LEVERAGING WOMEN:
MEDICAL RELATIONSHIPS BETWEEN PEOPLE, PARTY, AND PROVIDER IN TWENTIETH-CENTURY CHINA AND TAIWAN

By

Erica T. Holt

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ABSTRACT

Globally, public health was an important facet of modern nation-state building. It created new practical relationships between the state and the people by improving health care and hygienic living conditions and ideological relationships through the dissemination of modern, scientific approaches to medicine. In the case of China, many scholars have devoted their research to understanding how hygienic campaigns functioned as parts of modernization initiatives. This dissertation contributes to the rich historic work on medicine and public health by examining the development of medical power through networks of birth workers in China and Taiwan.

In the 1950s, both Chinese governments – the People's Republic of China (PRC) and the Republic of China (ROC) – attempted to address concerns about infant and maternal health by improving midwife care and access to those services. Doing so required not only the training of women as midwives but also a dialogue with the public to build the credibility of these new, modern medical workers. In the first half of this dissertation, I argue that the governments attempted to support these midwives by trying to recruit locally and making modern medical terminology legible to would-be patients. Through their successes, the midwives were able to cultivate trust and authority with people in remote and rural areas, thus facilitating the reach of state-sponsored medicine.

In the second half of this work, I shift the focus to the PRC, using the examples of barefoot doctors and family planning initiatives to show that the state began to use medical networks to exert medical power through birth planning mandates. The complex dynamics between state policies, medical care, and gender coalesced in the portrayal of women as paramedical workers and as the main purveyors of birth control. The state effectively leveraged

the female barefoot doctors' social and political roles in the service of its family planning initiatives.

The creation of public health workers like midwives and barefoot doctors was about their ability to improve public health, but those medical networks also served additional purposes. They provided pathways of surveillance and enforcement of policies, whether that was about licensing and certification or about vaccine and birth control campaigns. The relationships built by the state with patients through medical care providers further reinforced biases from scientific medicine itself, wherein adopted systems of public health perpetuated colonial relationships of extraction and control, although in these cases they were internally focused.

This dissertation is dedicated to my grandmother, Loretta Lynn Priest.

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Introduction

Women were a fulcrum of modernization. Not only did they contribute their labor to industrial and agricultural development, then through their underacknowledged contributions in domestic labor, but they were also the focus of population politics in developing nations. Their bodies themselves were repeatedly at the center of questions about state building and modernization projects. Anxieties about the health of the nation, the fitness, and the growth, were directed at women to address. These global phenomena also materialized in twentieth-century China and Taiwan, as governments asked how they could improve maternal and infant health outcomes. They found ways to employ women as birth workers to support women's access to medicine, and they dialogued with women at large to circulate news ideas about health and wellness. Chinese governments also deployed women as public health nurses and barefoot doctors to both surveille the general population through health initiatives and promote state policies. In doing so, they also altered the broader relationship between the state and medicine, but also with women specifically.

This dissertation is about the transformation of medicine as a form of healing into a component of modernization: a transition from person-centered care to state-prescribed medicine. The question of the significance of medicine in larger projects of state building in East Asia has been addressed by historians from a variety of entry points, including public health, mental illness, infrastructure, and more. One of the reasons I believe we as scholars ask so many questions about public health projects is because they demonstrate a complex and intimate interaction between people and the state. Nothing is more personal than one's body, and whenever a government places constraints on bodies – such as to accept vaccinations, adhere to quarantine requirements, or make illegal access to medical services like abortion – people feel

the weight of the state directly.

China has historically understood itself as a special case: It was "semi-feudal" and "semi-colonized," and then required a special kind of modern transformation which, at the point of the communist revolution, was often described as "socialism with Chinese characteristics." Maoism was developed by Mao Zedong to make sense of socialism and communism is a specifically Chinese context. So, too, state-directed medicine and public health needed to be shaped specifically for the Chinese context.[1] This was as much about the political environment as it was the existing medical landscape, because when it came to medicine, interests were divided between the people and the government. Even with grassroots mobilization of the masses to carry out modernization through five-year, soviet-style plans, it was not simple to convince people of new medical practices. This is attributable in part to their foreign origin; Western-style medicine operated from a different medical paradigm, used different terms, and expected a different interaction between patient and provider than Chinese medicines. As I detail in chapter one, the collaborative aspect of Chinese medicine that made it collaborative was not a component of prescriptive, Western medicine. Although the governments in both the Republic of China (ROC) and the People's Republic of China (PRC) acknowledged that modern medicine in China could not be the wholesale adoption of Western medicine, in only a few decades, state medicine mirrored many of the most prescriptive aspects of Western-style public health, while making space for the existence of a standardized Traditional Chinese Medicine (TCM), too.

Writing about the history of medicine can be a linguistic feat. Even the term "doctor" needs considerable context to fully understand its meaning. In China, doctor could mean a biomedical physician or a Chinese medical doctor. It is also used in the term "barefoot doctor," which is

[1] Sean Hsiang-Lin Lei, *Neither Horse nor Donkey: Medicine in the Struggles over China's Mortality* (Chicago: University of Chicago Press, 2014), 13.

more accurately described as a paramedical worker. “Medicine,” too is complex and historically situated. It would be a disservice to adept healers of the past not to call what they did medicine, but those practices are far removed from the clinical experience a person likely encounters at the doctor’s today. As a result, this dissertation is saturated with modifiers to these and other medical terms. “Western-style” and “biomedical” are frequently used to distinguish from Chinese medicines, and “Chinese medicines” means something different than “Traditional Chinese Medicine.” As I detail in chapter one, historically, China’s medical landscape was pluralistic, which included both a variety of indigenous, Chinese medicines and practitioners. The early interactions with Western medicine in China began with medical missionaries. Although this form of medicine was neither modern, nor biomedical, it was derived from Western medical epistemology. This means that, in both primary sources and the scholarship, medicine is often framed dichotomously as Chinese or Western. Thus, in the cases where I am trying to delineate origins, I often modify medicine and professions with the terms “Western-style” and “Chinese”/ “Chinese-style.” These terms are applicable throughout the contemporary period, but the line between “Western-style” and “modern” or “biomedicine” is more complicated.

Biomedicine refers to the systems of medicine that employ physicians, nurses, and other state-certified medical professionals who use modern medical techniques and technology to diagnose and treat patients.[2] This is a form of modern medicine that is derived from rigorous scientific inquiry and is widely acknowledged as reliable. I use the phrase “biomedical doctor” to indicate a doctor who is trained through the university system. This is, in some ways, “Western-style” medicine, but many people globally have contributed to the development of biomedicine from the twentieth century forward. Chinese doctors and scholars were influenced by Western

[2] For more on biomedicine and biomedicalization see chapter 5 and Adele E. Clarke, et. al., *Biomedicalization: Technoscience, Health, and Illness in the U.S.,* (Durham: Duke University Press, 2010).

and Japanese counterparts (who also learned from Western countries), but there was always some adaption in the adoption of these ideas.[3] Conversely, there are many biomedical scientists from China and Taiwan who have innovated medicine. There are places where I combined the two modifiers – Western and biomedical – to emphasize a difference in medical paradigm, but this is not to say that biomedicine belongs solely to the West. Similarly, modern medicine could encompass a wide variety of medicines, but it is most frequently used to describe Western-style biomedicine in the twentieth and twenty-first centuries. Like biomedicine it is not owned by the West, but through much of the 1900s, the shape of Chinese governments' modern medicine was informed by Western standards. The revolutionary medicine formed during the Cultural Revolution in the PRC was modern, but was very different from modern medicine in the U.S. In the case of China and Taiwan, then, modern medicine encompasses a broad array of medical practices that governments sponsored as part of the development of their state medicine.

In China, drawing lines between these two overlapping medicines often necessitates multiple modifiers. In his book, *Neither Donkey nor Horse,* Sean Hiang-lin Lei writes that this dichotomy is usually framed as "scientific Western medicine and premodern Chinese medicine." As he explores through his work, this duality is nuanced and shifting in the mid-twentieth century.[4] Lei's research is also concerned with the intervention of the state with medicine, but his work is focused on the institutionalization of Traditional Chinese Medicine from the late 1800s until the end of the Republican period in mainland China, in 1949. In 1947, the Nationalist government officially established a policy of public medicine (*gongyi*), which Lei states was translated as "State Medicine," to reflect its connection to British State Medicine and to highlight

[3] In his chapter, "Anatomy," from *The Making of Human Science in China*, (Boston: BRILL, 2019), David Luesink describes how this phenomenon took place in the discussions about anatomy specifically.
[4] Lei, *Neither Donkey nor Horse,* 4.

that, rather than medicine that was available to the public, it brought medicine under full government control.[5] Of course, the PRC developed and implemented different policies to address medical access in rural areas, but their version of state medicine closely aligned with the Nationalist value of "full state control over all medical matters."[6] In this way, I have used "state medicine" (lower case), but also terms such as "state-sponsored" and "state-directed."

Medical Authority and Medical Power and Medical Colonialism

In the following chapters, I explore the roles of midwives and paramedical professionals, including barefoot doctors, in the development of China and Taiwan's modern medical networks during the 1950s, 1960s, and 1970s. These networks were instrumental in improving access to medical care, but they also allowed the state to reach more deeply into the population than ever before. Throughout, I emphasize the ways gender influenced the creation and deployment of these medical roles and how this affected women's experiences as patients and care providers. The thread binding the chapters of this dissertation is the examination of how medical authority was earned and how medical power developed through the creation and deployment of policies as part of state medicine. Before the establishment of scientific biomedicine, medical care providers needed to demonstrate their abilities in order to establish their authority with patients. I am thus defining medical *authority* as medical trust. Earning this trust can be done in a variety of ways – through effective treatments, family connections, and/or religious affiliations – but the authority to diagnose and treat is derived from the patient's (and their family's) medical perspectives. Medical authority is also connected to cultural heritage in both the material and cultural sense since a person's bodily perspective is rooted in and understood through these paradigms. Medical authority is not prescribed and can be challenged for any number of reasons.

[5] Lei, *Neither Donkey nor Horse, 225.*
[6] Lei, *Neither Donkey nor Horse, 225.*

In many cases, it is also collaborative and cooperative. In contrast, medical power is the ability to assign diagnoses and treatment through structural requirements, political pressure, and verbal or physical coercion. It is not founded on a trust-built relationship with individuals, but instead relies on its affiliation with and support from the state. It does not need to account for cultural differences among patients, nor does it need to use language patients consider familiar and legible because its medicine is rooted in a scientific standard. So long as it meets the contemporary standards, it is incredibly difficult to challenge inside the institution; it is, therefore, prescriptive.

Although I am starkly dividing these two terms, they are not mutually exclusive phenomenon. My goal is not to artificially separate medical authority and medical power but rather to demonstrate that while medical authority has historically existed between healer and patient, medical power is a modern construct that coevolved with the development of the modern nation-state.[7] As a result, medical power may be exerted through a relationship which is already connected by medical authority, but it may also forcibly join patient and healthcare provider when a foundation of trust has not yet been built or is even actively resisted. This is to emphasize that the exertion of medical power is neither about the effectiveness of the medicine nor the public's opinion of that medicine and policy: it is about state priorities.[8] In the case of China, the

[7] Those familiar with Michael Foucault's term "biopower," will notice its similarities with how I have defined medical power in this chapter. There are a few reasons for this divergence in terminology. First, I aimed to described medical authority and medical power as parallel but divergent forces, overlapping at times, at odds other times. Like biopower, medical power is a by-product of modern nation-state building, but it is not necessarily tied to scientific objectivity in its practical application. By this I mean that biopower as it developed in Western Europe developed alongside the standardization of Western medicine and liberal politics. This is perhaps the greatest divergence in my use between biopower and medical power: I am not linking medical power to liberalism in the way that Foucault traces its roots. Furthermore, I have chosen to use medical power here to highlight the *medicine* of it all. Medical authority has existed between healer and patient since healers developed as a role in societies, and while I emphasize their differences, sustaining medical power without medical authority would prove incredibly difficult.

[8] Both Andrews and Baum noted that for a long-time Western medicine did not offer clearly superior care in comparison to the Chinese medicine available. Bridie Andrews. *The Making of Modern Chinese Medicine, 1850-1960* (UBC Press: Vancouver, 2014), 94, and Emily Baum, *The Invention of Madness: state, society, and the Insane in Modern China* (Chicago: University of Chicago Press, 2018). 154.

increasingly centralized state could have produced the same medical power dynamic with a version of Chinese medicine if they had chosen to assert state medicine in this way; however, Chinese governments repeatedly felt the pressure to adopt Western public health standards to legitimize their rule, and so they centered Western medicine in their policies.[9] Despite the desire to employ Western-style public health approaches, there were practical considerations that led to a hybrid approach first under the ROC government and then later under the PRC. It was this culmination of factors in state building that elevated Western-style medicine and developed a medical power to assert this form of medicine through public health campaigns. The continuity provided by connecting high-level state initiatives through local medical networks, such as rural health clinics and Chinese medical doctors, are some of the ways medical authority and medical power overlapped in the second half of the twentieth century.

One prominent example of medical power's overlap with local medical authority is the vaccination campaigns conducted by the Nationalists during World War II. In *Mass Vaccination,* Mary Augusta Brazelton argues that "mass immunization programs made vaccination a cornerstone of Chinese public health and China a site of consummate biopower…"[10] When the Nationalists moved from the east coast of China to the southwest, they took many of their medical scientists with them. One of the initiatives these scientists were tasked with was the development and distribution of vaccines for both the military and the local people, but the Nationalists' interest in immunization was not purely humanitarian. Rather, it was a way to ensure the health of their soldiers and by proxy the viability of their military campaign. Brazelton

[9] This is the simplest explanation of a much more complicated phenomenon. Baum's point about psychology and the new culture movement is one of several examples that demonstrate the use of Western medicine was not just about global pressures on the government, but shifting ideas about self, medicine, and culture that occurred throughout much the late nineteenth and early twentieth century.

[10] Mary Augusta Brazelton, *Mass Vaccination: citizens' bodies and state power in Modern China* (Ithaca: Cornell University Press, 2020), loc. 104.

writes that because the Nationalists could not afford sanitation improvement or the time to implement social hygiene reform, scientists relied on vaccination to limit the impact of communicable disease between the local people and the Nationalist troops.[11] From 1945 forward then, vaccines became the major intersection between the Nationalist government and the local people in southwestern China.

An unhealthy local population directly affected the health of soldiers and the viability of responding to the Japanese invasion, and as a result immunization was not a voluntary measure. Anyone who entered heavily populated urban areas needed to adhere to vaccination standards.[12] One method of enforcement included stationing Nationalist soldiers at bus stops, train stations, and the city gates. The soldiers could then demand to see an individual's vaccination certificate and, if a person did not have it, deny them the right to travel or enter the city.[13] Although this did not completely enforce immunization, it is an example of how larger political goals melded medicine with the enforcing power of the state. While it was possible to avoid vaccination, there were structural incentives in place to accept vaccines and, as a result, a form of power that dictated medical standards and affected one's mobility.

Introducing a new medical practice often required translation. In this context, translation was not simply about two languages, but rather about the cultural legibility of the medical practice. In the case of immunization, doctors and nurses frequently operated with Chinese medical paradigms, providing vaccines based on the season and being permissive towards

[11] Brazelton, *Mass Vaccination*, loc. 2131. Implementing large-scale infrastructural changes was a challenge throughout most of the twentieth century in China.
[12] Brazelton notes that it was impossible to immunize even a single city. The technology for developing and transporting vaccines (including refrigeration) was often either non-existent or difficult to obtain. Scientists at Nationalist bases made impressive strides in developing heartier vaccines, but it was not possible for them to have enough to immunize everyone.
[13] Brazelton, *Mass Vaccination*, loc.1320.

spiritual and religious responses to disease.[14] The main goal for the Nationalist doctors was not to completely upend people's medical understanding but rather to make room for effective treatments. As many families observed the efficacy of vaccination (the neighbors contracted smallpox, but their family did not), immunization could be combined with prayers to stave off disease without negative impacts.

This brief example demonstrates how medical power and medical trust are two separate dynamics between people and medicine that can function in tandem. In this case, medical authority could be leveraged with positive effect for the Nationalists' goal to vaccinate the general population. The Nationalist army had the ability to forcibly vaccinate local people, and certainly the policing of vaccination records indicates they asserted medical power through coercive measures; however, permitting the co-existence of local vaccination practices eased the transition to these new vaccines and provided some agency for people receiving them. Most public health campaigns under both the ROC and PRC governments included this co-existence of authority and power, albeit often unevenly. Policing every *body* in the territory was difficult, and few examples are quite as stark as the asylums or plague quarantines of the early 1900s. It was sometimes easier to convince a population of the utility of preventative medicine and try to build the medical authority of new practices, but when policies met resistance, exerting medical power to carry them out was possible through the established medical infrastructure.

Dissertation Structure

The scope and shape of this dissertation were driven by covid-lockdown-era constraints. In January of 2020, I was preparing to leave for my research trip to the PRC, including the cities of Beijing, Shanghai, and Wuhan. My initial plans included archival research and collecting oral

[14] Brazelton, *Mass Vaccination*, loc. 1995.

histories, but the emergence of the corona virus as a society-wide concern derailed all of my plans up to that point. I was lucky that I was allowed to delay the use of my Fulbright-Hayes DDRA fellowship, but as the United States was starting to work its way through the long covid-lockdowns, the PRC attempted to manage new waves of the virus amid increasing political tensions, particularly, though not exclusively, with the United States. I was fortunate to be granted the option to move my research location to the ROC, Taiwan in the Spring of 2021. I began my research trip in May 2021 in Taipei, Taiwan. While I am very grateful for the support of my committee members and those at Academia Sinica for helping me make the switch, unfortunately, Taiwan itself was just entering a strict lockdown as I prepared to depart. I was granted a special visa to begin my journey, but the opportunities to visit sites in person was limited, and the ability to conduct interviews was impossible at the time. The sources for Part I are largely derived from my research trips to Taiwan, while the sources for Part II were collected on shorter, earlier research trips to the PRC, including Beijing, Shanghai, and Hong Kong. In the time in between, I was able to gather sources from digital collections, the Rockefeller Archive Center, and through a research assistant, Ruipu Li in Shanghai.

The result of these research constraints is a dissertation on midwives and barefoot doctors, united in questions about medical authority and medical power. Further, I explore the development of relationships between medicine, the state, and the people. Through this I have identified three relationships that are useful for the examination of birth work: 1) the relationship between the state and medical infrastructure, 2) the relationships between state medicine and the people, and 3) the relationship between state medicine and women. The final point, about women specifically, is concerned with the layers of gendered expectations for women as patients and providers. Throughout the following chapters, I highlight how social conceptions of women roles

and broader political dynamics encouraged women to participate in medicine in very specific ways. Moreover, their position as mothers or potential mothers made them the focus of medical policies for both infant and maternal health as well as birth planning while at the same time they were also called upon specifically to carry out that work.

Part I contains chapters one and two, which focus on the development of midwife training programs and the professionalization of midwives under government directives in the 1950s. Chapter one details this historiography of medical authority in the long durée in China, covering scholarship on medicine and birth work from the Ming and Qing dynasties through the early years of the PRC. The goal of this chapter is to highlight how the pluralistic, vernacular medical landscape was bottled necked into standardized state medicine through the first half of the twentieth century. Chapter two raises similar questions about midwifery in Taiwan, highlighting the perceived need to improve access to midwives in remote and underserved areas. While these chapters are largely divided into a discussion about China and Taiwan, comparisons between the two are present in both chapters, and there is significant discussion about the modern midwife in both Taiwan and the PRC during the section on neonatal tetanus in chapter two. Together, these chapters provide discussions of the first two relationships explained above: (1) the relationship between medicine and the state, and (2) the relationship between medicine as a state institution and the people.

Part II contains chapters three and four, which explore the significance of the third relationship: the dynamic between state medicine and women. Both of these chapters are centered on the PRC but include some points of comparison from the ROC government in Taiwan as well. In chapter three, I provide an argument for the feminization of low-status medical professions, particularly barefoot doctors, and the complex consequences of positioning

women as birth workers and birth control distributors. Chapter four furthers this discussion of gender and medicine by examining how early family planning initiatives expanded the network of medical and paramedical providers, thus creating a deeper reach into the countryside to promote state-directed birth planning.

Finally, chapter five functions as a conclusion that threads the two parts together while offering an argument about the impact of medical colonialism on medicine and birth work in China and Taiwan. Drawing from decolonizing methodologies and Reproductive Justice frameworks, my aim is to show how state-sponsored medicine was influenced by colonial projects and how this affected forms and functions of care.[15] Unlike state medicine, which is intentionally constructed by governments, medical colonialism is the unintentionally adopted biases that make their way into medical standards and systems. Medical colonialism perpetuates biases which disempower patients and place the state's form of medicine in a position of power. As a result, it disempowers patients within a system that marginalizes social and cultural support for medical healing practices. Chapter conclusions will include a brief note about the connection to medical colonialism, but a full discussion is the focus of chapter five.

A few concluding notes about translations, terminology, and gender. The sources for this research are derived from both China and Taiwan. The Japanese colonial government, the government of the ROC, and the government of the PRC used different language, characters, and phoneticization. The linguistic component of these sources is a critical part of my investigations into birth work, medicine, and discourse between the government and the people. As such, I have used the characters and phoneticization as they appeared in the Chinese-language sources to preserve their meaning as specifically as possible. This means that readers will see both the

[15] Reproductive Justice (RJ) is a feminist framework first established by the SisterSong organization, as detailed in chapter five. It is capitalized throughout this dissertation as in the convention from RJ writers.

pinyin and Wade-Giles pheonetic systems where they are relevant. Typically, Wade-Giles is only used for the romanization of Mandarin under the ROC, but there is a mixture of spelling in English-language documents. In addition, readers will see a mixture of simplified and traditional Chinese characters. Simplified characters were introduced in the 1950s in the PRC; however, during the transition period, some documents contained both traditional and simplified characters. I have preserved these idiosyncrasies too.

Since the overturning of *Roe v. Wade* in 2022, there has been a (rightful) proliferation of gender-neutral terms to refer to people who can become pregnant. Terms such as "birthing person" and "birthing parent" arose in a specific contemporary and American framework that has space to accommodate a wider variety of genders and sexualities in the public sphere. Access to abortion and pregnancy support have historically been framed as a women's issues, but recent activism highlights the problems with this, including erasure of transgender pregnancy and the essentializing of women to their reproductive capacities. Except for chapter five, where I consider the long durée of birth work, including more contemporary examples, I still use a gendered male/female binary in this work when discussing pregnancy and birth work. In twentieth-century China and Taiwan, women were a distinct social category, both within society and from the government's perspective. As I explore throughout this dissertation, the expectation of the gender binary was acknowledged and reinforced by the state and by peers. Women shouldered gendered work and social responsibilities, and I hope to underscore some of the spoken and unspoken ways the state understood and shaped women's roles by examining the gender in this language.

