshi*. According to a 2004 *People's Daily* article, 76 percent of all Chinese women deliver babies in hospitals or clinics, which leaves little room for untrained midwives to practice.⁶¹³

However, as in Western countries, modern childbirth can make women feel helpless, uncomfortable, and degraded because of largely unnecessary routine procedures.⁶¹⁴ According to a 2001 study, hospital births in four Shanghai hospitals (including one outlying rural county hospital) were highly medicalized, with women receiving routine episiotomies, rectal

⁶¹⁰ "China Vows Health Care for 900 Million."

⁶¹¹ "Low-Cost Midwifery Offered to Qinghai Women," China Daily Online, November 2, 2004.

⁶¹² "Midwifery Phased out in China's Rural Areas."

⁶¹³ Ibid.

⁶¹⁴ Qian et.al, "Evidence-based Obstetrics;" Barbara Ehrenreich and Deirdre English, *For Her Own Good: 150 Years of the Experts' Advice to Women*. New York: Doubleday, 1978; Adrienne Rich, *Of Woman Born: Motherhood as Experience and Institution*. New York: Bantam Books, 1977.

examinations, supine position, and pubic shaving. All of these routine procedures are considered unnecessary or excessive according to current medical theory. At the same time, fewer than 27 percent of women received pain relief in the form of acupuncture, epidural analgesia, abdominal massage, and/or intravenous diazepam and pethidine, though more than half of the women reported that their pain was "intolerable."⁶¹⁵ Caesarean rates in China are very high in urban areas, with approximately 60 percent of women in Shanghai and Beijing requesting the procedure for various reasons: fear of a painful vaginal birth without analgesia or anesthesia, or to keep their hips slim, or to choose an auspicious birth date. Hospitals are eager to perform caesarean sections because of higher profits.⁶¹⁶

It is important to remember that childbirth practices are greatly affected by culture and environment. After all, it was not so long ago that American women were routinely completely anesthetized for delivery, often regardless of a woman's personal wishes to be awake and lucid at the birth. This is one area in need of further exploration. A study of the midwives who have been displaced in recent decades would give greater insight into the processes and procedures of childbirth and maternal and child health in China.

The challenge to provide health care to all of China's women and children has not been completed. What began in fits and starts by a few medical missionaries grew into a national program with an overarching vision. The hierarchy of medical training begun in the 1920s and 1930s with places like the First National Midwifery School and Dingxian was the model for the CCP public health program. This model was originally designed to reach as many people as possible as quickly as possible by training a few highly qualified individuals who would give

⁶¹⁵ Qian et al., "Evidence-Based Obstetrics."

⁶¹⁶ "Beijing Reports Higher Caesarean Birth Rate," Xinhua News Agency, Beijing, May 1, 2006, "Easier Delivery," *Shanghai Star*, 11-11-2004.

abbreviated training to even more people. Barefoot doctors – both male and female – would refer the difficult cases to more qualified technicians or physicians. Marion Yang was correct in her assessment of China's needs – that the country was too vast and underdeveloped to simply impose a Western public health model on it. Nearly 80 years later, though China's maternal and child health care has markedly improved, Yang's vision of maternal and child heatth care for all is still incomplete.

APPENDIX A

RULES GOVERNING THE ADMINISTRATION OF THE FIRST NATIONAL MIDWIFERY SCHOOL

- 1. Students should obey all teachers.
- 2. Students should observe all the rules.
- 3. Students should all board in the school and are not allowed to leave school freely.
- 4. During the time of studies, students are not allowed to ask leave unreasonably.
- 5. During the school holidays, after due announcement by the person in charge, students are allowed to leave the school but they must not miss their time for preparing lessons.
- 6. Clothes, etc. for students other than those designed by the school authorities should be quite simple and refrain from pompousness.
- 7. Students whether in class or during time of rest must observe silence.
- 8. Attention should be paid to the public property of the school but if same be spoiled it must be compensated for according to value.
- 9. Boarding fees, etc. must, according to the stipulated sum, be paid at the beginning of each semester and should not be in arrears.
- 10. Students in the classroom, boarding or bedroom and all other places must preserve cleanliness and restrain themselves from spitting here and there and from throwing away thing [sic] arbitrarily that will affect health.⁶¹⁷

⁶¹⁷ "Fifth Annual Report, FNMS," Appendix III: Outline of Organization of the Chinese Midwifery Association, viii.

APPENDIX B

NATIONAL MIDWIFERY BOARD CONSTITUTION

Article I. This Board aims at the promotion of midwifery education and at the advancement of the standard of midwives, and shall be named the National Midwifery Board.

Article II. There shall be temporarily seven to nine members, to be composed of the following:

- a. Two representatives each from the Ministries of Education and of Health.
- b. The Ministries of Education and of Health shall jointly appoint three to five members among those who are especially interested or who have had special training in midwifery education.

Article III. There shall be a chairman, to be elected by the members.

Article IV. All the members shall be honorary. The term of office is two years, renewable at the end of the term.

Article V. Meetings shall be held every six months. In case of necessity, special meetings may be called by the Ministries of Education and of Health.

Article VI. This Board shall perform the following duties:

- a. Organize demonstration midwifery schools.
- b. Manage and hold in custody funds on midwifery training.
- c. Determine the standards of midwifery education.

d. Make investigation into existing public and private midwifery schools.

Article VII. In case special investigations are deemed advisable, in connection with the above, the Chairman may delegate members of the Board for the work.

Article VIII. There shall be one secretary and one business manager, to be in charge of the minutes, correspondence, and other routine matters. The secretary and business manager shall be appointed by the Ministries of Education and of Health from among the members of the Ministries.

Article IX. There shall be one treasurer, to take charge of funds on midwifery education. The treasurer shall be elected from the Board members.

Article X. Detailed regulations for this Board shall be listed elsewhere.

Article XI. The above regulations may be amended from time to time by the Ministries of Education and of Health.

Article XII. The above will be effective from date of promulgation.⁶¹⁸

⁶¹⁸ "Fifth Annual Report, FNMS," Appendix III: Outline of Organization of the Chinese Midwifery Association, viii.

APPENDIX C

TRANSLATION OF FIGURE 5.7

"Good Methods for Protecting Newborns and Infants"

Changsha Mother and Child Assistance Organization

- 1. Eyes. For newborns and infants one must mix hot water with boric acid to form a paste and apply to eyes with cotton.
- Umbilical cord. Every day one must clean the umbilical cord with boric acid, apply lotion and change cotton dressing.
- 3. Bathing. After umbilical cord falls off, give infant bath in hot water that has gradually cooled to warm once daily, and use suitable cloth to dry off.
- Breastfeeding. When nursing a newborn use clean white cloth or cotton to lightly clean [nipple].
- 5. Food. The first day newborn is able to drink, give boiled water every two hours during the day and every four hours at night to give the infant's stomach a rest. You should not nurse when ill or if you become pregnant for it is easy to have a miscarriage.
- 6. Atmosphere. In the infant's room, no matter whether summer or winter, day or night, you should open the window to allow fresh air.
- 7. Sleep. In order to allow for a natural rest when sleeping, the infant should not be hemmed in or shaken.
- Illness. If the infant becomes sick or has diarrhea, stop giving food and give only liquids. Give small amounts of cold [previously] boiled water and take to hospital.
- 9. Flies. Flies are a vehicle for disease. If they land on cups and plates, they can carry infectious diseases on their feet if you are not careful.

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