Part I
Birth Work in Translation

In the initial stages of this project, when colleagues in China and Taiwan asked about my topic, I answered that I was researching *zhuchanshi*, or midwives. Usually, people would respond with a quizzical look, but with further elaboration, they would nod and say "oh, yes, *jieshengpo.*" While I knew *jieshengpo* was also a word for midwife, it took a few interactions for me to realize that it was not just one- or two-person's knowledge of medical terminology: *zhuchanshi* was not the popularly recognizable term I believed it to be. Although it is the standard medical term for midwife in both places, it is not an easily recognizable word among ordinary people. This difference in language was not about a lack of knowledge on the part of the people I spoke with, but rather an interesting facet of the way medical language evolved in Chinese-speaking populations. Midwives are not common medical workers in the PRC and ROC today, as most people give birth in hospital settings where they are attended by doctors and nurses. For this reason, many people consider midwives to be outdated forms of birth care, and so *jieshengpo* fit their idea of a midwife in the past helping a woman through labor; however, there is something even more compelling at play in this linguistic eccentricity. In the following two chapters, I examine the ways midwifery changed as it came under the supervision of state medicine. One facet of this change was medical terminology. Before the standardization of medicine, a plethora of Chinese-language terms existed for "midwife," but as governments integrated and promoted modern medicine, they also attempted to change the language people used to describe health, illness, and medical care providers. Although this would lead to many linguistic shifts throughout the twentieth century, not all of the modern medical terms, *zhuchanshi* among them, would be effectively integrated into popular language.

This section of my dissertation contains chapters one and two, both of which center on the professionalization of midwives in the middle of the twentieth century. Although there was variation in the training and roles of midwives between China and Taiwan, there was also a unifying thread about the modernization of healing. This process included the implementation of a standardized biomedicine based on Western-style medical science, but in many ways that was only the beginning of the integration of modern medicine into Chinese and Taiwanese society. Before chapter one, I want to offer a brief exploration of the linguistic changes related to midwifery, highlighting how the language of birth work was translated as part of the professionalization of midwives.

When reading English-language scholarship about midwives for this project, I encountered the recurring challenge of the obfuscating nature of translations in historical work. English-language scholarship typically translates the many Chinese terms for midwife into the singular English "midwife," and consequently flattens the plural medical landscape. Additionally, Chinese-language sources are not always more illuminating as they, too, seemed to imply there was a singular correct translation. The provincial government documents from Taiwan always used the medical standard term *zhuchanshi,* and while the newspapers from the People's Republic of China (PRC) used a mixture of terms, there was a clear trend towards the standardization of *zhuchanshi* as midwife. Looking up the word "midwife" in Chinese dictionaries provided limited translations as in both Chinese-English and English-Chinese dictionaries, only the standard terms were included: usually *zhuchanshi*, but sometimes also *jieshengpo*. In itself, this transition to new words is not particularly noteworthy. Research in the history of medicine is an exercise in outdated synonyms for diseases, symptoms, medicine, and professions. For example, lockjaw was once the common term for tetanus. The transformation of

Chinese terms for "midwife" through both time and translation, however, is a particularly strong example of how language, translation, and scholarship interact.

Before the standardization of medical terminology, there were multiple words for the role of the midwife. These terms were all descriptive and made up of some combination of "birth/delivery" and "woman," indicating that midwives were essentially women who assisted other women through the delivery process. As birth work was medicalized, the terminology for it changed too, but this was more than a linguistic shift: it also signaled a transformation of the midwife herself into a modern, medical professional. Both the ROC and PRC governments used the term 助产士/ 助產士 *zhuchanshi* for the modern midwife, but the path of this language switch was different in China and Taiwan.

In Taiwan, the adoption of *zhuchanshi* was linked to transitions in governments. During the Japanese colonization of Taiwan (1895-1945), the colonial authorities mandated schools and government institutions use the Japanese language, forcing Taiwanese people to learn Japanese in order to interact with colonial agencies and participate in local governance.[1] Mandarin was later instituted as an official language under the ROC government (1945-present), when control of Taiwan was transferred the Nationalists (the ROC's ruling Party), which once again required a linguistic shift in schools, bureaucracy, and business. *Zhuchanshi* was only finally adopted from the ROC as Mandarin became the new standard for medical language: it was a linguistic import that replaced the Taiwanese word *xiansheng ma* and the Japanese word *san ba* or *sanpu*.[2]

[1] Here I use "Taiwanese" to refer to anyone living in Taiwan before it was ceded to the Japanese government, including Han Chinese, Fujianese, Hakka, and the many indigenous groups.
Denny Roy, *Taiwan: a political history,* (Ithaca: Cornell University Press, 2003), 36-45.
[2] Note 9. Janet Kwang-Wang, "The Midwife in Taiwan: an alternative model for maternity care," *Society for Applied Anthropology,* 39, 1. (Spring, 1980): 79, and Chai-ling Wu, "Have Someone Cut the Umbilical Cord: Women's Birthing Networks, Knowledge, and Skills in Colonial Taiwan," *Health and Hygiene* in *Chinese East Asian and Publics in the Long Twentieth Century* (Durham: Duke University Press, 2010): 173-175.

In China, much of the discourse surrounding the transition to *zhuchanshi* was framed through an old/new dichotomy. Old-style (旧法 *jiufa*) was juxtaposed against new-style (新法 *xinfa*) midwifery to indicate the difference between granny midwives and those trained to a biomedical standard. The discussion in the *People's Daily* signaled that old-style midwives were outdated and dangerous, while new-style midwives were safer and more effective. However, the use of old and new signifiers was also transitional as eventually *zhuchanshi* became the standard term. Unlike other words for midwife, *zhuchanshi* was specifically defined as the modern midwife. This title indicated that the woman had undergone training at a school or hospital and was certified in some way by the state to practice. It clearly delineated *zhuchanshi* from other terms for midwife such as *jieshengfu, chanpo,* etc., which were applied to women who were not trained or regulated by a government entity.

Terms for Midwife:[1]
接产妇 (*jiechanfu*)
接产人员 (*jiechanrenyuan*)
新时接产人员 (*xinshi jiechan renyuan*)
接生婆 (*jieshengpo*)
收生婆 (*shoushengpo)*
产婆 (*chanpo*)
旧产婆/旧时产婆(*jiuchapo/ jiushichanpo*)
新产婆 (*xinchanpo*)
助产士 (*zhuchanshi*)

Table 1.1: "Terms for midwife." A list of common Chinese-language terms for "midwife."

The above list of Chinese terms is compiled from both primary and secondary sources. Although each one carries a different connotation, they can all be translated into "midwife." Historians and other researchers have sometimes approached these terms with nuance, and so *jieshengpo* has been explained and translated differently. For example, Tina Phillips Johnson

(writing about midwives in China) translated it as "a granny birth helper" while Janet Kwang-Wang (writing about midwives in Taiwan) defined it as an older woman who receives the newborn infant, but who does not intervene in the birthing process.[3] Those definitions are not at odds with each other, but they do carry different connotations. Both mention that the midwife in question is an older woman or a granny. Janet Kwang-Wang also defines *chanpo* as "with the wife undergoing childbirth," even though the two characters are simply *chan* to give birth/ to be delivered and *po*, granny, the same as *jieshengpo*. The functional difference in these two terms is not apparent in the definitions provided by any sources, but Kwang-Wang states that in pre-colonial era Taiwan, *chanpo* was used in spoken language, while *jieshengpo* was not.[4] Both of these terms show up in newspapers in the PRC, so it is not clear that there was, in fact, a written and spoken language barrier between terms in all Chinese-speaking populations.

In the way that terms and their definitions change over time, it may be tempting to explain this standardization as part of a general change in terminology that occurred with the introduction of new, scientific terms. Similarly, regional variations of terms are often flattened as language is standardized in schools and media coverage reaches a wider audience. Medical language is particular in that it was standardized to express scientific meaning and legality, something that was not necessary much before the 1900s in China and Taiwan outside of universities such as Peking University Medical College and Taipei Imperial University. However, when governments promoted the use of professional midwives, they also attempted to popularize this new terminology, with varying degrees of effectiveness.

In the same way that the professionalization of medical providers required new terms that

[3] Tina Phillips Johnson, *Childbirth in Republican China: Delivering Modernity* (Lanham: Rowman and Littlefield, 2011), 74. Kwang-Wang, "The Midwife in Taiwan," 72.
[4] Note 8. Kwang-Wang, "The Midwife in Taiwan," 79.

denoted training and experience, a plethora of new medical terms were developed that demonstrated improvement in medical science's ability to discern different and new diseases as well as to categorize illness in scientific terms. Tetanus was recorded through a few historical iterations in Chinese: 四六风 *siliu feng,* 脐风 *qifeng,* and 破伤风 *poshangfeng.* In the documents from Taiwan, *poshangfeng* is sometimes preceded by 初生 *chusheng,* to indicate "neonatal tetanus" rather than just "tetanus," but in all of the cases I discuss in part one, when *poshangfeng* is used, it is in conjunction with midwifery, which would indicate concerns about infections for both infant and mother. In any case, the change in terms for tetanus reveals how medical epistemology transformed as people came in contact with state-sponsored medical care providers. For each term, 风 *feng* is used rather than 病 *bing*, which is typically associated with modern medical terms for diseases and illnesses. Whereas *feng* is generally associated with terms from the Chinese medical lineages, there is no term for tetanus that includes *bing* and the most common contemporary translation in English-to-Chinese dictionaries is *poshangfeng.* Articles in the *People's Daily* from the early years of the PRC used all three terms to discuss concerns about tetanus, while government documents in Taiwan used *poshangfeng*.

A 1949 article titled "Preventative measures for infants against neonatal tetanus," (婴儿四六风的预防法), used all three terms beginning: "Siliufeng or qifeng is a type of disease that affects newborns. It is a form of the communicable disease *poshangfeng*." (四六风或脐风是初生儿患的一种疾病，是由一种叫破伤风的细菌所传染).[5] Subsequent news articles about tetanus and midwifery do not include all three versions, but some feature two. It is clear from this example that education about the language of neonatal tetanus was a component of

[5] "婴儿四六风的预防法," *人民日报 The People's Daily*, March 25, 1949.

addressing the medical issue itself. In addition, educating ordinary people about new terms and connecting these words to existing ones was a way to facilitate the work of midwives. It was likely known to midwives that all three terms were the same disease but given that modern midwives in communities in both China and Taiwan faced challenges integrating into rural areas, facilitating these linguistic transitions by using modern and vernacular terms together was a way to support a smooth transition to Western-style medicine.

In the documents from Taiwan, the council members and department chairs only use the term *poshangfeng*. This is also true for *zhuchanshi* as the term for midwife. These words became the most common contemporary terms for tetanus and midwife in both China and Taiwan, but there is an important distinction between the variety of terms presented in news articles and the singular use of terms in the Taiwanese government documents. The audience for these two sources was different. The government documents addressed council members, government department heads, and others who were knowledgeable about modern medicine (at least enough to know the existing medical infrastructure and the possibilities for expanding it). The responders for these documents were employees of the Ministry of Health, and so their language was influenced by standardized medicine. Conversely, the news articles were directed at the average person and as a result needed to bridge the gap between lay and medical terms.

Another issue was that poorly or broadly defined medical terminology could make it difficult to fully grasp the impact of specific medical conditions. News reports also included concerns about 抽风 *choufeng*, or convulsions. This, at first, indicates a completely different, if still not entirely defined, illness. In one article, when the writer reports on *choufeng*, they write

"*choufeng* (suffering from tetanus)" (抽风(患破伤风)).[6] This clarification appears to be an isolated example. In other reports, *choufeng* is used by itself and is not clearly differentiated from other specific diseases in those cases. This could imply that *choufeng* was used as a stand-in for tetanus or it might mean that this specific journalist was stating that, among the uses for *choufeng,* in that particular case they are referring to tetanus. The lack of clarity is useful in that it demonstrates the fluid nature of medical terms during this time period and the difficulty of identifying diseases that needed to be addressed. It also raises the possibility that, even when not represented clearly in numbers, the popular conception of which diseases were most common was influenced by broader, vernacular definitions of illness.

I am suggesting that there is a component of medical modernity involved in this shift. *Qifeng* is a Chinese medical term composed of 脐 *qi,* as in navel, and *feng,* as in illness. Although the same disease, the use of this term over *poshangfeng* implies a Chinese medical epistemology rather than a Western one. The development of new Chinese translations of Western medical terms and the adoption of Western medical terms from Japanese texts was a process that began in the late nineteenth century. Initially only popular in the early medical institutions on the East Coast and among the educated urban elite, as Western-style medicine became more popular and accessible it needed to be distinguished from what would be standardized as Traditional Chinese Medicine in the 1950s.[7] In avoiding the use of terms specific to Chinese medicines and emphasizing the use of modern terms, these articles standardized the language that midwives would use with the people they served. This created a shared language between people, the state, and medical workers, but it also reinforced the marginalization of old

[6] "冀省卫生厅， 省妇联指标 开展妇婴卫生工作训练改造助产人员," *人民日报 The People's Daily*, Jan. 26, 1950.
[7] Bridie Andrews, *Making Modern Chinese Medicine, 1850-1960* (Honolulu: University of Hawaii Press, 2015), 185.

and outdated medical practices.

The transition to a new vocabulary was only one component of the introduction of new-style or modern midwifery; it also included changes in medical and social practices for birth work. In much the same way that modern medical terminology had to be translated for the people to understand, new scientific standards and medical professions had to be made legible in the existing social fabric. As the following chapter shows, this process required midwives and the government to find ways to build trust with patients so that the new approach to birth work could garner authority. In some ways, a midwife was a midwife, regardless of the term people used for her, but as the state developed, the gap between the *jieshengpo* and the *zhuchanshi* widened significantly.

Chapter 1
救救小生命！Save the Children!:
Medical Authority and the Professionalization of Midwives in China

In May of 1949, *The People's Daily* (*人民日报 renmin ribao*) ran an article on the epidemic-level infant mortality rates in China's rural villages.[1] According to their local survey, a group of 20 women had collectively given birth to 44 children. 32 of those births were attended by old-style delivery methods (旧法接生 *jiufa jiesheng*), and 25 of those cases resulted in early infant death. 18 of these deaths were attributed to neonatal tetanus; however, the 12 infants delivered by new-style delivery methods (新发接生 *xinfa jiesheng*) all survived. This article also included the case of Ms. Liang, a 42-year-old woman who had given birth twice and lost both children to neonatal tetanus (脐风 *qifeng*). Fearing for her third child, she had sought advice on how to protect the coming infant against tetanus. It was suggested to Ms. Liang that "If you bite off one of the child's toes, next time you'll be able to save the child."[2] (你把小孩子的脚指头咬掉一个，下次孩子就保住.). Ms. Liang followed the advice, but without effect; she lost her third child as well. It was only when she enlisted the help of a modern medical doctor (医生 *yisheng*) that she received productive advice.[3] Since the reported cause of her children's deaths was tetanus, the newborns likely contracted it when their umbilical cord was cut. To ensure her next child was delivered safely, the doctor told Ms. Liang that she should call comrades from the hospital to deliver the baby (请医院的同志来接生). With the help of hospital staff, Ms. Liang finally safely delivered her fourth child.

[1] 李友义, "救救小生命！-- 谈 农村妇婴卫生工作," *人民日报 The People's Daily*, May 22, 1949.
[2] 李, "救救小生命！-- 谈 农村妇婴卫生工作."
[3] *Yisheng* does not always refer to a modern or biomedical doctor. In this case, however, it is clear that the reporter suggested visiting a modern doctor at a hospital.

Although this story and the accompanying statistics were only a few lines in a newspaper article, they are emblematic of an important transformation in China during the middle of the twentieth century. Three of Ms. Liang's children suffered from tetanus – a dangerously common illness that could be contracted by both mother and infant during the course of delivery. The onset and progression of tetanus is quick and in the 1950s almost untreatable in newborns. For the first few days, infants would appear normal, but as tetanus developed, the lockjaw symptom would set in, preventing the child from nursing. As it progressed, the infant would suffer from body stiffness and spasms, which then lead to death. One of the issues that this and similar articles highlighted was the cause of tetanus. The different advice given to Ms. Liand shows one "superstitious"[4] and ineffective response to tetanus as opposed to the effective clinical help she received from the hospital. The survey on old- and new-style midwifery further asserted the life-saving differences in childbirth services. None of these issues were new in the 1950s. Disease and birth complications were well documented in medical literature, and the global rate of infant mortality was high. In addition, the 1950s were not the first time a Chinese government – whether it be the Qing empire, the Republic of China (ROC), or the People's Republic of China (PRC) – attempted to modernize midwifery to address these issues. Yet, Ms. Liang's story sits on the cusp of a significant historical change. The (ex)changes of medical knowledge that brewed in the first half of the twentieth century finally became part of public health policies under a government with the resources to standardize and disseminate medical care in China.

In this chapter, I will argue that PRC's policies in the 1950s signaled a change in state-medicine dynamics that finally supported the type of institutionalized medicine the late Qing and

[4] As I will address in the second half of this chapter, practices that were not founded in scientific methods were labeled "superstitious" by both Republican and Communist supporters. While some methods were useful or at least emotionally therapeutic, others, like the one in this example, were clearly harmful and ineffective at dealing with illness.

early Republican rulers attempted to create. To make this point, I explore the transition from old-style to new-style midwifery in China to demonstrate how the (re)creation of institutional medicine altered patient access and care. I begin this chapter with a discussion of medical authority in the long durée of Chinese medicines. This historiography shows medical authority was earned by each provider from individual patients and their families, contrasting with the medical power that developed through Western-style, state medicine. Using the framework of medical authority and medical power laid out in the introduction, I then discuss the redefinition of midwifery in the early years of the PRC as state-sponsored medical professionals. These new-style midwives differed from the nurse-midwife colleagues trained during the Republican era, but their goal to expand access to quality healthcare for women and children was the same. The PRC's ability to train midwives on a large-scale transformed the social and political role of the midwife.

Medical Authority in Imperial China

In imperial China (until 1911) and for much of the twentieth century, medicine was practiced by a multitude of medical care providers including shamans, Buddhist monks, literati doctors, granny midwives, and traveling pharmacists. People chose different care providers for different illnesses and sometimes employed multiple practitioners simultaneously. A person's choice of healer was influenced by religion, economic status, gender, and personal beliefs about how medical care should be administered. Importantly, none of these practices nor practitioners were above patient scrutiny. As the brief historiography below demonstrates, until the latter part of the twentieth century, medicine in China was plural and oft revised. While the imperial court kept its own medical team, this did not dictate the type or availability of medicine to the average person; rather, each doctor, midwife, and healer had to prove both the worth of their medical

epistemology and their ability to practice medicine effectively. The goal of this discussion is to show how medical authority functioned before the standardization of modern Western medicine and what would become Traditional Chinese Medicine (TCM) and as a result how the relationship between the state and medicine evolved with the establishment of the PRC in 1949. I begin with medicine as practiced by literati doctors in the Ming (1368-1644) and Qing (1644-1911) dynasties to highlight the long history of medical pluralism and vernacular medical knowledge.

Historically, conceptions of the body and illness have been specific to time and place. Chinese medical practitioners conceptualized the physical body as connected to cosmology and daily life.[5] Illness could be caused by shock or emotional deprivation, and susceptibility was affected by the season, one's menstrual cycle, and food. The vocabulary of disease centered on the movement of *qi* and hot/cold fluctuations as related to the balance of *yin* and *yang* in one's body. This orientation of sickness was articulated similarly across the various medical occupations. While each practitioner and type of medicine had their own response to disease, importantly, they shared a vocabulary and paradigm which prevented patients from seeing them as mutually exclusive. This meant that calling on a shaman to perform a ritual and calling a literati doctor to prepare a prescription simultaneously was a plausible response for a single medical issue and neither practitioner was in conflict with the other.

Although shamans, traveling pharmacists and other medical practitioners were well utilized by people throughout the Ming and Qing dynasties, this discussion focuses on literati doctors. As scholars, these doctors possessed the educational and financial privileges to record and publish their medical treaties and case histories. In addition, families formed around the

[5] Charlotte Furth, *A Flourishing Yin: Gender in China's Medical History, 960-1665* (Berkeley: University of California Press, 1999), 4-5.

cultivation and protection of prescriptions, and in prosperous areas, such as the lower Yangzi region, scholar groups and societies sprung up to share and preserve important innovations in medical practice. This made literati doctors one of the best documented groups of medical practitioners in China. Moreover, despite many changes to the medical tradition, the history of literati doctors formed the foundation of what would become TCM as practiced today, which posed the only institutionalized counterpart to modern Western medicine after 1949 in China. While religion-based healing practices, such as shamanism, survived in Chinese communities into the 1980s,[6] they were not included as parts of state medicine in the People's Republic of China (PRC) or the Republic of China (ROC).

In *A Flourishing Yin,* Charlotte Furth explores the doctor-patient relationship in late Ming dynasty Yangzhou through the published case histories of literati doctors. These doctors were part of medical family lineages, apprenticed by established doctors, but not beholden to a government-standardized practice. Furth describes medical training in the late Ming as "a medical culture that had become extremely decentralized, its sources of authority diffuse, its classical roots subject to question, requiring the successful physician to stand as an individual on his medical opinion and to look for social support from whatever literati or lineage identity his circumstances permitted."[7] This meant that even doctors of a medical lineage and extensive experience were required to prove their worth with each consultation. Patients were not passive receivers of medical advice for many reasons. One of the cases detailed in Furth's work shows that the first response to illness often occurred within the family, with home remedies or cures from books and shared recommendations.[8] In the early 1600s, one doctor, Cheng Maoxian, was

[6] Bridie Andrews. *The Making of Modern Chinese Medicine, 1850-1960* (UBC Press: Vancouver, 2014), 49.
[7] Furth, *Flourishing Yin*, 226.
[8] Furth, *Flourishing Yin*, 236.

called by a son to attend his mother. Cheng diagnosed the mother with “stagnation downward” after she'd self-administered Six Harmony infusion for a “bowel uproar.”[9] Through the course of the treatment, Cheng prescribed ginseng as part of an herbal decoction, but the mother “feared that her chest would not ease but be stopped from excessive supporting action.”[10] Despite her resistance, and with the help of the son, Cheng Maoxian was able to continue to administer ginseng to positive effect until the mother recovered several days later.

This particular case history exemplifies a few aspects of medicine in Ming China. First, self-diagnosis and treatment were common. Second, that both the patient and the doctor used the same language and logic to understand and treat illness. The doctor did not have to convince the mother of a new medical paradigm, but only that ginseng would not have the negative effect she thought. Third and finally, that medicine was a collaborative space which included the doctor, the patient, and the patient's family. Although the son deferred to the doctor's recommendation, he did so against the will of his mother. As Furth puts it, Cheng Maoxian constituted “...a service provider lacking the resources of an unchallengeable science,” and as a result could not point to an established truth of medicine, only his own interpretation. Instead, he relied on the social intervention of the son to help heal his mother.[11] Furth's larger point is that Cheng Maoxian, however well established and experienced, was not above challenge from his patients. It was not unusual in the 1600s, as it is not unusual now, for patients to seek out healers who would reinforce their personal understanding of illness. Cheng's case histories repeatedly lament finding patients who first utilized doctors that agreed with their own assessments to the detriment of the

[9] Furth, *Flourishing Yin*, 228.
[10] Furth, *Flourishing Yin*, 229. While "herbal" may invoke the image of a less potent form of medicine in the U.S. now, it is important to remember that, not only were herbal remedies often effective but they were also the precursor to medicine taken today. Decoctions are created by boiling herbs into a drinkable "tea." This method is still used by TCM doctors and is standard in Chinese hospitals where TCM is available.
[11] Furth, *Flourishing Yin,* 244.

patients' health. These cases also show how competing ideas about treatments and prescriptions were already strongly present in the Ming dynasty. For those with the financial means, calling a new doctor when the first failed or negotiating a prescription was a common part of the medical market.

For most of the Qing dynasty, the medical landscape looked very similar to that of the Ming. Even after European missionaries arrived, their medicine was rarely more effective or advanced than the medicine already offered by Chinese pharmacologists. Yili Wu's work on 妇科 *fuke*, or gynecology, in late Imperial China provides some of the continuity from Furth's investigation of medicine in the Ming dynasty. In *Reproducing Women*, Wu addresses the negotiation of medical authority on gynecological diseases and childbirth, a particularly complicated challenge for *fuke* doctors because they were almost always men treating women. In Qing society, which insisted upon a strict gender division in the domestic sphere, even medical practitioners struggled to permeate gender boundaries. As Wu states, "Men might well write authoritative works on 'women's disease,' yet childbirth took place at home, under the direction of midwives and female relatives."[12] This meant that male *fuke* doctors were not above challenge, even if they were above women and midwives in the social and medical hierarchy. Like their Ming counterparts, Qing doctors lacked an unquestionable science and institutional power to assert their authority; their services were rendered at the discretion of their clients, who could call on a different doctor's services when the first failed to meet their standards. In addition, *fuke* doctors had to compete with midwives for pre-natal, birthing, and post-natal work. The services of a literati doctor were more expensive than those of a midwife, and the

[12] Yili Wu, *Reproducing Women: medicine, metaphor, and childbirth in late imperial China* (Berkeley: Univ. of California Press, 2010), 4.

composition of Qing families meant that most matriarchs lived as part of an extensive family network in the same household. They regularly assisted their daughters-in-law and granddaughters through birth. As a result, male doctors needed to prove their worth above the services offered by family members and less-expensive midwives.

One Qing doctor attempted to establish his medical credentials through the publication of his *Treatise of Easy Childbirth.* Composed by Ye Feng (Pseudonym Lay Buddhist Jizhai. Note the overlap of Buddhism and medicine in this case.) in 1715, this guide to childbirth was "...one of the most famous and widely circulating medical works of the later imperial period."[13] It represented a paradigm shift towards childbirth from the default of "difficult" to "natural," which could be painful, but was still "easy." Doctors and midwives alike had approached childbirth with the intent to intervene; accounts abound of mishandled breech births and midwives physically pulling infants from their mothers. Ye Feng's treatise argued that nothing was more natural than birth and so there was no need for a midwife's highly dangerous and interventionary tactics.[14] Instead, women should avoid anything that induced birth, such as taking the birthing position and pushing, until the baby was absolutely ready to be born. One of the reasons, Wu argues, that this paradigm was so well received was because Ye Feng's work "...essentially crystallized a set of optimistic perspectives that had become increasingly salient in late imperial doctors' views of childbirth."[15] In other words: easy childbirth echoed popular ideas about medicine and birth already in place. Despite representing a shift in the medical approach to labor, it did not radically change the extant medical epistemology. In contrast to manual methods of delivery, literati doctors were supposed to utilize intellectual resources and pharmaceutical

[13] Wu, *Reproducing Women,* 148.
[14] These practices didn't improve much until after 1949, when state-sponsored training and re-training programs started to shift practices. This is covered in more depth in chapters two and three.
[15] Wu, *Reproducing Women,* 150.

drugs.[16] Ye Feng's argument, that childbirth was natural and easy, implied that midwives were both uneducated and unnecessary, thus elevating doctors above midwives.[17]

Although some literati doctors denigrated the services of midwives, they were not as successful as nineteenth-century Western obstetricians would be in eliminating access to midwives' services. As I cover in more detail in chapter five, this can be largely attributed to the lack of relationship between literati doctors and the government. Western doctors formed strong relationships with the state through their professional organizations (such as the American Medican Association) and medical institutions (e.g. hospitals and universities) during the nineteenth and twentieth centuries, which gave them the leverage to effectively marginalize midwives. In contrast, the literati doctors of the Qing dynasty were not organized as part of state-sponsored medicine. As a result, their leverage was only local, and relationship based.

In addition, while midwives were typically older women with experience in labor and delivery, they were far more accessible than literati doctors. Geographically, the Qing empire encompassed even more land than the PRC does today. This included large parts of what are now Tibet, Mongolia, and Xinjiang, all of which have their own lineages of medical authority. Realistically, only a portion of the population in Qing China would have been in the physical proximity to a *fuke* doctor, who trained and practiced in places like the lower Yangzi region. In contrast, midwives existed everywhere because nearly any woman could develop experience in assisting birth. They were not, like *fuke* doctors, attached to a medical lineage. Moreover, the cost of calling such a doctor would have priced many ordinary families out of their services. Wu was able to research literati doctors because their work was well published, so while this work records important changes in *fuke* medicine during the Qing dynasty, it did not represent the only

[16] Wu, *Reproducing Women*, 187.
[17] Wu, *Reproducing Women*, 151.

or even most popular option for labor services.

While Furth and Wu's work are not exhaustive representations of medicine and medical practice in Ming and Qing China, they demonstrate that medical authority was not static: it was collaborative, contestable, and part of a medical market that included many different approaches to healing. Even within a medical lineage, practice was not uniform. Medical treatment varied for many reasons, such as personal experience, religious training, and/or access to ingredients, but it was also fueled by competition for employment. Cheng Maoxian and other *fuke* doctors needed regular patients to maintain their practice and so they required an advantage to secure their patients. Among literati doctors, standardization of prescriptions reduced the demand for expensive doctor's visits and advice, as patients could recreate prescriptions at the local pharmacist. As Bridie Andrews notes in her book *The Making of Modern Chinese Medicine,* drugs stores were common and "Since at least the Ming dynasty, Chinese pharmacies had been turning classic prescriptions and secret remedies into convenient pills and powders."[18] As is clear from Cheng Maoxian's case history, patients were willing to self-diagnose and treat less intense illnesses on their own. This encouraged medical practitioners to keep their special treatments and prescriptions a secret within their personal medical lineages,[19] thereby incentivizing patients to seek out their services.

When missionaries first built hospitals and offered medical services in China, their Western medicine did not pose an immediate rival to existing medical practices. Anatomical and linguistic conceptions differed greatly between Chinese and Western medical approaches, and missionaries in the eighteenth and nineteenth century rarely offered better medical care options than their Chinese counterparts. Like the cases discussed above, missionaries did not possess an

[18] Andrews, *The Making of Modern Chinese Medicine, 1850-1960,* 46.
[19] Andrews, *The Making of Modern Chinese Medicine, 1850-1960,* 133.

unchallengeable medical authority, and they also had to deal with additional linguistic, epistemological, and practical hurdles.

Bridie Andrews' work addresses the challenges missionaries faced when they tried to practice medicine in China. Immediately obvious was their physical foreignness (a difficulty in itself), but they also struggled with the medical language barrier. As noted earlier, the shared medical paradigms and language that Chinese doctors and healers used permitted options to overlap without one healer's approach undermining that of another.[20] This created an opportunity for missionaries' medicine, but differing medical epistemologies and approaches made it less legible to the Chinese people. Because missionaries were not initially attempting to reform public thought on medicine, Andrews notes that many missionaries responded to this barrier by downplaying the foreign aspects of medicine to make Western medicine more attractive to Chinese people.[21]

Missionaries did not adopt Chinese anatomy, but they were interested in Chinese *materia medica.* As demonstrated in Furth's discussion of Ming medicine, pharmacies were a well-established component of Chinese medicine, and the cultivation and gathering of medicinal herbs was already a well-documented occupation. Prescriptions devised by literati doctors were created from the published references of these herbs and missionaries quickly found these materials very useful because understanding indigenous plants meant that they could use local flora to practice medicine. Andrews argues that "These frequent attempts to understand and operate in the Chinese pharmaceutical world suggest that the missionaries were not as dismissive of Chinese pharmacies as they were of Chinese medical knowledge."[22] Like Ye Feng's treatise on easy

[20] This is to say that a family might call a bonesetter and a pharmacist, for example. This did not prevent factions from forming, as is clearly documented between literati doctors by scholars of medicine.
[21] Andrews, *The Making of Modern Chinese Medicine*, 53-4.
[22] Andrews, *The Making of Modern Chinese Medicine*, 56.

childbirth, Chinese pharmaceuticals were appealing to missionaries because they resonated with previous knowledge, whereas understanding bodily functions through the balance of *yin* and *yang* or the movement of *qi* was too far removed from their medical paradigms. Although there were similar ideas about the origin of disease from bad air and humors, the divide over medicine persisted.

The work of early medical missionaries further demonstrates China's medical pluralism during the eighteenth and nineteenth centuries. Missionaries had to compete for medical authority and in doing so adopted some Chinese medical characteristics to their practice, but this competition was not a conflict of medical accuracy or effectiveness. Instead, it reflected a continuity of the medical market norms. While missionaries utilized Western medical knowledge, Andrews argues that the medical practice of missionaries was not notably different from Chinese literati doctors. The authority to diagnose and prescribe was governed by social interactions, use of language, and even religious preferences with missionaries just as they were with Chinese healers. These early competitions for medical practices required patient trust in their medical care provider, and as a result, the authority to diagnose and treat derived from the patient. Moreover, medical practices could overlap for greater benefit, meaning that even if a patient or their family turned to a missionary for help, that did not exclude the help of other healers. Medical authority shifted depending on the individual doctor, the type of illness, or religious affiliation; thus, no one type of medicine was clearly superior. However, this dynamic changed in the late nineteenth century, as social reformers in the late Qing and throughout the Republican period focused on adopting Western medical standards as public policy. When this occurred, neither the literati doctors' nor the missionaries' medicine was sufficient to meet state

standards.[23] The resulting competition for state support in turn altered the plurality of medical authority and began to reshape it into a hegemonic medical power.

The Growth of Western Medical Authority

The appeal of Western medicine and Western medical epistemology to the Republican government and its ruling Nationalist Party was not based on the superior effectiveness of the medicine itself, but rather international conditions that increasingly associated science with modern nation-states.[24] China's position as a semi-colonized country meant that the Nationalists needed to prove to the international community that China could maintain modern standards of public health and hygiene. In other words: the effectiveness of Western medicine was less important than its use as a vehicle for social and political changes that could shore up Nationalist rule in China.[25]

One way to understand the establishment of Western medical power is through state intervention in mental illness. In *The Invention of Madness,* Emily Baum demonstrates that Western medical views of 'madness' changed the state-doctor-patient relationship. [26] Prior to the institution of asylums in the early 1900s, the family was responsible for relatives who suffered from mental illness. If a person was arrested for acting "mad" in public, they could be quickly released to the family for confinement and treatment at home. In addition, because madness could be attributed to spirit possession, societal pressures, or the symptoms of other diseases, it was treatable, and therefore not a permanent condition.[27] However, as Western ideas about

[23] Andrews, *The Making of Modern Chinese Medicine*, 67.
[24] Sean Hsiang-Lin Lei, *Neither Horse nor Donkey: Medicine in the Struggles over China's Mortality* (Chicago: University of Chicago Press, 2014), 10-15.
[25] Andrews, *Making Modern Chinese Medicine*, 141.
[26] Baum uses 'madness' throughout her book to delineate between madness and mental illness - the changes in cultural and medical understanding over time. Her work deals with this terminology in more depth, but I want to note here that their use in this section is a specific historical term, not a pejorative or dismissive term.
[27] Emily Baum, *The Invention of Madness: state, society, and the insane in Modern China* (Chicago: University of Chicago Press, 2018), 23, 30-38. Note here, too, how madness as a disease was not only psychological or

mental illness and confinement were introduced, asylums functioned as a way to control unruly persons. This began under the last decade of Qing rule but continued during the Republican period because the Nationalists recognized neuropsychiatry and asylums as important markers of authority in the West.[28] The asylum was a method of incarceration for non-productive members of society, and as such it signaled to Western powers that the ROC was willing and able to contain and treat psychological deficiencies within its territory.

Psychology was useful for more than just the insane and unproductive. Popularized psychology was also a way to shape Republican citizens. Baum considers the New Life Movement in this aspect, writing that it "...was Chiang Kai-shek's crowning effort to induce the Chinese public to refashion their minds and behaviors to better align with the revolutionary imperatives of the modern nation."[29] Cultivating strong connections between the Republican state and psychologists enhanced the reputation of both the state and the doctors, but just as with literati doctors and medical missionaries, Chinese patients challenged and negotiated psychiatric treatments. Baum phrases it this way: "Once Chinese configurations of illness entered the psychopathic hospital... Western physicians deprived them of their independent meaning and absorbed them into the ontology of neuropsychiatry. Chinese patients, meanwhile, attempted to resist these partisan interpretations by underscoring the validity of their own medical knowledge."[30] Western-trained psychiatrists attempted to reorganize Chinese mental illness through their own medical epistemologies, but even with state-backed authority, Chinese patients remained active in their diagnosis and treatment.

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physiological but influenced by broader social issues the same way other diseases were described within the Chinese medical context.

[28] Baum, *The Invention of Madness*, 113-116.

[29] Baum, *The Invention of Madness*, 154.

[30] Baum, *The Invention of Madness*, 173.

Andrews and Baum's work highlights the dueling functions of Western medicine as a form of international validation and practical medicine in the transition from Qing China to the Republican period. That scholars emphasize the structural importance of medicine over its use further demonstrates the competitive nature of medical care, but as institutional medicine – in the form of asylums, medical universities, and public health initiatives – strengthened, the nature of this competition changed. Until the very early 1900s, healers needed to prove their medical authority with each visit and treatment as they could not rely on a wide-spread medical standard or state support to shore up their diagnoses. When the Qing government adopted Western psychiatric standards from Japan, and the Nationalists utilized Western public health standards, those government entities endorsed specific medical epistemologies. This created an interaction between the government and medical care which had not existed before, and it equipped those governments to control individual bodies based on adherence to foreign health standards. However, the government's endorsement was insufficient to convince the general population of Western medicine's effectiveness, so patients continued to demand treatment based on their personal understanding of illness.

This shift in government focus to public health and patients' resistance to unknown medicine is a turning point in the history of medicine in modern China. As the roots of institutionalized medicine were forming in the late nineteenth and twentieth centuries, a new patient-medicine dynamic emerged. The medical authority that was earned from patients by medical care providers was slowly overshadowed by the emerging medical power created by the state-medicine relationship. Personal and plural medical paradigms were replaced or condensed under the modern medical system that prescribed standardized treatment and excluded other modes of healing. As I will argue in the next section, this medical power grew slowly, in

conjunction with a series of changes in the modern world, including government, politics, education, and a variety of social transformations that came with industrialization, colonialism, and imperialism. Not only did medicine itself change, but the possibilities of care, cultural heritage of medicine, and personal autonomy were altered too.

Authority and Power in the Redefinition of Midwifery

Recall Ms. Liang from the beginning of this chapter. She, and many women like her, had lost multiple children to neonatal tetanus. As I will discuss at length in chapter two, tetanus is an important example of how basic medical innovation was both an effective, much needed public health initiative and how addressing it served to build trust between people and modern midwives. While the Nationalists also tried to establish state medicine to provide medical care for the people, the ROC's time on the mainland (1912-1949) was marked by warfare, internal turmoil, and financial constraints. These economic considerations drove the move towards village-based medicine as advocated for by people such as C.C. Chen. Although the ROC government wanted to develop its healthcare networks, it was not possible to supply rural areas with the required number of physicians and trained nurses at the time. Chen understood that limited budget and developed a system of training village health workers based on his Ding County case study.[31] The concept involved training local people and leveraging existing medical networks to support initiatives such as vaccination, which lay people could be quickly and easily taught to administer. While the village health system did not meet all medical needs, in the case of Ding County, it did successfully increase the number of vaccinations, thus reducing the impact of preventable diseases. The ROC government was supportive of this approach, but unfortunately the beginning of the Japanese invasion in 1937 ended real efforts to address rural

[31] Lei, *Neither Horse nor Donkey,* 237-8, 240.

health.[32] Having never really experienced much peace and stability to begin with, the Nationalists spent the next decade actively engaged in warfare with the Japanese military or the Communists until they were eventually forced to retreat and move their headquarters to Taiwan.

The establishment of the People's Republic of China (PRC), then, was the first significant span of time since the dismantling of the Qing empire that the Chinese government was large enough and sufficiently stable to attempt addressing public health initiatives. This came in a variety of forms from campaigns to remove pests and vaccinations to the development of sewage removal systems.[33] The PRC's Ministry of Health quickly recognized the importance of addressing infant and maternal mortality rates, and in response they supported a transition from old-style to new-style midwives. In Ms. Liang's case, she was told to go to the hospital to get assistance with her delivery, but most women were not in close enough proximity to make this a viable option. With this in mind, the government focused on training midwives who would work in rural areas to improve accessibility to midwife services. This process was aimed at addressing rural health problems and disseminating new information about biomedicine. Like the ROC government before it, the officials working in the PRC valued the practical and ideological benefits of adopting a system that would demonstrate their ability to self-govern, and perhaps even more poignantly for the Communist Party than the Nationalist Party, they understood that public health in China would have to be developed differently than it was in Europe and Japan. Unfortunately, it was not possible to train enough physicians, nurses, and other biomedical professionals to staff villages. Moreover, it was not economically feasible to do so; people in the countryside could not afford those professionals even if the doctors were willing to work in

[32] Lei, *Neither Donkey nor Horse,* 243.
[33] For more on these initiatives, see *Red Revolution, Green Revolution: Scientific Farming in Socialist China* by Sigrid Schmalzer, *Hygienic Modernity: Meanings of Health and Disease in Treaty Port China* by Ruth Rogaski, and *The People's Health: Health Intervention and Delivery in Mao's China 1949-1983* by Zhou Xun.

remote areas (and many were not). In response to these parameters, the government focused on short-term training programs that would quickly increase the number of healthcare providers who could address common injuries and disease. In many cases, these programs encouraged people from rural areas to train in modern medical methods and then return to their villages. In this section, I use news articles from the *People's Daily* to show how these new methods were discussed and disseminated, as well as how midwives were recruited and trained. Together, these articles show how the government promoted their own form of modern midwifery.

Similar to vaccinations, the first steps towards addressing infant and maternal health were quite simple: handwashing and sterilization of equipment used during delivery were achievable practices that reduced the impact of many infectious diseases. The hurdle was disseminating this information and convincing people of its utility. In an effort to educate the general population on the importance of hygienic practices, the *People's Daily* published many articles detailing ways to avoid contracting diseases such as tetanus during the vulnerable delivery and post-partum process. One news article from March 25, 1949, advised women and families who could not access or afford midwife services to sterilize any material that would come in contact with the infant and birthing mother. Special emphasis was placed on the scissors or knife that would be used to cut the umbilical cord, but the advice also included disinfecting the swaddling cloth, and the preparation of boiled water for hand washing.[34] Publishing these achievable standards for sterilization not only demonstrated safe methods for home births, but it also set the standards for when midwives should be called to help. Meaning that people could compare the practices of a midwife against what they read in newspapers. In addition, the news articles were framed to convince women of the veracity of new-style birthing methods by coupling the new measures

[34] "婴儿四六风的预防法," *人民日报 The People's Daily*, March 25, 1949.

with specific results. The format of articles concerning neonatal tetanus included anecdotes or statistics that claimed new-style midwifery saved infant lives alongside practical aspects like sanitizing scissors before use. This structure is clearly employed in the article about Ms. Liang: First, the article covers how modern delivery techniques saved her fourth child and then details best practices or advice on whom to consult. Another report from the Hebei Provincial Health Department claimed that 30% of local infant deaths were attributed to tetanus, and blamed old-style midwifery directly for their poor hygienic practices.[35] The proper response, the article continued, was to rely on new-style midwives (新助产员 *xin zhuchan yuan*) and their modern medical methods. This format demonstrated the problem (high rates of infant mortality as a result of tetanus) and offered a solution (new-style midwives), thus clearly communicating to the public the utility of new-style midwifery to their personal lives.

One of the notable features of these early news articles is the plurality of terms for the same disease. As detailed in the Part I introduction, there was 四六风 *siliufeng*, but 破伤风 *pofangsheng* (general term for tetanus) and 脐风 *qifeng* (the TCM term for neonatal tetanus) were also used to refer to tetanus contracted during or shortly after delivery. Different names could indicate differences in medical perspectives, as demonstrated with *qifeng*. This multiplicity of terms was a result of China's medical pluralism, which also needed to be addressed and translated. One report demonstrated that many people were unclear about the origins of tetanus.[36] Some believed infants were born with the disease while others blamed fate, a force that could not be curbed with any amount of medicine. Regardless of the terminology used, it was important for the state to establish the cause of tetanus so that prevention methods made sense to the people

[35] "冀省卫生厅， 省妇联指标 开展妇婴卫生工作训练改造助产人员," *人民日报 The People's Daily,* Jan. 1, 1950.
[36] 辽东省人民政府卫生处, "辽东岫岩县助产训练班的经验,"*人民日报 The People's Daily,* April 27, 1950.

using them. As a result, when discussing the effectiveness of new-style midwifery in preventing tetanus, articles also needed to address how people contracted the disease. As one article described the curriculum of the new-style midwife training, it explicitly stated that tetanus was contracted after birth, as a result of poor sterilization techniques.[37] The advertised course promised to show women how to sterilize equipment properly and therefore prevent neonatal tetanus. Here again, the newspaper combined both the danger and the solution, and in this case also addressed common misconceptions about disease prevention. The results and practice repeatedly went hand-in-hand.

Tetanus was only one among many concerns for infant health. An article from Northern China discussed the wide-spread issue of 假死 *jiasi*, literally translated as "fake death," but better understood as neonatal or birth asphyxia. Neonatal asphyxia occurs when a newborn infant is deprived of oxygen through lack of blood to the brain. In the cases published in the *People's Daily*, the newborns likely suffered from lack of oxygen during the birthing process, so that when the child was fully delivered, they appeared to be stillborn. However, in the case of asphyxia, if oxygen deprivation was not too prolonged, the newborn could be revived through artificial respiration (人工呼吸 *rengong huxi* – usually part of CPR). These newspaper articles claimed that old-style midwives did not know how to perform CPR or how to identify cases of *jiasi*, and as a result, many newborns were buried or cremated prematurely. Not only did this news article reframe an existing problem but it also paired the dangers of neonatal asphyxia with the advice to seek out new-style midwives or doctors. The reporter further notes, "Of the four [newborns] who had birth asphyxia, they [midwives] were able to use CPR to save the children's

[37] 辽东省人民政府卫生处, “辽东岫岩县助产训练班的经验.”

lives" (其中四名是假死，她都用人工呼吸法把孩子救活了).[38] In this instance too, new-style midwives are the only ones who could identify asphyxia *and* respond appropriately. In the articles concerning midwife training (助产训练班 *zhuchan xunlian ban*), the effectiveness was further emphasized through a comparison of old-style and new-style midwives. When old-style midwives attended training, the newspaper reported, they admitted their deficiencies and even their regret at having not learned new-style techniques like sterilizing instruments and CPR sooner.[39]

Stories of old-style midwives' resistance to new-style training were frequent, both in the *People's Daily* and in scholarship on women in the PRC, but we should not understand this "regret" as a universal response. Instead, it should be interpreted through its use in newspapers, a form of media that was meant to convey information to the masses. In using reformed old-style midwives, news articles could demonstrate that even old-style midwives recognized the effectiveness of new-style midwifery. In the face of some resistance to new methods, the conversion of old-style midwives served the additional purpose of speaking directly to women's concerns about new skills and new people.

In addition to preventing neonatal tetanus and responding to birth asphyxia, midwives also administered vaccines. An article from *The North-China Daily News* discussed a training program in Shandong (Shantung) Province in which "More than 5,000 women in the area have already been given an elementary course in midwifery" from the East China Military and Administrative Committee.[40] The article credits the new midwifery training with reducing the

[38] "华北，东北等地 训练八千余接产人员 改进妇婴儿死亡率减低," *人民日报 The People's Daily*, March 29, 1950.
[39] 辽东省人民政府卫生处, "辽东岫岩县助产训练班的经验."
[40] "Midwives in East China Being Trained," *The North-China Daily News*, May 9, 1950.

local infant mortality rate by 50%. Importantly, it provides a glimpse of the connotations applied to old-style midwives: "Most of the women who have undergone or are undergoing training were formerly old-type professional midwives. They are taught hygiene, modern methods of child delivery, and the simple rules of disinfection, as well as how to vaccinate infants. They are rapidly discarding their medieval 'super-natural' practices which were largely responsible for the deaths of many infants and their mothers."[41] This excerpt shows that vaccines were a part of the new-style midwife training, but it also provides some insight into the training practices and the circulated conceptions about old-style midwives. Although variolation and Jennerian vaccines were present in China during the late Qing dynasty, it appears that old-style midwives were not part of that public health effort.[42] Training to administer vaccinations was not typical for old-style midwives in part because old-style midwives were not part of an organized medical system. While some apprenticed for their positions, many became midwives simply because they had given birth themselves or perhaps assisted family members first.[43] Until the Republican period, when people like Yang Chongrui set up training programs, midwives came into their position through their delivery experience. As Tina Phillips Johnson writes in *Childbirth in Republican China,* "In fact, before PUMC (Peking University Medical College), there was no medical *profession* in China. Medicine was not legalized, institutionalized, or standardized. PUMC granted the first government-sanctioned medical diplomas in China."[44] In other words, the professionalization of midwives was part of a broader shift towards institutionalization of medicine occurring in all medical professions across China.

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[41] "Midwives in East China Being Trained."
[42] Mary Augusta Brazelton, *Mass Vaccination: citizen's bodies and state power in modern China* (Ithaca: Cornell University Press, 2019), Loc. 528.
[43] Gail Hershatter, *Gender of Memory: Rural Women in China's Collective Past* (University of California Press: Berkeley, 2011), 158-9.
[44] Tina Phillips Johnson, *Childbirth in Republican China: Delivering Modernity.* (Rowman & Littlefield Publishers, Lanham) 2011, 74.

The role of new-style midwives as vaccinators reduced the impact of infectious diseases, and as a result, reduced the morbidity rate of diseases like smallpox, which lightened the burden on an already inadequate medical system.[45] In addition, vaccinations were a favored form of public health, and using midwives to distribute them was one way to enhance the overall effectiveness of vaccination while building relationships with families. Convincing people to accept vaccination, however, took many forms. In articles addressing the importance of epidemic prevention (防疫 *fangyi*), some mentioned midwives showcasing women with pockmarked faces to encourage people to accept preventative vaccines.[46] In this way, midwives drew on a broader set of social concerns about beauty, marriageability, and discomfort to encourage people to seek out and accept preventative medicine. Once again, the news articles emphasized the problem and offered the services of new-style midwives as the solution.

Including vaccination as part of midwife work expanded the definition of their role as medical care providers. It also situated them as part of the state-sponsored medical network. This contrasted with old-style midwives who operated at the behest of their patients rather than through government direction. Whereas old-style midwives held medical authority with individual families, new-style midwives were often outsiders, asserting foreign ideas about health and disease. The new-style midwives were associated with the government, but in the 1950s they lacked the state and social support to enforce medical initiatives that people were unwilling to accept. Instead, the midwives and the state had to work to promote new-style midwives' medical authority in order to support their role as intermediaries between the people

[45] In Johnson's discussion of Republican-era midwives, she notes that, for most people, the new-style midwife services were out of reach. This is both a point about economics and geographic dispersal. Johnson, *Childbirth in Republican China*, 54.

[46] 张文, 马彦杰, and 刘和一，"执行预防为主方针 河北开展卫生宣教防疫工作半年中八百万人接种牛痘," *人民日报 The People's Daily,* Aug. 12, 1950.

and state medicine. The newspaper articles' discussion of the problem and solution together was one way that the government tried to convince people to accept this new medicine. Part of building this trust was convincing women to work as midwives, too.

Despite the prevalence of news articles praising new-style midwifery in Northeast China, recruiting women into midwife work was not easy. People held common conceptions of midwives as dirty and superstitious; the work was not well paid, considered low in status, and usually located away from city centers. Consequently, young women, especially those who were career- or Party-oriented, were reluctant to take it on as a profession. This section covers how training programs were promoted, to whom they were promoted, and some of the cited reasons people resisted midwife work. Just as I identified the structure of news articles that sought to establish the reliability of new-style midwifery in the previous section, I identify a structure of information that combined midwife training and responses to perceived concerns about midwife work here. The latter suggests something important about the function of these articles. Rather than simply reporting on midwife training programs, the issues raised indicate that this was a dialogue, and that someone was responding to women who resisted midwife work. Responses to reluctance were frequently framed in socialist rhetoric, but they also identified practical concerns women had about training as midwives.

A 1950 report from Hengshui Prefecture attributed a reduction in the infant mortality rate from 48% to 7% to the 3,000 newly trained delivery personnel (助产人员 *zhuchan renyuan*).[47] Unfortunately, it seems the success of this new training program did little to entice women into the profession. In particular, female cadres (Chinese Communist Party members who served as

[47] 衡水专署通讯组, "推广新法接生减低婴儿死亡率　衡水专区训练三千接生员,"*人民日报 The People's Daily*, July 28, 1950.

local liaisons between the highest and lowest segments of the government) resisted midwife work because it could interfere with their political careers. In response to a local survey on why they were not interested in midwifery, one cadre said, "there's no future in midwifery" (接生没出息 *jiesheng meichuxi*).[48] She was specifically concerned about becoming a "government midwife" (官收生婆 *guanshou shengpo*), implying she did not want a job with low status and poor income. This was a reasonable concern. Early campaigns to expand midwifery wanted to provide services at little or no cost, but the funds from the government to meet these requirements were fluctuating and often unstable. [49] Collectivization and the establishment of birthing/delivery stations (助产站 *zhuchan zhan*) in rural areas were meant to serve as institutional support for midwives, but like their predecessors, the PRC's budget paled in comparison to the work that needed to be funded.[50] In her book *Gender of Memory,* Gail Hershatter explains that "In the name of frugality, one co-op eliminated work points for midwives, who were paid nothing for a year; they were forced to spend their own money on medical supplies."[51] Although the government wanted to support rural health work, the investment came largely in public support, rather than financial. Local communities were left to foot (or ignore) the bill. The subsequent precarity of economic support made it a difficult career sell for women. Given that female cadres were especially ambitious participants in their new socialist state, and frequently avoided or delayed having children in order to continue their careers as Party members, it is no surprise that a job with a low salary and poor future prospects

[48] 衡水专署通讯组, "推广新法接生减低婴儿死亡率　衡水专区训练三千接生员."
[49] "华北医疗卫生工作开展　公立医院近二百所　政府拨米百八十万斤免费诊疗　帮助农民解病苦 组织医生下乡去," *人民日报 The People's Daily*, Aug. 8th, 1949.
[50] "北京卫生事业迅速发展　半年来工况中的医务人员与病床增加一倍, 并训练了万余接产妇，婴儿死亡率大奖," *人民日报 The People's Daily*, July 28, 1950.
[51] Hershatter, *Gender of Memory*, 171.

was unappealing to them.

The CCP often emphasized the social and political contribution of one's work over the practical outcomes. Political consciousness was raised in response to this aversion to birth work as a way to emphasize the importance of midwife work to the revolution. Calling midwifery "revolutionary work" was not only about recruiting cadres but also about legitimizing midwifery for skeptical women. One facet of the 1949 Women's Day (三八 *sanba*) conference was to correct misconceptions about midwife work among local women. Some of them stated they were "unwilling to study public health, and even more unwilling to study midwifery, for fear that people would call them 'midwife'" (不愿学卫生工作, 更不愿学助产, 怕人家叫"接生婆.").[52] There is a subtle shift in language used for "midwifery" and "midwife" here. For midwifery, as a form of study, the persons used 助产 *zhuchan*, but for midwife as an occupation, they use the term 接生婆 *jieshengpo*. Z*huchan* indicated a modern term which specifies standardized training, where older terms such as *jieshengpo* were associated with outdated practices.[53] The difference in terminology implies that the women speaking understood that midwife training would be modern and respectable, and also that people would not understand how it was different from old-style midwifery. This was not simply a concern about a misconception of status, but also about the stigmatization of old-style midwifery, which might come from people who found it superstitious and others who categorized birth work as dirty and polluting.

Another news report from Southern Hebei included a similar notion. The article begins by detailing the training during a 21-day-long midwife course but goes on to admit difficulty in

[52] 晓光 and 王璘, "团结妇女力量和极生产支前　各地纷纷集会纪念'三八'," *人民日报 The People's Daily*, March 13, 1949.
[53] However, it does not tell us *what* kind. As I discuss later in this chapter and in chapter 2, *zhuchan* was used in both China and Taiwan, but the standards for training midwives varied greatly.

recruiting women to join. Women stated they were concerned about losing face (丢脸 *diulian*) because of persisting superstitions about birth and feudalistic thinking.[54] Fate was a recurring obstacle in convincing many women, and even when articles described training efforts positively, they frequently mentioned difficulties in reframing ideas about birth from fate to science.[55] The persistence of this problem seems to have been exacerbated by the participation of old-style midwives in the modern training program. Although old-style midwives sometimes admitted that the biomedical training improved their practices and led to better health outcomes, others were reluctant to fully embrace new-style methods, and reports of trained granny midwives regressing to old practices were common in the 1950s.[56]

While these newspapers are not a critical source from women themselves, the inclusion of potential concerns demonstrates an attempt to speak directly to obstacles for women who might join midwife training programs. Interestingly, these articles are always speaking to only women. While midwifery is coded as women's work, gynecology more broadly is not limited to female practitioners: the scholarship on gynecology in China certainly contains examples of men who practiced *fuke,* and similarly there are examples in other countries of men who worked as doctors in gynecology and obstetrics. The social precondition that women should not expose themselves to men in the way that labor necessitates meant that for most of history, birth work was conducted by women, yet the modern era was different. [57] As birth work was reformed under the Western medical notions of gynecology, it was also often reformulated as a doctor's – and

[54] "冀南三专区　创办助产训练班," *人民日报 The People's Daily,* May 5, 1949.
[55] "传爱祁县举办训练班 集训旧接生妇 进行科学接产教育," *人民日报 The People's Daily,* Jan. 7, 1950.
[56] "传爱祁县举办训练班 集训旧接生妇 进行科学接产教育," and Hershatter, *Gender of Memory,* 161.
[57] There is another possibility for why women conducted birth work: women were the ones giving birth. As mentioned repeatedly here and in scholarship, old-style midwives were often women who had come into that work because they themselves had given birth and helped their families members through delivery. It would logically follow that what actually perpetuated birth work as women's labor was likely a preference on the pregnant person's side, a trust formed through experience

therefore a man's – occupation. I discuss the long-term impacts of this development in chapters four and five, but here I show that news articles reinforced the gender division in birth work through language in the 1950s.

In translation, many Chinese terms are collapsed into the singular English word "midwife," and as a result it is easy to lose the subtle differences implied when using terms like the above mentioned *zhuchan* and *jieshengpo*. I have intentionally included the Chinese terms in next to the English translation to highlight the diversity of words people used to describe the same work. Below is a list of the most common terms used in the *People's Daily* articles examined for this chapter.[58] Although it is not exhaustive, this list can serve as an example of how gender is folded into these words:

接产妇 (*jiechanfu*), midwife
接产人员 (*jiechan renyuan*), midwife staff
接生婆 (*jiechanpo*), midwife
旧产婆 / 旧时产婆 (*jiu chanpo/ jiushi chanpo*), old-style midwife
新产婆 (*xin chanpo*), new-style midwife
新时接产人员 (*xinshi jiechan renyuan*), new style midwife staff
助产士 (*zhuchanshi*), midwife

Table 1.2: "Gender and 'Midwife' terminology." List of common Chinese terms for "midwife" as related gender.

There are a few linguistic trends for "midwife" in the 1950s. First there is the dichotomy between old and new, as in old-style and new-style midwives. In the PRC, this difference is generally delineated with 新 *xin* and 旧 *jiu* attached to one of the base terms for midwife, but connotations can also present more subtly. An implication that an existing term for midwife meant an outdated midwife could be corrected with the prefix *xin.* For example, 产婆 *chanpo* by itself can be translated as "granny midwife," but adding *xin* changed the meaning and implied

[58] Ordered alphabetically according to pinyin.

that this was a midwife who had undergone modern medical training. Thus, despite the same base *chanpo*, "granny midwife" became "new-style midwife" or even just "midwife." Since *chanpo* was already in use and legible for the public, it did not need much additional context. Simply adding *xin* or *jiu* to the beginning of it made it a more versatile word while also facilitating the dichotomy between outdated practices and state-supported biomedicine.

The final character which transforms a verb like 产 *chan* and 接产 *jiechan* (midwiving) into the noun "midwife" is also revealing. [59] There are four characters that appear repeatedly in terms for birth workers: 婆 *po,* 妇 *fu,* 员 *yuan,* and 士 *shi.* Each of these carries its own definitions and connotations. In contrast to *po, fu,* with its female (女) radical, indicates a younger woman. 妇女干部 *funüganbu* means a female cadre, for example. Although this *fu* does not generally carry negative associations, Wang Zheng's famous "Call me 'Qingnian' but not 'Funu'" has demonstrated that this *fu* took on a negative political connotation during the early PRC period. As a result, and depending on the positionality of the individual woman, *jiechanfu* could be interpreted negatively.

The 士 *shi* in 助产士 *zhuchanshi* is the same as 护士 *hushi* (nurse) and here too *shi* functions as *po* and *fu* in the same way they turn a verb into a noun. The historical gender connotations of *shi* are masculine, with overlapping terms including soldier and scholar, but s*hi* lacks the certainty of gender coding that *po* and *fu* imply. Similarly, 接产人员 *jiechan renyuan* uses a gender-neutral term 人员 *renyuan*, which is often translated as personnel or staff. In these news articles, *renyuan* appears in a variety of other forms, such as 医务人员 *yiwu renyuan*

[59] Sic, as defined in *新时代汉英大词典 New Age Chinese-English Dictionary,* ed. 吴景荣 and 程镇球. (Beijing: The Commercial Press, 2010).

(medical personnel) and 卫生工作人员 *weisheng gongzuo renyuan* (public health personnel), neither of which have clear gendered implications. Terms such as *renyuan,* which do not specify gender, are the least frequently used in these articles while the most common are terms that end in *po*. Z*huchanshi* is a very time-specific term which is used only for modern midwives who have undergone some type of state training. It was (and still is) less recognizable to the average person than terms such as *chanpo* and *jieshengpo.* Importantly, *zhuchanshi* is never specified with old-new language. It is always a biomedically trained midwife. This same term was the government standard in Taiwan, too, despite the number of other local terms for midwife. The *shi* in *zhuchanshi* might initially provide some latitude in gendered connotations, but in the same way that *hushi* as nurse takes on a gendered quality even if it is not explicitly stated, *zhuchanshi* is also only ever used in reference to female practitioners.

The overwhelmingly gendered quality of the many terms for "midwife" suggests not only that there was an assumption that midwives were women, but that midwives were *required* to be women. Men were not invited into this version of birth work and when addressing concerns, the news articles focused on the obstacles women encountered. Even when articles used the term *zhuchanshi,* it was consistently paired with feminine pronouns: "they" (她们 *tamen*) rather than the neutral or masculine "they" (他们 *tamen*). Put concisely, the language in newspapers demonstrates that not only was midwife work initially coded for women it was re-coded for them in early recruitment efforts. As I explore more in chapter three and four, this pattern continued even when the government switched the focus from specifically training midwives to training medical personnel more broadly during the Cultural Revolution.

Training the New-Style Midwife

The difference between old-style midwives and new-style midwives was centered on

modern biomedical standards and expanding the breadth of medical care. Old-style midwives were typically called on during labor and sometimes only when the women encountered difficulties during delivery (many women gave birth without midwife assistance). Further, they were not trained by any centralized institution and usually came into the work as a result of their experience. They provided post-natal care only in the sense that they sometimes also facilitated the introduction of the newborn to the wider community.[60] Modern midwives differed in that their duties included everything from delivery to pre- and post-natal care, as well as epidemic prevention work in the form of vaccinations. It appears that midwife training programs were fairly standardized in terms of the contents and topics they covered, but the length varied. The training program in Southern Hebei, which appears to be a typical example during the 1950s, lasted 21 days. It taught village cadres how to properly disinfect equipment, remove placentas, general maternity hygiene, and described common problems that occurred during childbirth.[61] While it was common for training programs to last only a few weeks, others were considerably longer. One took five months, focusing on maternal health, but it also included training in public health and injections.[62] The reason for the difference in length could be attributed to the expectations for certain training programs. For example, some scholars have argued that it is incredibly difficult to separate "midwife" from "nurse" in China. Johnson notes that early supporters of reforming birth services wanted nurses to undergo specialized training, but in reality, there were not enough nurses in China during the 1920s for additional training to make a significant improvement in access. In 1928, Yang Chongrui advocated for different levels of training: a short course that last 2-6 months and a longer one for women with higher levels of

[60] Johnson, *Childbirth in Republican China*, 101.
[61] "冀南三专区　创办助产训练班," *人民日报 The People's Daily*, May 5, 1949.
[62] "妇婴学校在农村," *人民日报 The People's Daily,* March 13, 1949.

education (high school) that lasted 2 years.[63] Even these shorter courses are longer than the majority of the examples in the *People's Daily*. It is possible that the longer courses were meant to train nurse-midwives and therefore included a more robust curriculum, but the evidence of a nurse/midwife overlap in the early years of the PRC is sparse, particularly for those trained to work in rural areas.[64] The issue of illiteracy, which caused difficulties during training in the Republican period were far from solved by the 1950s, and so it is possible that shorter training programs were created because women from rural areas were less literate and therefore limited in their study.[65] Regardless, if nurse-midwives were produced by some of these programs, their numbers were small.

While many articles encouraged female cadres and young women to participate in this training, others focused on re-training old-style midwives. One course in Shanxi, Qixian County was designed specifically to train these old-style midwives (旧接生妇 *jiu jieshengfu*) in scientific delivery methods (科学接产方法 *kexue jiechan fangfa*).[66] Similarly, in Jilin Jiutai country, old-style midwives with extensive experience were brought in for retraining. One woman in this program was reported to have practiced for 36 years and delivered 1,300 babies. There was merit in retraining existing midwives; they were already embedded in their communities, and they had previous experience to draw on. However, length of practice did not always equal success in practice, and some of the midwives in this program admitted that they saw a very high infant mortality rate.[67] Although old-style midwives often reported a high rate of

[63] Johnson, *Childbirth in Republican China,* 98.
[64] According to Johnson, the opposite was true during the Republican period, when the emphasis was on training nurse-midwives.
[65] One of the difficulties of retraining old-style midwives was illiteracy, which meant difficulty with texts and filing reports. Johnson, *Childbirth in Republican China,* 98-99, 101.
[66] "传爱祁县举办训练班 集训旧接生妇 进行科学接产教育."
[67] "吉林九台县举办助产学校 训练农村助产士 惠南县改造旧接产妇," *人民日报 The People's Daily*, Jan. 14, 1950.

infant mortality, because these deaths were colloquially attributed to fate rather than the midwife's lack of ability, utilizing existing midwife networks by retraining them could also build connections between the people and state medicine.

These training programs were part of the Ministry of Health's larger effort to expand modern medical care into rural areas.[68] The length and content of each training program varied, sometimes greatly, and as a result this medical education was not standardized across curriculums. In other words, even the government-standard term *zhuchanshi* applied to a group of midwives with different educational, experiential, and medical backgrounds. Despite such incongruities, these programs were an important part of the transformation of medical epistemology in China. While the length and content varied or developed over time, the medical paradigm was generally consistent and as a result a more uniform medical approach was introduced to a wider patient audience. This did not mean a wholesale replacement of Chinese medical thought. Indeed, one of the interesting characteristics of the medical infrastructure in China and Taiwan is the contemporary, dual existence of Western and Chinese medicine. Although it did result in conceptual changes about (or potentially additions to) the origin of disease, bodily structures, and fate/religious dynamics. Hand washing, for example, was mentioned repeatedly in news articles and is well documented in the scholarship as a simple and effective innovation that met resistance from old-style midwives. Globally, the introduction of hand washing as disease prevention required a popularized understanding of germ theory before people – including medical doctors – accepted its utility. So, one might imagine it took some time to demonstrate the medical necessity of hand washing to the general population too.

Midwife training worked two-fold to introduce a more standard medical approach. On the

[68] Xiaoping Fang, *Barefoot Doctors and Western Medicine in China* (Rochester, NY: University of Rochester Press, Rochester Studies in Medical History, 2012), chapter 1.

one hand, it re-trained old-style midwives, which meant introducing new techniques like sanitation to women who were already involved in midwife work. On the other hand, the courses were meant specifically for young women who would work in rural areas, where medical care was needed the most, and thus propagated a new approach to midwifery (and, in fact, to medicine in general). Neither of these changes progressed linearly. Old-style midwives resisted new techniques after training and women frequently refused help from new-style midwives, especially if they were not from their own community. Over time, however, the approach to birth shifted towards new-style midwifery. While this shift increased in later years as physical medical infrastructure evolved, short-term training programs were the origin of this early shift in medical epistemology.

Conclusion

In the early 1950s, developing the medical authority of new-style midwifery was one component of the Ministry of Health's attempts to respond to concerns about infant and maternal health. Resistance to new-style midwives or participation in training programs demonstrates that state standardized midwifery was far from a hegemonic power, but as new-style midwives had more opportunities to demonstrate their competence, their reputation improved. This was also a transformational period for the medical system and its relationship with the state. The professionalization of midwives on a large-scale initiated a shift in which midwives had stronger connections to the state and public health programs than ever before. The expansion of modern medical techniques was accompanied by improvements in infant and maternal health care, which helped to build the medical authority of modern midwives and the popularization of "scientific medicine" in general. Although the training programs were developed specifically for the conditions in the PRC, they were built on established scientific methods, and thus transferred

some components of medical colonialism. One example of this is that while only in the early stages, the professionalization of midwives in the 1950s begins shifting the medical providers' responsibility towards the state and away from the patient. Over the next two decades, the strengthening of this relationship between the state and medical professionals, which also included a heightened emphasis on political alignment, would weaken patients bodily knowledge and autonomy.

In communicating information about new-style midwives, newspapers spoke directly to women who lost children to preventable diseases and offered them practical ways to improve their child's chance of surviving early childhood. These articles thus disseminated new ways to conceive of health and illness. Rather than a result of fate, diseases like tetanus were understood to be caused by improper sanitation and contamination. In this way, newspapers attempted to build trust and introduce a new form of medical authority by offering success stories of new-style midwifery and modern medicine. News articles also addressed concerns female cadres raised in response to recruitment attempts. This focus suggests that the CCP wanted Party-affiliated midwives amongst their ranks. This emphasis on Party-affiliation further linked the state and medical personnel together. This was more than just the standardization of medicine; it was also a standardization of medical care providers' political ideology. Eventually, the coalescence of the state-sponsored medicine and Party politics would be strong enough to exert medical power to promote initiatives in the face of strong public opposition, but it would take decades for those networks to form. Finally, training programs supported the standardization of medical epistemology, if only for a few specific practices. (Re)training midwives and sending them (sometimes returning them) to rural areas helped to reinforce this scientific standard, even

if women resisted it for a while.[69]

Individually, these changes were small. Some women accepted new-style midwifery; others refused it. Some female cadres trained as midwives; others tried to focus on more Party-related work. Training programs varied, and short-term training of medical personnel continued into the 1980s, but these first movements towards a different kind of midwifery laid the groundwork for the long-term changes in the relationship between state medicine and the people.

[69] Zhou Xun, *The People's Health: Health and Intervention in Mao's China, 1949*-1983 (Quebec: McGill-Queen's University Press, 2020), 220-229.

Chapter 2
Essential Networks:
Communicating Midwifery as a Response to Public Health Concerns in Taiwan and China

> "Every year 150,000 Taiwanese women deliver without assistance from trained health workers. Another 200,000 deliveries are made by midwives. Our study shows that the number of midwives entering the profession not only fails to keep pace with the increase of population, but even fails to replace the retiring midwives. These facts give urgency to planning for better maternal care in the future."[1]
>
> - From *Health Manpower in a Developing Economy*

> "Perhaps the most prevalent group among the part-time medical personnel are the midwives. In 1958 only 34,000 midwives were reported for China, while there were hundreds of thousands of women who practiced midwifery when called on."[2]
>
> - From "Medical Education and Manpower in Communist China"

Determining the number of working midwives in China and Taiwan proved difficult for social scientists in the mid-twentieth century. According to Leo A. Orleans' research, by 1967, there were roughly 42,000 midwives in the People's Republic of China (PRC), but "this figure includes only the midwives in the medical institutions operated by the state. It does not include the thousands of midwives who are on the communes and who do not get salaries or wages from the state."[3] When this article was published in 1969, Orleans admitted the training curriculums were not accessible, and his calculations do not appear to include old-style midwives who were not trained by medical institutions. The 1963 study in Taiwan, under the Republic of China

[1] T.D. Baker and Mark Perlman, *Health Manpower in a Developing Economy: Taiwan, A Case Study in Planning* (The Johns Hopkins Monographs in International Health, 1967), 82.
[2] Leo A. Orleans, "Medical Education and Manpower in Communist China," *Comparative Education Review* 13, No. 1 (Feb. 1969), 40.
[3] Orleans, "Medical Education and Manpower in Communist China," 37, note 42.

(ROC) Nationalist government, noted a considerably smaller number of midwives at 3,781 – not quite 10% of the number in the PRC – but all of them were registered with the provincial government. Given the difference in population size, the demand for medical personnel was naturally higher in China than Taiwan, but there were also important differences in the definition of "midwife" and their role as medical care providers, particularly in terms of their association with the state.

Globally, infant and maternal health was a concern for most countries in the twentieth century. Western Europe and the United States were exceptions when it came to sterile environments for labor and delivery, but without accessible hospitals and clinics, many people even within developed countries continued to give birth in environments that unknowingly exposed infants and mothers to diseases. Neonatal tetanus in particular featured repeatedly in reports about infant mortality in China and Taiwan, in large part because it remained a health threat anywhere sterile hospital environments and tetanus toxoid vaccines were not yet readily available. Because the survival rate of neonatal tetanus was so low in the mid-1900s and treatment was difficult to come by, prevention was (and remains) the most important method to combat infection. In developing countries, the World Health Organization (WHO) and medical journals continued to report high infant mortality rates associated with neonatal tetanus into the 1980s.[4]

Between the fall of the Qing empire in 1911 and the establishment of the PRC in 1949, China lacked a unified, centralized government, and the underdevelopment of medical infrastructure was just one of the long-term effects of war and political instability. In comparison, the 1950s and 1960s were a relatively stable period in terms of continuity of

[4] Martha H Roper, Jos H Vandaler, and Francois LGasse, "Maternal and neonatal tetanus," *The Lancet* 370, (Dec. 8, 2007): 1,949, DOI:10.1016/S0140-6736(07)61261-6.

government. The Chinese Communist Party (CCP) established a strong central government and a united Chinese territory within only a few years, and while the geographic expanse of China would prove to be an obstacle in government planning, this was the first time in nearly half a century when the government of China could reasonably attempt to address rural-urban inequalities in health care. The data in sociological research shows a sharp decrease in infant mortality after 1949 that continued until the famine caused by the Great Leap Forward.[5] Although high infant mortality rates remained a concern for several years, the improved political stability, food supply, and increase in medical care available to the average person contributed a decline in early childhood deaths.

In Taiwan, the medical infrastructure developed by the Japanese colonial government provided a foundation for the effective distribution of health care in many parts of the island. For this reason and for reasons related to the tensions between the PRC and ROC, during the first couple of decades in Taiwan, the Nationalist government did not make strong attempts to alter existing pathways of medical care. While there were already many professional, government-certified midwives in Taiwan before the arrival of the ROC, Taiwanese council members repeatedly mentioned that existing midwives needed to be certified under the new government. As a result, examining the 1950s and 1960s in Taiwan can show how the provincial government perceived the importance of midwives and understood interactions between state-certified medical workers and people in remote areas.

Further, this chapter offers a comparative examination of the professional midwife in both China and Taiwan, highlighting how midwives were understood as a medical authority and how they implemented modern birth work practices. Similar to the standardization of midwifery

[5] Kimberly Babierz, et al, "An exploration of China's mortality decline under Mao: A provincial analysis, 1950-90," *Population Studies*, 69 No. 1 (2015): 40.

in China during this time, the ROC government supported the training and promotion of professional midwife services. I argue that the way local advocates and council members in Taiwan's provincial government requested more midwife training programs, especially for remote areas and mountainous regions, indicates the confidence they had in professional midwives to meet public health needs. The development of state medicine in China and Taiwan had very different trajectories, but despite this, tetanus was repeatedly mentioned as a concern for infant health. I further aim to highlight the invocation of neonatal tetanus as a driving force for improving access to birth services in different medical conditions.

In both the PRC and ROC, the government's involvement with the training and certification of medical personnel shifted the relationship between the medical infrastructure and the state as well as the relationship between state medicine and the people. As I argued in the previous chapter, in China this shift only occurred at a large-scale after the establishment of the PRC, when short-term training programs quickly increased the number of professional, new-style midwives. In Taiwan, the Japanese colonial government established a foundational medical structure that the Nationalist government continued to use once control of Taiwan was ceded to the ROC, which included a system to earn the legal certification to practice midwifery. Preventing uncertified midwives by banning their business proved slower in remote regions but was much more manageable in Taiwan that in the PRC, where the vast geographic space coupled with epistemological hurdles slowed the process of banning old-style midwives.

The relationship between medicine and the people was altered through changes in medical terminology and public health initiatives that focused on clear concerns for infant welfare. When the ROC and PRC governments standardized midwifery and became the mediators for certification, they also redefined the linguistic terms and medical parameters for

things such as “midwife” and “tetanus.” I argue that altering language in this way also altered the experience of medicine. It changed how people understood medical professions and illness, and in doing so standardized medical experiences. While there were positive impacts of this change, it also narrowed medical possibilities. As a concurrent development, professional midwives could then convey their credentials and skill when they were dispatched to remote areas (the “countryside” in China and “mountainous and plains regions” in Taiwan). When they addressed real concerns about infant mortality, such as neonatal tetanus, they facilitated a relationship with local people. Consequently, midwife work connected remote communities with the state and facilitated the exchange of medical knowledge.

In this chapter I use two very different sets of sources from Taiwan and China to understand changes in midwifery and birth-related public health concerns. The sources for my discussion of midwifery and tetanus in Taiwan are derived from Taipei’s Provincial Assembly Archives (台北省議會史料總庫), while the sources for the PRC are drawn from newspaper articles, largely from the *People's Daily* (人民日报 *renmin ribao*). The Taiwanese provincial government documents display conversations between local advocates, council members and the provincial government that illuminate issues related to infant health and the proposed solutions. The articles from the *People's Daily* demonstrate how the PRC government communicated to its citizens about midwifery, how they expected people to use new-style midwives, and even addressed perceived concerns about accepting their medical care. The number of news articles concerning midwifery is unique to the PRC. While conducting research in Taiwan, I also explored Taiwanese newspapers from the 1940s, 1950s, and 1960s, hoping to locate similar articles about midwives or concerns about infant health, but was unable to find any notable mentions. Serendipitously, the archive did provide one potential explanation for the difference in

news coverage on this topic: A 1956 memo from the British Embassy in Beijing stated that "There is at present a campaign in the press advocating the spreading of modern methods of midwifery particularly in rural areas where there is some opposition to the changing of traditional methods."[6] This indicates that the disparity in coverage between the two newspapers was likely a result of differing government priorities. As I will address in the following section, in Taiwan, midwifery had already undergone one iteration of professionalization during the Japanese colonial period, so by the time the Nationalists moved their headquarters to Taipei, there were already notable numbers of certified midwives. During the same period in the PRC, there was not yet widespread acceptance or availability of new-style midwives. It appears then that in the PRC, the government devoted considerably more effort to popularizing new-style midwifery through news articles than the ROC (if they used news articles to communicate about this particular public health issue at all). Although these sources are not parallel in form, they are useful sources of information about existing health care structures, the concerns of the government and the people, and the specific issues midwives were meant to address.

Midwives in the ROC, Taiwan

The wide-spread professionalization of midwifery occurred earlier in Taiwan than in China as part of the Japanese colonial government's plan to build an exemplary colony. Initiated under the direction of Gotō Shinpei in 1898, Japanese authorities exerted considerable effort to develop modern public health infrastructure based on German models – including the training of midwives – according to Taishō era Japanese standards. This project was so successful that by the time the Nationalist government moved operations to Taiwan, the major threats of infectious disease had been eliminated. Initially the goals of these efforts had been to make Taiwan a

[6] Letter from British Embassy to Peking, 15/06/1956, National Archives FO 371/ 121008.

habitable environment for the Japanese people who arrived as part of the colonial initiative, and many of the medical and public health professionals who operated in Taiwan were from mainland Japan,[7] but over time, Taiwanese people themselves were trained and integrated into the system. This began as a response to the plague epidemic of 1919, when it became clear to Japanese public health authorities that there were insufficient numbers of medical workers available, particularly in rural areas.[8] The process they developed for the recruitment and training of Taiwanese people as medical workers later became common practice for all medical fields.

One consequence of this development of medical professionals and infrastructure was that lay midwives quickly came under the colonial government's supervision. In 1902, illegal midwives, meaning those not certified by the Japanese government, were banned, albeit enforcement was uneven.[9] Banning lay midwives in favor of those certified by Japanese schools and hospitals initially proved untenable because in the first years midwifery education was offered at medical schools, only Japanese nurses were admitted. It was not until five years later, in 1907, that Taiwanese women were permitted to attend midwifery training, but even then, the educational requirements limited the potential recruits to middle- and upper-class Taiwanese women, a social group that had not previously participated in much birth work.[10] This dynamic raised additional issues for enforcing the ban against lay midwives. First, despite completing the training, some of the Taiwanese women did not take up midwifery as a professional vocation, meaning that women were trained and certified but not practicing. Then, even when government

[7] Shi-yung Liu, "Building a Strong and Healthy Empire: the critical period of building colonial medicine in Taiwan," *Japanese Studies* 24:3, (2004): 303.
[8] Liu, "Building a Strong and Healthy Empire: the critical period of building colonial medicine in Taiwan,", 304.
[9] Chai-Ling Wu, "Have Someone Cut the Umbilical Cord: Women's Birthing Networks, Knowledge, and Skills in Colonial Taiwan," *Health and Hygiene in Chinese East Asian and Publics in the Long Twentieth Century* (Durham: Duke University Press, 2010), 162.
[10] Wu, "Have Someone Cut the Umbilical Cord," 171.

certified Taiwanese midwives did practice, they faced obstacles soliciting clients.[11] Like their counterparts in China, Taiwanese lay midwives operated through social networks: women sought midwives through friends and family, not through a medical institution. Chai-ling Wu explains that this was because Taiwanese women were more concerned with the trust earned through social networks than through the scientific literacy campaigns run by the Japanese government.[12] The colonial government's attempt to transition from lay midwives to professional midwives was centered on the reliability of scientific medicine. This made sense in the context of modern colonization, which used science as a justification for colonial projects, but Taiwanese women's priorities were directed towards the experienced reliability of community-based medicine.

Despite the reticence of some women to engage with professional midwives and the social dynamics which muted the impact of training programs, infant and maternal health improved significantly during the colonial period, but improvements in the prevention and treatment of infant diseases still lagged behind the overall decrease in mortality. In "Differential Mortality in Colonial Taiwan," Liu Shi-yung explains that new techniques for controlling epidemics and a gradual increase in public health education were two of the main factors for the overall decrease in mortality from 33% to 20%, between 1906 and 1942.[13] In contrast to the decrease in communicable disease in the general population, it appears people perceived that high infant mortality rates continued unabated because in the late 1920s, Taiwanese physicians "encouraged the Japanese authorities to address the high infant and childhood mortality rates."[14] Liu's statistical analysis does not offer a concise answer as to why infant mortality rates begin to

[11] Wu, "Have Someone Cut the Umbilical Cord," 172-3.
[12] Wu, "Have Someone Cut the Umbilical Cord," 171.
[13] Shi-yung Liu, "Differential Mortality in Colonial Taiwan (1845-1945)," *Annales De Demographie Historique*, 1(107), (2004), 230.
[14] Liu, "Differential Mortality in Colonial Taiwan (1845-1945)," 236.

decline in the 1930s, but does assert a connection between the midwife programs and infant health. Liu writes, "Midwives delivered about half of the babies in 1911 and about eighty percent by 1932. Where the midwife program was successfully implemented, the mortality rate of babies delivered by midwives even fell below average."[15] This is to say that scholars have observed the improvement in infant health throughout the colonial period, but often as a part of larger changes in the public health infrastructure. These accounts then suggest that modern midwife services were fairly widespread but not complete by the end of the colonial period. Mountainous regions and the Penghu islands were noted as the areas most lacking in public health infrastructure and access to midwives, a deficiency which continued through the first two decades of ROC rule.

After the Japanese emperor surrendered to the United States in September of 1945, Chiang Kai-shek and the other leaders of the ROC were escorted to Japanese-occupied areas of China to accept their surrender. In addition to these territories, Taiwan, which had been ceded by the Qing to the Empire of Japan in the Treaty of Shimonoseki after the first Sino-Japanese war, was "returned" to the Nationalists as part of the Republic of China. It is not needless to say that this transition was complicated. Although the Qing Empire officially recognized Taiwan as a province in 1885 and there had been considerable contact between mainland China and Taiwan island in the preceding two hundred years, the people of Taiwan in 1945 were not united in a desire to be incorporated as part of the Republic of China. Many social and cultural differences split the people, even amongst those who were ethnically Han and had immigrated to Taiwan just before the Japanese occupation began.

One interesting development under Japanese colonial rule was the emergence of "Taiwanese nationhood."[16] The population of Taiwan was ethnically and culturally diverse: there

[15] Liu, "Differential Mortality in Colonial Taiwan (1845-1945)," 239.
[16] Denny Roy, *Taiwan: A Political History,* (Ithaca: Cornell University Press, 2003), 57.

was a large population of Han descendants, with notable groups of Hakka and Fujianese people, as well as nine officially recognized indigenous groups (Atayal, Saisiyat, Bunun, Tsou, Rukai, Paiwan, Puyuma, Amis, and Yami), and several more groups of unrecognized Plains Indigenous people.[17] With this diversity came varied religious, philosophical, and linguistic traditions, but many were still united through the struggle to assert themselves in the Japanese political administration, and this resulted in the beginnings of a shared Taiwanese consciousness. In addition, a Taiwanese middle class had grown alongside the economic developments. In comparison to the instability on the Chinese mainland in 1945, Taiwan had steadily created and maintained stable, modern cities. The entry of the Nationalist government in Taiwan, then, was correctly predicted to usher in chaos.

From the perspective of the Nationalists, Taiwan was filled with "semiferal Chinese" and the continued threat of Japanese influence.[18] During the first two years of the ROC's presence, the Taiwanese people felt the pressure of inflation, loss of jobs (as Taiwanese people were displaced from bureaucratic positions in favor of mainlanders), and social marginalization. This came to a head on February 28, 1947, when two agents from the Monopoly Bureau seized money and goods from Lin Chiang-mai for illegally selling cigarettes on the street.[19] A crowd of bystanders came to Lin's aid, but one of the agents fired his gun into the group as a distraction, killing one of the participants. This incident sparked a demonstration against the Monopoly Bureau, which escalated into an island-wide revolt against the Nationalists. Leadership responded with orders to destroy all traitors on the island, including those believed to be associated with the Japanese government, the Communists, or Taiwanese independence

[17] 臺灣總督府第十五統計書 [*Governor-General of Taiwan Statistic Yearbook 1911],* (1913), 46.
[18] Denny, *Taiwan: A Political History*, 56.
[19] Denny, *Taiwan: A Political History*, 67.

leaders.[20] The resulting period of White Terror and, shortly after that, martial law, transformed the social and political landscape of Taiwan. Surveillance became a core component of everyday life, including monitoring people through public health.

The public health system established by the Japanese colonial government was created specifically to monitor the health of the population and to control, at least in part, what types of medical care Taiwanese people could access. As medicine was institutionalized – through the establishment of medical schools such as Taipei Imperial University – Western medical treatments were elevated above Chinese medicines.[21] In addition, like the Nationalists and their distribution of vaccines during the Japanese invasion mentioned in the introduction, the Japanese colonial government was concerned about promoting health initiatives that would benefit the stat first and then the people. This is to say that the Nationalists and Japanese authorities wanted similar functions from their public health systems. The result was that when the Nationalists took control of Taiwan, during a period of intense political surveillance, they continued to employ the existing medical infrastructure to meet the needs of the state.

The Japanese authorities' response to infectious diseases was so effective that by the time the ROC took over, there was no longer a need for heavily policed quarantines, but infant and maternal health did remain a concern. The Nationalist's response to these problems was surprisingly rather hands off: whereas police had previously been employed to enforce public health measures, the Nationalists granted public health nurses great control and discretion. Chin Hsien-yu writes that, "Women's and children's health, too, became an urgent priority in the 1950s. Finding that public health nurses served these populations more effectively and

[20] Denny, *Taiwan: A Political History*, 71.
[21] Hsien-yu, Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," *Osiris*, 13 (1998), 328.

comprehensively than did the police, the KMT [Nationalists] and medical professionals put them in charge of local care."[22] Chin's larger argument is that placing public health nurses in this position was significant because public health nurses did not have high status within this existing healthcare system nor as women, so their general social status was inferior to male medical workers. Yet these women proved to be effective at building networks with other women because, as Chin states, "…the double marginality eased their integration into the lives of their clients and facilitated their awareness and understanding of the problems these women faced."[23] Chin clarifies that the public health nurses in this instance were not midwives, but their positioning within the medical infrastructure can still illuminate the dynamics between healthcare workers and the government during the transition to Nationalist rule. In addition, there was considerable overlap between nurses and midwives at that time and through the next few decades. Prior to their move to Taiwan, the ROC supported nurse-midwife training programs and the government would continue to promote similar standards – that one should be trained as a nurse first with additional training as a midwife – in Taiwan.

The structure created by the Japanese colonial government (and reinforced in a slightly altered state by the ROC government) placed professionalized midwifery firmly under the state's purview, but the administration of these health services was carried out by the health care workers themselves. Despite well-developed training standards, the number of midwives was insufficient, particularly for women in mountainous and remote regions. In 1967, The Johns Hopkins University Press published an extensive report on the state of Taiwan's healthcare system title *Health Manpower in Taiwan.* This research was conducted collaboratively by the Division of International Health of The Johns Hopkins University, the Health Division of the

[22] Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," 331.
[23] Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," 336-7.

Joint Commission for Rural Reconstruction of the Republic of China, and the Provincial Health Department of Taiwan.[24] In evaluating the health manpower in Taiwan, the authors expressed concerns about a lack of nurses and midwives, estimating that there was "only one nurse for 5,600 people" and also confusingly "twice as many physicians as qualified nurses."[25] The number of midwives was even more concerning: according to the Ministry of the Interior, in 1963 there were only 3,781 registered midwives, but not all of these women were actively practicing, while a report from 1960 recorded 704 non-working midwives.[26] The majority of midwives operated out of private practices (1,370), with health centers as a distant second (471).

Perhaps more concerning than the non-practicing midwives was the alarming percentage of new graduates who pursued other work soon after certification. The authors write, "Indeed, only one-quarter of the recently graduated midwives, and one-tenth of nurse-midwives, actually practice midwifery."[27] The report suggested that there were clear social factors that encouraged women to work in other healthcare roles. Although nurses were generally considered quite low in status among medical professionals and the position of midwife was considered more prestigious, many of the new graduates worked as nurses in hospital settings because they found it difficult to establish themselves as midwives in local communities. As long as a woman had completed her education and certification, she could reasonably expect to find work in a hospital, but the same did not seem to be true of employment as a midwife. In contrast, midwife work was centered in homes and local communities, meaning that midwives had to actively build connections and demonstrate their qualifications. One of the hurdles for new midwives was that "the average nurse-midwife may be as young as eighteen, and the average midwife may be

[24] Baker and Perlman, *Health Manpower in a Developing Economy,* v.
[25] Baker and Perlman, *Health Manpower in a Developing Economy,* 77.
[26] Baker and Perlman, *Health Manpower in a Developing Economy,* 84.
[27] Baker and Perlman, *Health Manpower in a Developing Economy,* 85.

seventeen when she graduates."[28] In both the JHU census and Peng-Huang study, the age of these new midwives impacted their ability to set up private midwife practices because women sought out midwives who had given birth themselves and had more experience in birth in general. Not only were these women young and seemingly inexperienced, but they were also not neccesarily locals in the areas they were trying to serve. This dynamic complicated their ability to find work and as a result, they sought more stable positions as nurses.

This shortage of midwives was a recurring theme during interpellation – a procedure that allows council members and others to make formal requests of the Taiwanese government – when concerned citizens raised questions about factors affecting infant health, midwife certification, and training programs. The earliest record in the provincial archives requesting more midwife schools dates to December 16, 1950. The proposal, directed to the Ministry of Health, was to increase the number of midwife schools by specifically emphasizing the inherent danger of childbirth and the role of the midwives in a safe birth.[29] In the same session, Council Member Lin wrote specifically of the lack of nurses and midwives in mountainous regions.[30] A few years later, during a session on December 21, 1955, Council Member Huang (議員黃 *yiyuan Huang*) complained about the lack of the midwives (缺乏助產士 *quefa zhuchanshi*), directly stating a concern about rates of tetanus and requesting more training schools to be built. Section Chief Yan of the Ministry of Health responded to Council Member Huang's concerns with skepticism about the general threat of tetanus but acknowledged that although the numbers were lower than last year, even those deaths were preventable and should not have occurred. Yan further reported that 40% of births were attended by midwives and of the 370,000 births

[28] Baker and Perlman, *Health Manpower in a Developing Economy,* 95.
[29] Taiwan Provincial Archive (TPA), 001-01-10OA-00-6-8-0-00057.
[30] TPA, 001-01-10OA-00-5-3-0-00154.

recorded, one to two thousand infants died of tetanus.[31]

Complaints about lack of medical workers continue into the 1970s, yet the conditions in Taiwan were quite good, not only compared to the PRC, but to other parts of Southeast Asia too. The educational paths to obtaining certification in midwifery were well developed and by the time Baker and Perlman published their 1967 report, they seemed optimistic about the future supply of midwives in Taiwan. The requests and complaints to the provincial government highlight why, especially in the 1950s, people perceived a lack of needed midwifery care. Based on the interest in establishing more midwifery schools and training departments, it appears that people believed that the existing programs were effective. Delays in obtaining certification and in certifying midwives from the Japanese colonial period, as well as a lack of training centers in rural areas, were identified as issues that needed improvement. This indicates that, where they practiced, professional midwives had earned some medical authority amongst their patients. Moreover, the public in general understood that the midwives' training was supported by the government, and therefore requests for midwives could be raised in government forums.

The process of certification was a core part of the inquiries made to the provincial government. It not only assured women that a midwife was well trained, but it also connected midwives to the larger medical network and allowed them to receive government support to subsidize services. Proposals to accept midwives' qualifications from the colonial period were common in the 1950s: ZhangLi Dehe (張李德和) appears in the records repeatedly requesting that the government authorize the certification of midwives. In July of 1953, Council Member Zhangli asked that the government accept midwife qualifications from private midwife schools during the Japanese colonial period to increase the number of legally practicing midwives.[32]

[31] TPA, 002-02-04OA-07-6-2-04-00222.
[32] TPA, 0026120442013.

These midwives could earn their credentials in three ways: 1) by working in a public hospital, 2) by working in the maternity care ward of a private hospital, or 3) with local qualifications.[33] Accepting the qualifications of colonial era midwives thus required some extra residency-like experience, but Zhangli was not alone in her assessment that midwives under the previous government (at this point not yet even a decade in the past) were a wasted resource if the ROC failed to verify their credentials.

Zhangli was, however, a particularly influential advocate for midwife services during the 1950s. Born in 1892, she lived through the end of the Qing empire, the entirety and of the Japanese colonial period, and the first two decades of ROC rule in Taiwan. Although she is also well-known by both historians and her contemporaries for her artistic work, she was deeply involved in politics to support women's education and health. In 1951, she was elected to the Provisional Provincial Council of Taiwan Province (what would later be called Taiwan Provincial Consultative Council).[34] Both her husband and brother worked in medicine, and collaboratively helped to establish a midwife training center (助產士講習所 *zhuchanshi jiangxisuo*) at the Zhufeng hospital in Chiayi City.[35] It is not surprising then that she appears repeatedly in the record complaining about the slow pace of certification. Following her early requests for accepting credentials of colonial-era midwives, she follows up in December of 1953 with appeals for help facilitating midwife qualifications, and again in September of 1954, at which point the response indicates that the government will satisfy her requests and accept the credentials or an equivalent academic level (同等学力 *tongdeng xueli*).[36] Requests from others

[33] TPA, 0026120442013.
[34] "桃城藝壇才女─張李德和 (1893-1972)," 台灣女人, accessed September 28th, 2023. https://women.nmth.gov.tw/?p=2060.
[35] "張李德和," 國家圖書館臺灣記憶系統. https://tm.ncl.edu.tw/article?u=016_002_0000294574, accessed December 8th, 2021.
[36] TPA 002-01-05OA-00-6-2-0-00182 and TPA 002-02-01OA-04-5-4-01-00812.

to accept Japanese era midwife credentials appear in 1955 as well, indicating that at least for some, the process of certification was still not easy or possible. Zhangli's and others' persistence in this matter was important because midwives needed government certification in order to work legally and people needed midwife services. So, facilitating the process of certification for existing midwives was an essential component of providing medical services to a broader base of patients.

While accepting the credentials of Japanese-era midwives would increase the number of practicing providers from the pool of experienced midwives, it was not the only solution to the insufficient number of midwives in Taiwan. Other government officials believed that setting up new training centers or departments within existing medical programs was needed to boost the number of new graduates. Concerns about the number of places capable of training midwives and the requests for more started in 1947 but become more common in the mid-1950s. This was possibly related to the intense political climate, as the infamous 2/28 incident occurred in 1947 and incited the beginning of the White Terror period in Taiwan. One recurring characteristic of these requests was the limited geographic reach of existing midwives and training centers. In 1952, Council Member Chen argued that the government needed to address the high infant mortality rate and lack of public health education for indigenous people (平地山胞 *pingdi shenbao*).[37] The term *pingdi shenbao* was a combination of the Japanese-era bi-partite tribal classification of *pingdi* "plains" and *shanbao* "mountain"[38] people. These groups were somewhat isolated from the larger medical networks, either culturally or physically, and many of the council members raised questions about meeting their needs through the following years.

[37] TPA 002-01-02OA-00-6-2-0-00485.
[38] Kharis Templeman, "Tsai Ing-wen's Pingpuzu Aborigines Challenge," *The Oracles Library*, accessed: September 9th, 2023, https://ketagalanmedia.com/2016/08/16/tsai-ing-wens-pingpuzu-aborigines-challenge/.

In order to meet the needs of indigenous people in remote areas, the government would need to do more than send in new graduates. By 1954, there were plans for fifty new Maternity and Child Public Health Centers (婦幼衛生中心 *fuyou weisheng zhongxin*) in these areas with plans to build more in the future,[39] but as in the PRC, it was difficult to convince people to work in rural areas and as a result, retention rates appear to have been quite poor. One proposed solution was to train women from these communities to return and serve in them. This, of course, was intended to solve the issue of finding women willing to work so far away from their own homes, but it also inadvertently empowered those midwives locally. Certified and supported by the government, they could not only help improve infant and maternal health outcomes, but they fully understood local customs, thereby acting as translators of medical knowledge.

Council members had identified a lack of certified midwives in *pingdi shanbao* areas, but lay midwives were still practicing there. This increased the importance of training and certifying lay midwives from and for their own communities. Council Member Gao noted this precise issue in January 1955 when he expressed concern about the high infant mortality in the area, but further acknowledged the importance of existing lay midwives in their communities.[40] In response, the Ministry of Health recommended that these lay midwives undergo a short training period to earn their credentials.[41] This solution was simple enough, but other complaints imply that the location for testing was not accessible to many people in Taiwan, meaning that there were additional barriers to testing for lay midwives in remote areas.

Even in the 1960s, there were not many places a woman could receive midwife training. According to Baker and Perlman's study, "there were four schools teaching midwifery. Two of

[39] TPA 002-01-05OA-00-6-2-0-00182.
[40] TPA 002-02-04OA-07-5-3-05-0052.
[41] TPA 002-02-04OA-07-5-3-05-0052.

these, a private school in Pingtung and a government school in Taichung, give a three-year vocational midwife course. The Taipei and Tainan vocational nursing schools give one-year postgraduate courses in midwifery for graduate nurses." The geographical distribution of these schools hindered the ability of some women to study as midwives. Advocates from Tainan appear most vocal about this issue, as Tainan had an active nursing school, but lacked a midwife training department in 1955. This meant that if a nurse wanted to complete the extra training to be certified as a midwife, she would need to travel to Taipei to sit for the certification test.[42] Since there was already an existing nursing school in Tainan, proposals focused on adding a midwifery department (助产科 *zhuchanke*) for training. Lin Renhe suggested cooperation between the education department and Tainan's Airforce Hospital would be easier than building a separate school.[43] Even after the government positively evaluated the need for a way to certify midwives in Tainan, others complained that a single facility would be insufficient to meet their needs. A tension formed between those arguing for more facilities and what the Ministry of Health believed was feasible and useful, but the back-and-forth shows local advocates and representatives' investment in addressing the threat of neonatal tetanus and other early infancy diseases. The belief that it was the state's responsibility to address these medical needs is clear in these conversations and indicates confidence in the established medical system to perform the work with enough resources. Although it cannot show how the general population perceived the state's medical infrastructure, it highlights that the government was aware that building the medical authority of midwives with their patients was an important part of introducing modern medical personnel and techniques. The attention to existing lay midwives is an additional example of this. By acknowledging their value within their communities, the government shows

[42] TPA 002-02-04OA-07-6-2-04-00216.
[43] TPA 002-02-04OA-07-5-3-05-00525.

they are conscious of the importance of the relationship between patient and provider as much as the medicine itself.

In addition to concerns about the number of midwives available and the accessibility of training programs was the affordability of midwife services. During a June session in 1954, Council Member Zhang advocated that "all county and city health centers should set up free midwifery" (各縣市衛生院應特設免費助產) because the fees for delivery were prohibitively high for some people.[44] As poorer populations tended to experience higher rates of infant mortality, this was a particularly pressing concern. The Ministry of Health responded that health centers only charged 20 yuan; however, for those who could not afford even that fee, the midwife's fee would not be charged.[45] Not only would a low or no-fee delivery make birthing assistance more financially accessible, but it would also encourage people to seek out government certified midwives' subsidized services.

Based on the requests made by council members and other citizens, professional midwives were well established as reliable medical care providers in the 1950s, despite some difficulty integrating young, new graduates into communities and delays with certification. The training programs themselves varied a bit in form – midwife schools, midwife programs, and nurses taking additional training to become nurse-midwives – were all parts of the council discussions, with women who trained first as nurses appearing to be the most common moving into the 1960s. As the health manpower report suggested, one reason some certified midwives were not practicing was because they had decided to work as nurses instead. Nurses had a variety of choices to earn their certification as midwives: they could train in hospitals with midwife

[44] TPA 002-02-01OA-04-6-2-04-00035
[45] TPA 002-02-01OA-02-6-2-0-00097.

departments, maternity wards (产科 *chanke*) or in a specific maternity hospital (产科医院 *chanke yiyuan*). Council members' proposals stated that nurses should complete two years of residency in a public or private hospital with a maternity ward to earn their credentials as a midwife.[46] Completing the training to become a nurse-midwife, then, required years of education and experience. Later proposals suggest that in places with shortages, such as Tainan and Taizhong, women could earn their midwife certificates within a year to speed up the availability, and some proposals mention midwife workshops (助產士講習班 *zhuchanshi jiangxiban*) rather than the full training for nurse-midwives, but this appears only in the discussions of certifying indigenous women, likely those who have already been working as lay midwives.[47]

Despite variations in training, there are two consistent characteristics of professional midwives during this time period. First, that the government standardized the training to a large degree. It was involved in the development of midwife specializations in hospitals and schools and set the parameters for certifications. It also determined when it was appropriate to use shorter training forms – like workshops – to meet local needs. This involvement also meant that council members and citizens had to bring their concerns to government meetings in order see changes in the medical system. This was not the only way to make changes, but the legal requirements of certification necessitated some discussion with the government. Second, once midwives were certified, many of them operated independently. In the early 1960s, over 70% of practicing midwives worked in private practices, as opposed to health centers.[48] In major cities, there was about a 6:1 ratio of midwives in private practice to health centers, but in the counties this ratio was only about 2:1.[49] In both cases, private practices were more common as is also reflected in

[46] TPA 0026120442013.
[47] TPA 0026120441019.
[48] Baker and Perlman, *Health Manpower in a Developing Economy*, 84.
[49] Baker and Perlman, *Health Manpower in a Developing Economy*, 85.

Janet Kwang-Wang's work on midwives in Taiwan. These private clinics were so popular that when obstetricians became more common in the 1980s and doctors wanted to expand their practices from city centers, they needed to collaborate with midwives to establish networks.[50]

In order to serve the communities midwives worked in, when they operated independently, they needed to be empowered to do more than deliver babies. Issuing death certificates was also important work, but it was not built into their initial certification. The inability to issue stillbirth death certificates (死產證明 *sichan zhengming*) for infants was raised multiple times in the 1950s.[51] Allowing midwives to issue these certificates facilitated this process for the families, who would not need to call in additional medical staff.

Reports from Taiwan indicate that, in the 1950s and 1960s, the number of midwives was insufficient to meet the needs of the entire country, but because of the existing medical infrastructure and manpower, the ROC did not need to undertake large-scale restructuring or developments in Taiwan in order to train enough midwives. In addition, the invocation, both to train more midwives with the existing system and to offer workshops for lay midwives, indicates that midwives were clearly valued by the state. That people made these petitions to the provincial government further demonstrates the importance of the government in developing and supporting training programs.

While council members repeatedly proposed adding more training programs to existing hospitals or establishing more midwifery schools, the source of the shortage was also partially rooted in the social integration of midwives to the community they would serve. As Chai-ling Wu indicates about colonial Taiwan, the social connection facilitated midwives' work more than

[50] Janet Kang-Wang, "The Midwife in Taiwan: an alternative model for maternity care," *Society for Applied Anthropology*, 39, 1, (Spring, 1980): 73-4.
[51] TPA 0011170240006, TPA 002-01-01OA-00-6-2-0-00320.

their association with medical science. To deal with this, council members and the government officials both had to acknowledge the value of lay midwives and find ways to augment it with public health training. In addition to earned trust and reliability established through social networks, the age of midwives was also a factor in whether women would accept a new graduate midwife as a reliable care provider. So, while the medical institution and legal certification standardized how Taiwanese midwives were trained and eventually eliminated practicing lay midwives, because so many practiced outside of the hospital system, it could not fully determine which midwives women trusted enough to employ. This meant that medical authority still had to be earned through trust- and performance-based relationships between midwives and their patients. Although the state was invested in standardizing this care and in maintaining some level of surveillance through public health initiatives, this discussion shows how medical authority was still an important component of promoting professionalized midwifery.

The Impact of Neonatal Tetanus in Taiwan and the PRC

In "Have Someone Cut the Umbilical Cord," Wu Chai-ling suggests that during the colonial period in Taiwan, neonatal tetanus was not as widespread a threat as it was perceived to be, and that many infant deaths were misattributed to neonatal tetanus.[52] In presenting an early version of this work at a symposium, I received similar feedback from historians who suggested that tetanus was not likely a significant concern for infant health in China and Taiwan during the 1950s and 1960s. Despite the invocation of misattribution and the seeming insignificance of neonatal tetanus in other places, I could not ignore the frequency of its appearance in primary sources from both China and Taiwan. Although other diseases and health concerns were mentioned alongside the professionalization of midwifery, neonatal tetanus was by far the most

[52] Wu, "Have Someone Cut the Umbilical Cord," 166-7.

common in my sources. The reports of tetanus in newspapers, internal government documents, and materials from foreign affairs offices reflect that perceived impact of neonatal tetanus. In this section, I will briefly outline the role of tetanus in how people advocated for new-style midwifery and for improved medical support. In this case, whether neonatal tetanus was the threat it was often assumed to be does not detract from its significant impact on personal experiences as well as its use in the promotion of state medicine.

While there is substantial research on infant and maternal health in China and Taiwan, there is little on neonatal tetanus outside of its mention in the general discussion of health concerns. This discrepancy of frequency in the archives and lack of research in historical or sociological scholarship raises the question: If the number of neonatal tetanus cases from the 1950s and 1960s were artificially inflated due to misdiagnosis, why did it occupy so much space in public and government discussions about infant health concerns? Public health responses to infant and maternal risk factors do not appear to have directly addressed this issue. For example, the article "An exploration of China's mortality decline under Mao," attempted to explain the reason for the sharp decline in infant mortality between 1950 and 1980.[53] There were many contributing factors, one of which the authors argue was the significant change in public health policies that contributed to an improvement in infant health outcomes. Using data from the provincial health archives, the researchers graphed types of public health interventions carried out, including vaccination efforts, as listed below. Tetanus toxoid, otherwise known as the tetanus vaccine, was not included.[54] Diphtheria and Pertussis form two thirds of the now common DTaP vaccine, which also includes tetanus toxoid. Reports from the *People's Daily*

[53] Babierz, et al, "An exploration of China's mortality decline under Mao," 40.
[54] According to this article, "A key contribution of our project has been the construction of a new province-year data set spanning the years 1950-1980." The authors have compiled multiple data sources for their analysis, and so I am working under the assumption that tetanus toxoid has not simply been left out of the chart.

indicate that one of the professional midwife's responsibilities was "epidemic prevention work" (防疫工作 *fangyi gongzuo*) which manifested as both vaccine administration and education.

Vaccination types:[1]
Pertussis
Diphtheria
Smallpox
Typhoid
Meningitis
Cholera
Measles
Tuberculosis

Table 2.1: "Vaccination Types." List of vaccination types used in the PRC between 1950 and 1980.

Although there is substantial scholarship on public health campaigns in China, as well as work such as *Mass Vaccination* by Mary Augusta Brazelton on vaccines under the ROC, discussion of tetanus specifically is sparse.[55] Even work on infant mortality rates in China lack information on neonatal tetanus. Despite the invocation of tetanus as a threat to infant health in my sources, the lack of attention to it in historical scholarship could suggest, as Wu argues, that tetanus was not the public health issue some made it out to be. However, given the global context, this still seems unlikely. Global concerns about tetanus would indicate that neonatal tetanus contributed to the high infant mortality rates in China, even if it was already a more managed problem in Taiwan. Regardless of scale, infant mortality as a result of tetanus had emotional and social impacts that cannot be accurately represented in this data. Meaning that if people perceived tetanus to be a threat, regardless of its actual impact, addressing it would have been a priority.

My focus on tetanus as it appears in newspapers and government documents highlights the role it played as a justification for improved and expanded midwife care. Well-trained

[55] As mentioned previously: *Red Revolution, Green Revolution: Scientific Farming in Socialist China* by Sigrid Schmalzer, *Hygienic Modernity: Meanings of Health and Disease in Treaty Port China* by Ruth Rogaski, and *The People's Health: Health Intervention and Delivery in Mao's China 1949-1983* by Zhou Xun.

midwives did much more than prevent tetanus – they provided pre-natal care, abortion care, vaccinations – and yet tetanus was repeatedly invoked to both the people and to the government. Contemporary prevention methods for tetanus are safe delivery practices and vaccination. The difficulty with vaccinations as prevention is that it requires first a large-scale vaccination effort for all women who are pregnant or are capable of becoming pregnant and second a knowledge that the tetanus resistance can be passed on. One 1966 article on the use of the vaccine to prevent neonatal tetanus suggested it was effective to vaccinate birthing women as the immunity could be passed on to the child in utero,[56] but widespread tetanus vaccination was only just becoming common in China in the 1960s.[57] Further, it required not only vaccine technology and knowledge, but also production capacity. In contrast, improving sanitization methods during delivery was cheap, simple, and very effective in reducing contact with tetanus even during home births.[58] It seems likely, then, that tetanus was a very knowable disease with simple prevention methods. Explanations of how to sanitize medical instruments and wash hands to the point of sanitization were common themes in news articles both as evidence of good midwife practices and as advice in lieu of a midwife's assistance. Reducing contact with tetanus during the delivery process was also more sustainable as vaccination for adults was not effective for transmitting resistance to an infant if administered only one time. The vaccinations had to be delivered regularly and ideally close to pregnancy.[59] Moreover, sanitary delivery conditions were imperative because neonatal tetanus was commonly contracted just after or during birth, frequently through contamination of the umbilical cord. One term for tetanus in Chinese is *four-*

[56] K.W. Newell, et al, "The Use of Toxoid for the Prevention of Tetanus Neonatorum," *Bulletin of the World Health Organization,* No 35 (1966): 863-871.
[57] Wenzhou Yu, et al, "Vaccine-preventable disease control in the People's Republic of China: 1949-2016," *Vaccine.* 36, Iss. 52 (April 2018): 8131-8137.
[58] Roper, "Maternal and Neonatal Tetanus," 1,953.
[59] K.W. Newell, et al, "The Use of Toxoid for the Prevention of Tetanus Neonatorum," 869.

six winds (四六风 *siliu feng*). This name is derived from the short period of time (just four to six days) before the symptoms of tetanus appeared in infants.

In one of the requests for more midwives, Council Member Huang asked "What percentage of newborns contracted tetanus as a result of the lack of midwives in rural villages? And how do those number compare to urban areas?"[60] Although Section Chief Yan responded with a relatively low number of two thousand, he did not provide an answer to the difference between rural and urban areas. Since neonatal tetanus rates were comparatively low in Taiwan during the mid-1950s, it might not be apparent to someone in Taipei that tetanus was impacting infant health in other cities such as Tainan. In this case, Yan highlights the reluctance of some to work in rural areas, noting that part of the issue was that midwives might not be willing to work there, thus leading to a disparity in medical care.

Despite the relatively low numbers, in the December session of 1955, one council member defended the proposal for more midwives saying that "Today, all kinds of infectious disease have been eradicated. It is a pity that newborns suffer from the hidden danger of tetanus, which is easily preventable."[61] Here, the concern is focused on the *distribution* of midwives (助产士不够分配问题).[62] In this case, the focus of the discussion is on tetanus's preventability and that the prevention method already existed; it was just not evenly distributed. In Taiwan's case, neonatal tetanus may have been raised as a concern in large part because other preventable diseases were already largely under control. This stands in stark contrast to the situation in the PRC, where the government repeatedly had to support campaigns to deal with issues such as schistosomiasis, which circulated through the untreated water system and had devastating

[60] TPA 002-02-04OA-07-6-2-04-00222.
[61] TPA 002-02-04OA-07-6-8-00-00376.
[62] TPA 002-02-04OA-07-6-8-00-00376.

impacts on rural health.[63] Even if the statistical impact of neonatal tetanus in the broader population was minimal, its otherwise rare occurrence among newborns does appear important to council members and local advocates. While the discussion of midwifery in general and tetanus as a byproduct are linked to complaints about inequalities in care in rural and urban areas, it is also perhaps a consequence of the physical medical infrastructure minimizing other facts that contributed to infant mortality in the past. Notably, unlike the news reports from the PRC, the proposals to the Taiwanese provincial government do not mention specific diseases other than neonatal tetanus, which suggests its relative importance both medically and socially.

While in general, infectious diseases were not a major concern for the ROC government in Taiwan, in China, the PRC government initially faced many challenges with implementing wide-scale public health programs. Medical infrastructure was concentrated on the east coast (Beijing and Shanghai) and in a pocket of southwest China (Kunming) the Nationalists had invested in during the second Sino-Japanese war.[64] Although both the Nationalists and the CCP had attempted to improve public health in their respective base areas before 1949, large-scale implementation had not been possible in the way it was under Japanese colonialism in Taiwan. As a result, the situation with infant mortality in China was more dire.

On April 1, 1950, the *North-China Daily News* reported that tetanus was "the main cause of infant deaths in the countryside," attributed largely to the conditions in which women gave birth.[65] Without the physical infrastructure of birthing stations or hospitals, most women gave birth at home, where the likelihood of contracting tetanus was much higher. This made tetanus

[63] Xun Zhou, "Eradicating Schistosomiasis as a Political undertaking," *The People's Health: Health Intervention and Delivery in Mao's China* (Quebec: McGill-Queen's Press, 2020).
[64] The medical system in Yunnan was not solely attributable to the Nationalists' effort, but they did contribute funds and effort when they were trying to immunize the local population to protect their soldiers.
[65] "From Day to Day," *The North-China Daily News,* April 1, 1950, 2.

both an important consideration for infant health and a specifically rural issue. In the 1950s, most of the PRC was considered rural. Even city centers like Beijing and Shanghai took several more decades to develop into the sprawling, cosmopolitan cities they are today. Any space outside the existing major urban areas quickly fell away into countryside. Not all news articles that discussed midwife training programs and concerns about infant health provided clear or specific location information, but for those that did, the places mentioned fall mainly into one of two categories: Beijing City and the rest of Hebei Province. A few later outliers in Shanghai and Heilongjiang aside, of the newspaper reports on midwives between 1948 and 1960, most of the locations mentioned are in Hebei, the province surrounding Beijing. Although this does not include all instances of training programs nor does it demonstrate all of the places where tetanus was a concern, it does indicate that the "countryside" was in effect directly outside the capitol, to say nothing of China's interior and Western provinces.

The Hebei Department of Health estimated that the infant mortality rate was over 50%, and that 37% of these cases were attributable to tetanus.[66] No break down of the other factors was provided. Further away from Beijing, in Jilin Province, the high infant mortality rate was also attributed mostly to tetanus.[67] One explanation for the focus on tetanus in particular was offered in a report from Liaodong addressing misconceptions about tetanus. People commonly believed that infants were born with the disease, rather than contracting it at birth.[68] This suggests that one of the reasons so many articles focus on tetanus could be that unlike other conditions this was a preventable disease, and thus disseminating information on how to prevent

[66] "冀省卫生厅, 省妇联指标 开展妇婴卫生工作训练改造助产人员," *人民日报, The People's Daily*, January 1st, 1950.
[67] In this case *choufeng* is the term used for tetanus. "吉林九台县举办助产学校 训练农村助产士 惠南县改造旧接产妇," *人民日报 The People's Daily*, January 14th, 1950.
[68] 辽东省人民政府卫生处, "辽东岫岩县助产训练班的经验," *人民日报, The People's Daily*, April 27th, 1950.

it could quickly improve infant health outcomes.

Neonatal tetanus was only one among many contributing factors, but like in the Taiwanese provincial government documents, it appears more often than others in PRC newspapers. An article on Shanbei includes a report that listed tetanus, early birth, miscarriage, suffocation, and being crushed to death as reasons for the high infant mortality rates.[69] Among these, tetanus was the only disease listed and in comparison, one of the only complications that was easily addressable. Other articles that detailed the training in midwife programs noted lessons in CPR. Midwives who knew how to identify asphyxia (假死 *jiasi*) and could quickly perform artificial respiration (人工呼吸 *rengong huxi*) would be able to save some of the newborns.[70] *Jiasi* was not a preventable condition, and it was not the same as a stillbirth. In the case of *jiasi*¸ newborns appeared to be stillborn but they were actually suffering from birth asphyxia, which can sometimes be successfully treated with CPR. It was the kind of complication that required immediate identification and attention from a trained midwife, nurse, or doctor at birth. Considering the illnesses and complications included in news articles, prevention measures for neonatal tetanus did not require much medical knowledge; even a lay person could learn sanitary measures to minimize the risk of infection.

In both China and Taiwan, midwives and delivery nurses were part of public health programs for improving infant health outcomes. Although the training for midwives in the PRC was drastically different than that of midwives in Taiwan under the ROC, their social-medical role was centered on addressing the same issues. Moreover, despite very different disease risks profiles in these two places, calls for midwives overwhelming justified the need for more

[69] 敬桓, "谈广大农村妇婴保健工作问题," *人民日报, The People's Daily, no date available.*
[70] "华北，北京等地 训练八千余接产人员 改进女婴卫生婴儿死亡率减低," *人民日报, The People's Daily,* March 29th, 1950.

personnel and programs by highlighting the threat of neonatal tetanus. I believe this was in part because tetanus was a popularly identified problem, and because it was an illness that could be clearly addressed; its impact efficiently minimized with only a small and noninvasive intervention. In dealing with this problem, midwives, and the modern medicine that the government was promoting, demonstrated the efficacy of this medicine and these medical care providers. This helped facilitate trust between the general population and new, professional midwives who were not initially embedded in the local community and who used different terms and approaches than lay midwives. In effect, focusing on tetanus as a known and potentially personal disease also helped translate the new standards for birth work and medicine. In important ways, addressing issues the people understood and were concerned about built a stronger connection between people and state medicine as a reliable source of medical care.

Conclusion

In viewing the professionalization of midwives in China and Taiwan together, some commonalities in the development of medical authority arise. In both cases, the state recognized that lay and granny midwives held important social connections to their communities, and that in order to introduce modern midwifery in remote and rural areas, they would have to find ways to build networks of trust. This included employing existing midwives by recruiting them for training and certification programs. This was also a practical measure because those already living in rural areas appeared more willing to remain and work there, thus improving the distribution of midwives to underserved places. Although short-term training was more common in China and nurse-midwife programs were more common in Taiwan, both tracks wanted to demonstrate their reliability by addressing infant health in ways that the general public would understand. This is in part why neonatal tetanus was so frequently cited as an issue in relation to

midwife care. In offering preventative methods, modern midwives could earn the trust of their patients and demonstrate the effectiveness of state-sponsored medicine.

The increase in number of midwives contributed to a reduction in infant mortality and improvement of infant and maternal health. This state-direct professionalization and distribution of birth work, then, had many positive impacts. State certification promoted more uniform medical care and increased access to preventative measures. Less obvious in this transition to state medicine, is the beginning of a shift from patient-centered care to state-directed medicine. By this I meant that the adoption of colonial medical systems placed the state as the intermediary between patient and provider and as a result medical professionals such as midwives were increasingly accountable to the government over their patients. In the 1950s and 1960s, this was still counter balanced against the importance of building social networks that supported this medical care, but as the relationships between the state and medical providers strengthened and the relationships between the providers and the patients became more clinical, the state's ability to use medical networks to carry out policies without wide public support increased. This shift in provider accountability to the state is particularly important in the context of family planning programs in the PRC in the following two decades.

Part II
Everything a Man Won't Do

As the relationship between the People's Republic of China (PRC) and the United States warmed in the early 1970s, a number of scholars, doctors, and journalists made trips to China to record changes instituted by the communist government. The development of the healthcare system under the new government, and particularly during the Cultural Revolution, was a topic of fascination for those working in medicine and public and health. American physicians were impressed with the roles of paramedical personnel in addressing accessibility to medicine.[1] In addition to popular and scholarly articles praising these advances – including birth control and acupuncture – some visitors captured pieces of this period on film. One 1975 documentary, "The Barefoot Doctors of Rural China," depicted the roles and training of the barefoot doctors, highlighting how they connected rural areas to the larger medical network. Of one example, the narrator explained, "Like most barefoot doctors, Dao Zhang works in his native village, where many of his patients are relatives and friends. These personal ties help to promote close doctor-patient relationships, which are largely responsible for the effectiveness of the paramedics." Medicine, thus, was facilitated through a trust-based relationship between the barefoot doctors and the people, but this simple observation obfuscates the complex dynamics of barefoot doctors' work.

The following chapters three and four explore women as barefoot doctors; the ways they were situated within the medical system, and the ways that they facilitated family planning. Although barefoot doctor work was not as clearly gendered as midwifery, their portrayal in

[1] Victor W. Sidel, "The Barefoot Doctors of the People's Republic of China," 1971. From Rockefeller Archive Center (RAC) "Population Council Record, Public Information Office and Publications, Accession 2, RG 2, Series 14 (FA1434).

media and the way they were mobilized to provide education about and distribution of contraceptives was heavily gendered. The questions I raise about the feminization of barefoot doctor work in chapter three and the development of medical networks in chapter four are parallel in many ways. The role of the barefoot doctor as a paramedical worker was closely associated with family planning work, work that quickly fell on women both as the consumers and purveyors of contraceptives. Therefore, the characterization of barefoot doctors as women and the need to connect women all over China with birth control were simultaneous endeavors.

This co-development of the barefoot doctor program and the early family planning initiatives are an example of how medical authority was transformed into an exertion of medical power. The relationship between barefoot doctors and their patients might have been one of personal familiarity, but it was created as an attempt to disrupt the existing medical system in favor of a form of revolutionary medicine for the masses, not just in access, but in the medicine itself. Barefoot doctors were a continuation of attempts to provide medical care in rural areas, but they differed from earlier iterations (like the midwives in the previous chapters) in that their work was explicitly political. The creation of a new revolutionary medicine and the use of barefoot doctors to carry out policies, not just public health improvements, is a shift in the deployment of medical personnel in the PRC.

Chapter 3
Naturally Nurturing:
The Depiction of Women as Medical Professionals in China and Taiwan

> The term "barefoot doctor" (in Chinese *chijiao yisheng*) loses much in translation into English. As it turned out, every barefoot doctor with whom we spoke was wearing shoes; the word *chijiao* or "barefoot" is used to emphasize that he is indeed a peasant…rather than to describe his footwear. The reader of English should also not be confused by the translation of the Chinese word *yisheng* as "doctor" which it indeed means in other contexts. Chinese officials do not confuse the *chijiao yisheng* with regularly-trained doctors but include them in statistics as peasants rather than health-care personnel.[1]
>
> - Victor W. Sidel, M.D., 1971

In June of 1973, just over a year after Nixon's famous first visit to the People's Republic of China (PRC), a group of Americans organized by *The Guardian* magazine spent a few weeks touring some of China's most developed cities. Since the establishment of the PRC in 1949, the social and political landscape had evolved rapidly, albeit in a nonlinear fashion. This group visited schools and universities, spoke with local cadres and street committees, and in general attempted to glimpse the changes made by the Chinese Communist Party (CCP) over two decades of relative isolation from the United States. Forums were held by local hosts, where the Americans could ask questions of those working on street committees, in education, the medical field, and so on. The group of Chinese women who met for the "Women's discussion" consisted of Ms. Zhang (a staff member of the Women's Organization), Dai Renliang (vice chairman of the Revolution Committee), He Shiya (of the Shanghai Electric Meter Factory), Cheng Jingmei (a shop assistant and a member of the Revolution Committee), and Ms. Cai (a surgeon in the

[1] Victor W. Sidel, "The Barefoot Doctors of the People's Republic of China," 1971. From Rockefeller Archive Center (RAC) "Population Council Record, Public Information Office and Publications, Accession 2, RG 2, Series 14 (FA1434).

Shanghai Physiology Institute). Working as the English translator, Ms. Zhang posed the questions from the Americans to the group and translated their responses, sometimes with the additional assistance of those gathered for the meeting. The Americans were interested in questions about women's roles in China's socialist movement, including how they had entered the workforce. Ms. Zhang reported that women had actively taken positions in finance, education, science, and in factory work, comprising between 20% and 30% in each sector. She said, "It's just like Chairman Mao said: times have changed. Men, women are equal. Whatever men can accomplish, women can too. So, women in different fields [are] encouraged to accomplish the new achievements."[2] Although Ms. Zhang noted that full equality in the workforce was a work in progress, she was clearly proud of the increase in the number of working women and the mobilization of women as contributors towards China's socialist construction.

Yet having toured schools and hospitals throughout their trip, the Americans were circumspect about accepting this answer. They had already observed what they believed to be a gender disparity in the workforce, and they asked for clarification. One woman said:

> One of the first things that we were told by our guides when we arrived in China, was that in China there are only comrades. There is not any work that is considered better or worse than others. That all are equal. A principle that we all have to admire. And that there is only a division of labor. That different jobs are assigned purely for efficiency's sake, and that none are considered better or worse than others. In our visits to the nursery schools and discussions with some of the people there, we have noticed that all of the staff are women. Now, all of the teaching staff are women. When we asked about this - why this was the case - we were told because women are more suited to this kind of work. They have characteristics which are - would make them be able to do the job better. We've also been told…that one of the major principles…working toward the equality of women in China is that women can do anything that men can do…Some of us see a contradiction there. If women can do everything that men can do, cannot men do everything that women can do?[3]

[2] Bobbye S. Ortiz, "Women's Discussion, 8B," 27: 35. From Stanford Libraries: Stanford Digital Repository. https://purl.stanford.edu/dr077pc8251.
[3] Ortiz, "Women's Discussion, 8B," 37: 48.

Her question followed the discussion of men actively taking part in household work, in which the translator explained that men's refusal to contribute to household chores was part of the Four Olds the Cultural Revolution worked to eliminate.[4] Clearly there had been some steps to encourage men to do work typically reserved for their wives and daughters, thus eliminating the double burden women experienced when they entered the workforce but returned home to the same household work. In public work, when women held positions such as nurses and teachers, the Americans wondered if there was similar discourse about men entering fields centered on caregiving.

The response, agreed on collectively after some discussion by the group, was no. For them, there were two clear reasons why men would not be equally represented in some professions. The first was that equality (男女平等 *nannü pingdeng*) was defined as "mainly the political and economical and cultural equality," and that complete equality would take a much longer time to achieve.[5] Secondly, and perhaps more enlightening, the group came to a consensus that "Specific characteristics must be taken into account in different kinds of work."[6] One's physical constitution and emotional capacity – which was at least partially related to gender – meant that they were better suited for different things. They mentioned that they observed this in football and gymnastics, where Ms. Zhang said, "We don't find any women playing the football match, and we find more girls in the gymnastics."[7] The reasoning followed that there were different characteristics for men and women which lead to a logical division in labor. Importantly, this division in labor was not about the Party nor the government's values.

[4] Ortiz, "Women's Discussion, 8B," 27: 45.
[5] Ortiz, "Women's Discussion, 8B," 41:41.
[6] Ortiz, "Women's Discussion, 8B," 41:41.
[7] Ortiz, "Women's Discussion, 8B," 41:41.

Technically, yes, men could do work women did, and the commentator on the recording mentioned that one of the women offered an anecdote about a man training to be a nursery schoolteacher, who, like his fellow female teachers, also demonstrated great patience in working with children. The division then was about personal constitution, physical or otherwise, that led someone to certain kinds of work, and women were generally (but not exclusively) more patient than men, making them better suited to caring for children.

Although the Americans and the Chinese women at this meeting understood the practical components of equality differently, for all of them equality was still a work-in-progress. Women's experience of equality in United States in 1973 was also quite limited. The right for women to open and operate a bank account independent of their husband was not guaranteed in the U.S. until the passing of the Equal Credit Opportunity Act in 1974, and the ruling for *Roe v. Wade*, which protected women's constitutional right to abortion until 2022, had only occurred early that year, in January of 1973. In contrast, women in China had relatively unrestricted access to abortion for decades prior, and as discussions with street committees revealed, access to contraceptives was actively promoted and financed by the PRC government.[8] The observation from Americans that men could do anything women could do was also not reflected in their own experiences.

In this chapter, I explore how women were represented as part of the workforce in the PRC, with an emphasis on the portrayal of women in medicine. I argue that women's representation on a larger scale was part of the changing dynamics between the state-sponsored medicine and women as it simultaneously normalized women in positions of medical power while also feminizing certain medical work and classified it as a nurturing profession. Utilizing

[8] Bobbye S. Ortiz, "Feng Shen Street Committee 20A." From Stanford Libraries: Stanford Digital Repository. https://purl.stanford.edu/jj599bq5202.

propaganda posters from the PRC and hygiene posters from the ROC in Taiwan, I show that women working within state sponsored medicine were about more than their roles as medical professionals; they also supported political narratives about state control, gender, and medical power.

I begin with a brief explanation of the masculinization of birth work in the United States to show how state sponsored medicine, gender, and medical power coalesced very differently for the American visitors to the PRC. The medical systems in China and Taiwan were not developed independently of U.S. influence; they received support from organizations like the Rockefeller Center and from the government such as USAID for funds and scientific assistance; however, these U.S. systems and practices were not adopted wholesale. The unique development of the rural health system in China set the course for the midwife and barefoot doctor training programs that were essential, localized components of healthcare in the twentieth century. Moreover, the feminization of medicine in Taiwan and China coevolved from different points of origin. Whereas women's equality was a core component of socialist construction for the CCP, for the ROC, women in leading medical roles emerged as an unintended consequence of their existing position in the medical system. I then focus my attention on the portrayal of barefoot doctors in Chinese propaganda posters. The political discourse during this time on socialist construction and gender equality were important contributing factors to the feminization of medicine. In the ROC, hygiene posters depicted medical leaders in the community, and while women were featured as doctors and nurses, ROC-specific gender expectations were affected by the political landscape in Taiwan.

The Masculinization of Birth Work in the United States

Historically, birth *work* was done by women. While the theoretical and medical

discussions of birth work were often conducted (and recorded) by men, as chapter one describes, the practical work was relegated to women. This was true for a number of reasons, the broadest one being that birth work was facilitated through social networks of women themselves, but there were other contributing factors. In many cultures, birth – like menstruation – was considered a dirty or polluting event, both physically and spiritually. Even before conservative Victorian values were introduced to other parts of the world through colonialism, it was unusual for a woman to feel comfortable exposing herself to a man in the way labor necessitates. Before women received midwifery training from medical schools, it was especially common that midwives were women who had given birth themselves. As such, their embodied knowledge was something a man could not offer. Despite all of these reasons for women conducting birth work, in the West, and the United States in particular, birth work underwent a long process of masculinization in the nineteenth and twentieth centuries. The development of birth work in China and Taiwan took a divergent path, with the feminization of paramedical professionals like barefoot doctors and the masculinization of physicians. A brief explanation of how birth work was masculinized in the United States will serve as a point of reference for how some medical professions were considered men's work while other were positioned as more suitable for women.

Until the mid-eighteen hundreds, when women in the United States were accompanied by a medical care provider during birth, they were attended by a midwife. At the time, medicine still existed in a limited but plural form, largely unregulated by the government, but this was changing. As the number of universities training medical doctors grew, so did the question of who could practice medicine and how it would be defined. Moreover, outlining the bounds of "real" medicine required the exclusion of those already practicing medicine who did not work

under or who were unwilling to submit to the growing regulatory bodies made up of medical institutions, legal requirements, and professional groups like the American Medical Association (AMA). Midwives were one of these pre-existing practitioners. In China and Taiwan, midwives were professionalized as additions to the insufficient number of physicians, but in the United States, biomedical doctors viewed midwives as challenges to their authority. Unlike Chinese medical epistemology, Western science did not easily permit plurality, and the midwives' varying medical backgrounds meant that their roles as practitioners were not perceived as part of a cohesive medical complex. In the singularity of scientific medicine, the failure of women to submit to the patriarchal hierarchy necessitated the stigmatization of midwives to facilitate the elevation of biomedical doctors.

The tensions between midwives and doctors came to a head over curettage abortion methods. In the late 1800s, this was a common form of abortion used by both doctors and midwives. It was, however, a risky procedure. Rates of injury and death were particularly high for curettage abortions because the curette – a long, metal surgical instrument – used to perform the procedure was prone to puncturing the uterus, leading to excessive bleeding and infection.[9] The resulting injuries came under public scrutiny, and in a bid to win public favor and marginalize midwives from obstetric practices, doctors blamed the midwives for the danger associated with this form of abortion. As Leslie J. Reagan argues in *When Abortion Was a Crime*, the rate of death due to curettage abortion were very similar in midwives and doctors, but because doctors formed a relationship with the law, courts, and police officers, they could leverage this medical power to associate abortion with midwives and justify criminalizing

[9] Leslie J. Reagan, *When Abortion was a Crime: women, medicine, and law in the United States, 1867-1973* (University of California Press: Berkeley, 1997), 77-79. Note there is always some bleeding with abortion from the removal of the uterine lining, however in this case, the bleeding is cause by puncturing the lining of the uterus or another organ. This bleeding can be both internal and external.

midwife practices.[10] A consequence of this was the criminalization of abortion across the board, which allowed medical doctors to successfully remove midwives as competitors in the medical space and enter the field of women's health with little challenge from other practitioners.

Figure 3.1: "Man-midwife." Illustration of man-midwife split into half male, half female. The left, male side shows the man-midwife in a waistcoat, holding a curette with other medical tools and medicines on the shelf behind him. The right, female side shows a woman in a striped dress and white apron preparing something in a fireplace.

The male doctor's transition to obstetric and gynecological medicine did not go unchallenged by society at large. There were a variety of responses, not only from women who might have preferred a midwife, but also by other men who perceived midwifery as women's work. Fig. 3.1 depicts a "man-midwife" from 1793; although nearly a hundred years earlier than the criminalization in United States, this image conveys the gendered hurdle that medical doctors faced as they attempted to develop gynecology into a male-dominated profession.[11] The man-midwife is depicted as straddling two personas: half man/doctor and half woman/midwife. On the left, his male side is depicted with the trappings of Western science. There is a cabinet of

[10] Reagan, *When Abortion was a Crime,* 81
[11] Isaac Cruikshank, "man-midwife," June 15, 1793, Illustration, Wellcome Collection, https://wellcomecollection.org/works/hjwc7hsg.

medicine, with large tools hanging on it, and in his hand is a curette. While with hindsight the irony of this tool later on is clear, initially the use of medical tools delineated the doctor from the quack, the professional from the lay healer, and the modern from the outdated. On the right, his female side is set in a home, next to the fireplace, where he is preparing something on the fire. There are few tools of the trade in this half of the illustration. As a whole, it implies that the doctor is perhaps treading where he does not belong, either because it is woman's work or because midwifery is not scientific enough for him to entertain. In any case, by the early 1900s, this assumption that male doctors were not suited to this work had largely fallen away. Through the marginalization of midwives and the limitation of access to alternative services, men carved their way into women's medicine.

Other factors further exacerbated the masculinization of birth work in the U.S. Restrictions on women's access to university education throughout the nineteenth and twentieth centuries prevented them from matriculating as OBGYNs in any notable numbers. When women were permitted to study and practice medicine, they were encouraged to work in gynecology and obstetrics, but their numbers did not make a significant dent in the proportion of women to men until the twenty-first century. Statistics from the Association of American Medical Colleges in 1997, showed that male obstetrician-gynecologists still outnumbered women 3 to 2.[12] While this was a significant increase from earlier decades, this was only possible because people actively advocated for legal equality. In the 1970s, the Women's Equity Action League brought a class action lawsuit against federally funded universities for biases in medical school admissions and recruitment. This is to say that early efforts to criminalize midwives coupled with inequality of access to education resulted in the overall masculinization of birth work.

[12] AAMC [Association of American Medical Colleges] Data Book: Statistical Information Related to Medical Education. Association of American Medical Colleges: Washington DC; l997, Tables B7–B8.

As a result, when the group of Americans arrived in the PRC in June of 1973, there was not equality in the medical field for them either. If the Americans were critical of the percentage of women (it was estimated at 38% in 1973) of in China's medical schools, it was from an ideal place, not a reality in which they lived.[13] The Americans might have chuckled at the thought that women were naturally suited to certain roles, but this gender bias had different consequences in the PRC than that it had in the U.S.

Women and the Medical Profession in China

The authority of medical care providers can be derived from a number of places, including experience or certification, and is also affected by their social status. In the case of women as healers, their position as women was double edged. One the one hand, as women they had unique access to other women; this placed them in a position of authority through embodied experience. On the other hand, as women they historically had little access to power, particularly within institutions. In order for governments to incorporate women as part of their medical infrastructure, they often had to clearly assert the appropriateness of women as medical practitioners.

In China, women's liberation has a complex, nonlinear history. In many instances, feminist movements are constructed bottom up, in which campaigns are organized locally to direct change toward the government; however, with the success of the CCP in China, women's liberation movements became part of the larger Party and government structure rather than a separate movement. The benefit was that as an organization, the Women's Federation had support from the Party, which should have made addressing women's issues easier, as the state already nominally agreed with society-wide equality. There were clear attempts at support. For

[13] Bobbye S. Ortiz, "Sun Yat-Sen Medical College," Tape 1 Side B. From Standford Libraries: Stanford Digital Repository. https://purl.stanford.edu/fp971bp6459.

example, the institution of communes were meant to "socialize housework" through initiatives such as the commune kitchen.[14] This was meant to address concerns about the double burden of women who were entering the workforce and might then have to return home to still complete the housework. While the commune kitchens were short lived, they did provide an example of how the state understood women's positions in society and tried to respond to the unique challenges they might face.

The issue with this approach stems from who is making the demands for women's liberation, how they are doing it, and to what ends. From the government's perspective, liberating women was often more about freeing them up to enter the workforce rather than freeing them from patriarchal expectations. This was especially true in the PRC, where mass mobilization was the foundation of five-year plans, the Korean war, attempts to remove pests, and family planning, among other issues. As a result, women's liberation came with a price – one that cost more than it might have initially appeared. The Great Leap Forward and the Cultural Revolution were two galvanizing events that shaped possibilities for women in work and society. Gail Hershatter has argued that the Great Leap Forward led to a feminization of agricultural work through the mobilization of women into this field.[15] In her oral history, she recorded a "former Women's Federation official" saying "Women did not hold up half the sky; in agricultural production, they held up more than half: 70 to 80 percent of the sky."[16] Not only had they entered the workforce *en masse* to meet the demands of the Great Leap Forward, when the support for domestic labor and childcare dried up, they shouldered that burden as well. While

[14] Felix Wemheuer, *A Social History of Maoist China: Conflict and Change, 1949-1976* (Cambridge: Cambridge University Press, 2019), 126.
[15] Gail Hershatter, *Gender of Memory: Rural Women in China's Collective Past* (University of California Press: Berkeley, 2011), 237.
[16] Hershatter, *Gender of Memory,* 265.

nominally there were feminist components to the socialist revolution, in reality many of the needed accommodations were not provided.

In a similar way, the Cultural Revolution called on young women to carry out revolutionary activities and participate in the on-going socialist construction. The women from the street committee and medical college repeatedly framed their progress towards equality as a by-product of the Cultural Revolution, but the attempt at women's equality during this time also frames women's liberation in terms of what they can provide for the state more than what the state can do to address equity. Just at the state called on women to enter agricultural and factory work, as well as train as midwives, it also promoted women as medical workers in the form of barefoot doctors. As I explore in propaganda posters below, labor models were used in both newspapers and posters as a way elevate positive political behavior. When women were put on public display, their images and stories were meant to motivate other women to do the same kind of work, even if it meant significant sacrifice.[17] In the case of barefoot doctors, their portrayal in propaganda posters equated their paramedical status with political correctness, but it also conversely feminized this form of state medicine.

Public Displays of Medicine in Propaganda Posters

Propaganda posters served an important role in top-down communication for the Chinese Communist Party (CCP) from the establishment of the PRC through the present-day. In a period of low-literacy rates, posters were especially effective forms of communication that projected the Party's idyllic and utopian goals. In this way, they contrasted with other propaganda posters, such as those from WWII, which were inflammatory, racist, and hyperbolically negative. Although there were Chinese propaganda posters that displayed anti-imperialist and anti-

[17] Hershatter, *Gender of Memory,* 234.

American sentiment, posters about Party programs and initiatives were usually positive, highlighting the intended improvement of Party policies. Because they were produced by artists at the behest of the CCP the topic of the poster and the artistic form itself were all subject to review. The deeply impactful consequence was a funneling of artistic expression into a narrowly-defined set of guidelines that aligned with Party approval.[18]

These posters not only portray government initiatives but offer some insight into the everyday lives of people, including their jobs and cultural events. Among the many professions and jobs depicted in these posters are medical care providers, the most represented version of this profession being the barefoot doctors. In this section, I examine how barefoot doctors are portrayed in these posters and what those portrayals could convey to their audience. The propaganda posters referenced here are from of the collection of Chinese propaganda posters on chineseposters.net and Yang Pei Ming's *Modern Chinese Poster Collection*.[19] The collection on chineseposters.net encompasses over 7,000 images from "the collections of Stefan Landsberger (Leiden University, University of Amsterdam), the International Institute of Social History (IISH, Amsterdam, Netherlands), and a private collector who prefers not to be named."[20] Collectively, they provide a wide variety of posters spanning the life of the PRC and demonstrating the ways the government portrayed different initiatives.

Workers were often the subject of propaganda posters, particularly as part of the portrayal of economic campaigns and the Cultural Revolution. China's communist revolution was rooted in a relationship with peasant farmers and laborers, who were essential to industrialization

[18] Julie Andrews. *Painter and Politics in the People's Republic of China, 1949-1979* (Berkeley: University of California Press, 1994), 1.
[19] Yang's published poster collection was created from his private archives, some of which can be viewed at the Propaganda Poster Art Center in Shanghai, PRC. In total it features 6,000 posters.
[20] "About chineseposters.net," Accessed Oct 20th, 2023. https://chineseposters.net/about/index.

efforts. Women and men were both featured in these roles. Posters showed that heavy machinery and hard factory labor could be completed regardless of sex. The man in "Sending more steel to the frontline of national construction" (Fig. 3.2) is shown in a steel factory holding a slab of iron, with other men working the blast furnace in the background.[21] Similarly, "Thoroughly criticize the 'theory of human nature' for the landlord and capitalist classes," (Fig. 3.3) displays women at a cotton factory.[22] In the center, one woman flexes her right arm while the other factory workers in the background raise their Little Red Books of Chairman Mao's quotations in the air and cheer her on. Men and women were depicted in the same roles, too; both men and women were featured welding, for example. It is clear that, as many Chinese women stated, they could do any of the work that men could do.

Figure 3.2: "Sending more steel to the frontline of national construction." A man in a factory holds up a large piece of steel, while other workers attend the forge in the background.

[21] Zhenhua Cai, "Sending more steel to the frontline of national construction," Dec. 1953, Illustration, Huadong renmin meishu chubanshe, IISH collection, https://chineseposters.net/posters/e12-367
[22] Revolutionary committee of the Shanghai national cotton factory Nr. 21, "Thoroughly criticize the 'theory of human nature' of the landlord and capitalist classes," Dec. 1971, Illustration, Shanghai renmin chubanshe, Landsberger collection, https://chineseposters.net/posters/g2-37.

Figure 3.3: "Thoroughly criticize the 'theory of human nature' of the landlord and capitalist classes." A female factory worker flexes her arm, while other women cheer her on in the background.

In addition to industrial work, women were shown in agricultural work, too.[23] Numerous posters depict men and women working in the field performing various jobs: raising pigs, harvesting grains and vegetables, and using oxen or even tractors to prepare the field. In many instances men, women, and children are all working happily in unison to achieve the production targets. The posters of agricultural work are quite idyllic. Farming was hard work, but it was almost always depicted as being completed with a smile. Further, farming is often represented by the harvest more than the work itself. This is true before and during the Great Leap Forward campaign, which aimed to dramatically increase agricultural output. In depictions of agricultural and factory work, men and women were both well represented. They were shown carrying out

[23] Fig. 3.4: Meisheng Jin and Peigeng Jin, "Carefully chosen improved variety," Oct. 1965, Illustration, Zhejiang renmin meishu chubanshe, Landsberger collection, https://chineseposters.net/posters/e37-177. Fig. 3.5: Meisheng Jin, "The vegetables are green, the cucumbers plumb (sic), the yield is abundant," Feb. 1959, Illustration, Shanghai renmin meishu chubanshe, IISH collection, https://chineseposters.net/posters/e11-992. Fig. 3.6: Dong Tianye, "The first female tractor driver Liang Jun," Nov. 1953, Illustration, Shanghai Huamei huapianshe, IISH collection, https://chineseposters.net/posters/c32-472.

the same jobs, whether that was harvesting, using equipment such as tractors or with industrial machines. Interestingly, although more men trained as barefoot doctors, when it came to the depiction of medical work, almost all of the posters of barefoot doctors feature a young woman.[24]

Figure 3.4:"Carefully chosen improved variety." Three young women gather wheat in a full field.

Figure 3.5: "The vegetables are green, the cucumbers plumb (sic), the yield is abundant." A young woman in a purple blouse harvests a variety of fruits and vegetables.

[24] Xiaoping Fang, *Barefoot Doctors and Western Medicine in China* (Rochester, NY: University of Rochester Press, Rochester Studies in Medical History, 2012), 52-3.

Figure 3.6: "The first female tractor driver Liang Jun." A woman, Liang Jun, drives a red tractor.

Barefoot doctors were medical workers trained in the 1960s and 1970s to work in communes in rural areas. They were trained in short-term programs, many of which lasted between three and six months, and then assigned to work in the countryside. Some were more committed to studying medicine than others, but they were all part-time "doctors," as they also contributed other forms of labor to their communes as needed. In posters, the standard representation of a barefoot doctor was a young woman, with her hair bobbed and pulled to the side or separated into two long braids, as exemplified in "Go to the countryside to serve the 500 million peasants" (Fig. 3.7).[25] Her outfit varies, but it is usually a button up shirt with the sleeves rolled up to her forearm. Most importantly, she is always carrying her medical kit, a rectangular leather bag with the red first aid cross affixed to the front. This medical bag is her clearest identifying feature, since without it she could be any other young woman in the picture. In

[25] Rixiong Lin, "Go to the countryside to serve the 500 million peasants," Dec. 1965, Illustration, Hebei renmin meishu chubanshe, Private Collection, https://chineseposters.net/posters/pc-1965-030.

posters that feature crowds, it was common to indicate a variety of occupations, barefoot doctors among them, and her presence in posters, such as "New Year's Eve in the collective household" highlight her ubiquitous place in society. In the context of the collective, the barefoot doctor was an expected component of the human labor; like the abundance of food, her job as a healthcare provider was a promise from the government. So, her inclusion here can be understood as making good on the promise of healthcare. Similarly, in "To go on a thousand 'li' march to temper a red heart," (Fig. 3.10) the barefoot doctor is in the front row of a march to Beijing, standing to the right of the leader who is holding a portrait of a young Mao Zedong.[26] To the leader's left is an armed soldier. Her presence in this poster further exemplifies her high status – particularly in meeting revolutionary goals – alongside other young revolutionaries. When she is the focus of a poster, the barefoot doctor is depicted performing various aspects of her job, including administering vaccines (Fig. 3.11), conducting health examinations, and spreading information about family planning. Sometimes she works in a village clinic, but other posters emphasize the lengths to which she would go to deliver medical care to everyone, no matter how remotely they are located.[27] Overall, barefoot doctors were depicted as hard working, studious, and embedded elements of the local society.

[26] Shanghai No. 3 glass household utensil factory revolutionary committee political propaganda group, and Xuhui district residential building and repair company No. 3 construction brigade revolutionary committee political propaganda group, "To go on a thousand 'li' march to temper a red heart," Jan. 1971, Illustration, Shanghai renmin chubanshe, Landsberger, https://chineseposters.net/posters/e13-708.

[27] Fig. 3.11: Lequn Ma, "This auntie vaccinates us," C. 1975, Illustration, Shanghai renmin meishu chubanshe, https://chineseposters.net/posters/e3-742. Fig. 3.12" Zhou Zhaokan, "Wholeheartedly serve the people," Feb. 1965, Illustration, Shanghai renmin meishu chubanshe, IISH collection, https://chineseposters.net/posters/e39-182.

Figure 3.7: "Go to the countryside to serve the 500 million peasants." A female barefoot doctor in a white shirt, carries her (leather) medical kit.

Figure 3.8: "The health worker at the head of the field." A female barefoot doctor in a green sweater, carries her (wooden) medical kit and a farming tool over her shoulder. [28]

[28] Li Mubai and Jin Xuechen, "The health worker at the head of the field," May 1964, Illustration, Shanghai renmin meishu chubanshe, Private collection, https://chineseposters.net/posters/pc-1964-012.

It is clear that women as barefoot doctors were shown in variety of ways that emphasized the political importance of their contribution to society. Of the 40 posters with barefoot doctors included, only one shows a male barefoot doctor. This absence of men can be partially explained by an effort to promote equality through female representation in these roles, but the same reasoning could be applied to posters about agricultural and factory work. In other jobs, both men and women are repeatedly depicted doing the same or similar work, so it is intriguing that there is such an inverse gender balance in this case. I cannot offer definitive numbers about the ratio of representation in factory and farm work, but a brief exploration would demonstrate that there is enough representation of men *and* women doing those jobs to dissuade conjecture about clear gender boundaries and occupational status. This makes the lack of men portrayed in medical roles even more perplexing, but the gender of it all may be only the beginnings of the answer.

Figure 3.9: "New Year's Eve in the collective household." A barefoot doctor enters a home. People are gathered putting up decorations and cooking food. [29]

[29] Xia Zhenping, "New Year's Eve in the collective household," June 1977, Illustration, Renmin meishu chubanshe, Landsberger collection, https://chineseposters.net/posters/e13-977.

Figure 3.10: "To go on a thousand 'li' march to temper a red heart." A Group of Red Guards marches in rows of three, with a barefoot doctor in the front row.

Figure 3.11: "The auntie vaccinates us." A female barefoot doctor administers vaccines to a que of school children.

Figure 3.12: "Wholeheartedly serve the people." A barefoot doctor travels with a donkey to carry medical supplies to the countryside.

In the few posters where men are shown in medical roles, they are almost never depicted as the barefoot doctors. Instead, they are shown as physicians or Chinese herbalists. For example, "Serving 500 million peasants" includes an older man in a button up shirt using a stethoscope on a child, while a young, female barefoot doctor stands nearby with her medical kit (Fig. 3.13).[30] The age difference might imply an apprenticeship-style relationship; he could be a director of a barefoot doctor training program who is taking her into the field for practice. Similarly, in "Mountain village medical station," (Fig. 3.14) a young barefoot doctor is presenting a large basket of plants she has gathered to two older men.[31] The bearded man on the right is holding one of the plants and conversing with another man on the left who is holding a reference book. It was common for barefoot doctors to work with local Chinese medical doctors and herbalists in the field, and it would appear here that she is learning about the local plants she can use to create medicinal decoctions.[32] Although few in number, when men are featured as medical providers, they are often situated in a way that implies a hierarchical dynamic between the male doctor and the female barefoot doctor.

[30] Shiqing Hong and Naijin Ji, "Serving 500 million peasants," Feb. 1966, Illustration, Shanghai renmin meishu chubanshe, Landsberger collection, https://chineseposters.net/posters/e37-179.
[31] Zhide Liu, "Mountain village medical station," Jan. 1975, Illustration, Shanghai renmin chubanshe, Landsberger collection, https://chineseposters.net/posters/e13-348.
[32] Marilynn M. Rosenthal and Jay R. Greiner, "The Barefoot Doctor of China: From Political Creation to Professionalization," *Human Organization,* Winter 1982, 41. 4, 334.

Figure 3.13: "Serving 500 million peasants." A male doctor and a female barefoot doctor attend to a mother and child in the field.

Figure 3.14: "Mountain village medical station." A female barefoot doctor shows the plants she has gathered to the local herbalist.

While the number of women portrayed in this role might have been an attempt by the government to normalize women in medical roles, I offer another potential paradigm through which to view these depictions. Unlike factory and agricultural work, medicine is a form of caregiving, but in a biomedical context, medical care is often split into two general categories: the person who diagnoses and the person who provides the practical care. Usually these are the doctor and the nurse, respectively. The professionalization of midwives in the 1940s and 1950s was supported by the government as a way to address infant and maternal health concerns, and in doing so the PRC avoided the replacement of midwives in birth work by physicians, particularly in rural areas. This pivot to training paramedical professionals was in large part an attempt to quickly improve basic and preventative medical care, and created a dynamic in which understaffed commune and brigade clinics utilized people like barefoot doctors in addition to physicians, Chinese medical doctors, medical students, and midwives.[33] Barefoot doctors were at the bottom of this medical hierarchy, and reports indicated that they had a difficult time earning the confidence of some people, who would attempt to bypass them for diagnoses.[34]

With this context, the depiction of barefoot doctors as women becomes more complicated than gender representation. It shows women as medical care providers, but ones more analogous to nurses and paramedics than doctors. While some did continue to study medicine and acquire surgical skills, this was not the core component of their training nor the work they were depicted conducting. As a whole, propaganda posters suggested that women can do any and all of the jobs men can do (welding, working with heavy machinery, and farm equipment), but in the medical setting they were shown as barefoot doctors, nurses or other auxiliary medical professionals. Men are also shown in agricultural and industrial work, but there are very rarely shown in care-

[33] Rosenthal and Greiner, "The Barefoot Doctor of China," 331-332.
[34] Rosenthal and Greiner, "The Barefoot Doctor of China," 332.

centered jobs. This disparity applies to posters of medicine, childcare, and teaching. Despite the estimate Cadre Zhang presented, that women occupied only 32% of the roles in the Education sector, the Americans observed far more women than men during their tours of nurseries and the posters with teachers are largely of women, especially when teaching young children.[35] Moreover, teachers were not strictly shown in their capacity as educators; they were often simultaneously portrayed in motherly roles. In "We and our teacher," (Fig. 3.15) a female teacher is shown walking in the rain and wearing a clear rain poncho.[36] Under her poncho she also covers three children in the same way a mother duck shelters her ducklings. This poster does not emphasize the professional qualification or hard work of the teacher, and without the title, it would be difficult to guess the relationship between the woman and the children. Similarly, nurseries were always shown staffed by women.[37] Childcare was an important component of state programs to free up domestic labor, but this seems to have also been identified as women's work. In some cases, women worked as both barefoot doctors and nursery staff; if men worked in the nursey, it is not reflected in the sources or the scholarship.[38] What emerges, instead, is a clear overlap of women in care-centered work.

[35] Bobbye S. Ortiz, "Women's Discussion, 8B," 27: 35. From Stanford Libraries: Stanford Digital Repository. https://purl.stanford.edu/dr077pc8251.
[36] Zeng Zhaoqiang and Shen Jian, "We and our teacher." Oct. 1977, Illustration, Jiangsu renmin chubanshe, Landsberger collection, https://chineseposters.net/posters/e13-47
[37] See Fig. 3.16: Tian'en Tao and Pin Lü, "The factory's nursery," Nov. 1953, Illustration, Xin meishu chubanshe, IISH collection, https://chineseposters.net/posters/e16-630.
[38] Haihui Zhang, interviewer. "We didn't have anything to stanch the bleeding…I used rice wine to disinfect my hands," May 4, 2017. From ULS Digital Collections: *China's Cultural Revolution in Memories: The CR/10 Project*. https://digital.library.pitt.edu/islandora/object/pitt%3A7198632/viewer.

Figure 3.15: "We and our teacher." A Teacher uses her rain poncho to shield three students from the rain. Two students share an umbrella in the background.

Figure 3.16: "The factory's nursery." Nursery staff attend to many young children.

In the same way that the presence of women in the workforce indicated that these spaces were appropriate for men *and* women – that women hold up half the sky through their labor – the dearth of men in caregiving roles indicated that these spaces were only for women. Women were depicted as naturally suited to nurturing work through their roles as nursery staff, teachers, and barefoot doctors. Further, their association with medicine through barefoot doctor work coded paramedical work as feminine labor. In the following chapter, I dissect the role of the barefoot doctor in family planning campaigns specifically, but here I want to further note that barefoot doctors were also the focus of propaganda posters promoting late marriage and contraception. This does not mean that birth work was the core feature of barefoot doctors' practice in these posters, but rather it codes preventative measures in general as feminine.

In addition, the collection of roles coded as women's work portrays these women as a form of public mother.[39] This was reinforced, in part, by the depiction of children as the barefoot doctor's main patients, despite the fact that barefoot doctors also treated adults, including those working in the fields. The consequential implication that only women could do that work reinforced a connection between caregiving and work best suited for women. In contrast, when men are featured in posters, they are shown as doctors, but this implies a hierarchy, one in which men as medical workers inhabit higher positions while women function as paramedical professionals.

Hygiene Posters in Taiwan

The large number of propaganda posters is unique to the PRC, and as a result they visually record and convey a wide breadth of government campaigns. Although much smaller in

[39] Jessice Leigh Hester used the term "public mother" in this way in reference to nurses in the United States during her conference presentation: "Material for Profession: The Language of Dissector and Dissected in 19th Century Philadelphia. There is other scholarship on public mothering, but it refers to mothers in the public space, rather than women whose job includes aspects of traditional, nurturing motherhood.

number, the ROC government also created posters to convey messages about health and hygiene. In this section, I am using posters commissioned by the Taiwanese Department of Education to promote hygienic habits. In this collection from Yale's University Library, examples include a range of expectations such as bathing, regular bowel movements, and even how to properly breath (through the nose and with one's mouth closed).[40] While these subjects may appear frivolous or invasive, this form of hygiene poster was rather common globally throughout the twentieth century, and handwashing posters are still required in many places (including the United States) as a reminder. Certainly, there are a plethora of parallel examples from the PRC, but there are a few key differences in the subjects of hygiene posters from Taiwan as opposed to China. First, there is no Taiwanese equivalent to the barefoot doctor. Public health nurses and midwives were important components of the growing network of health stations, and they were supported by the government; however, these positions were not created as part of a larger attempt to invent a revolutionary medicine for the masses. Taiwanese public health campaigns were directed at the people, but they were not framed on socialist ideologies or connected to a new revolutionary campaign. Hygiene posters in Taiwan do feature medical workers, it is just that the medical systems in Taiwan and China were not analogous in this way.

Second, the posters in Taiwan appear to be directed at the patient or the general public. In contrast, propaganda posters in the PRC spoke to two audiences: those who would become the barefoot doctors and those who would receive the barefoot doctors' services. The images of barefoot doctors were beautifully crafted and positioned the barefoot doctor as an important part of society. Conversely, the nurses pictured in the Taiwanese health and hygiene posters are clearly but rather plainly drawn. The art style itself compounds this disparity. Take as example,

[40] Department of Education, Taiwan, "Breathing – I will breathe with the nose, closing the mouth," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/catalog/digcoll:2819761.

two posters on handwashing. The poster "Pay attention to hygiene, take precautions against disease" (Fig. 3.17) from the PRC is brightly colored from edge to edge. It features two smiling children washing their hands at the faucet. In the background is the silhouette of a person eating, with germ-like images hovering around them.[41] The implication was that if one washed their hands, they could avoid ingesting germs when they ate meals. In contrast, the poster from Taiwan shows a girl, standing over a water basin.[42] She is neither smiling nor actively washing her hands, but above her head are two red thought bubbles that indicate she should wash her hands before meals and after using the restroom. In function, both could serve as effective reminders of the utility of handwashing, but the art style varies dramatically and as a result affects the reading of the poster, too. When considering what the poster is promoting, then, the depictions of barefoot doctors not only promoted public health initiatives, but they also idealized it as a respectable profession.

Figure 3.17: "Pay attention to hygiene, take precautions against disease." A boy and girl wash their hands at a sink.

[41] Jifa Jin, "Pay attention to hygiene, take precautions against disease," April 1983, Illustration, Shanghai renmin meishu chubanshe, https://chineseposters.net/posters/e13-476.
[42] Unfortunately, I am not able to reproduce the images from the Yale collection, however they may be viewed through the links provided in the footnotes. No log in is necessary if using the following link. Department of Education, Taiwan. "Washing hands; I will wash my hands before taking the meal and after using the restroom," From Cushing/ Whitney Medical Library https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047322#page/1/mode/1up.

Although the number of similar posters from Taiwan is considerably smaller, they can offer some insight into gender dynamics of the medical profession. When included, nurses are depicted as women. In "Infection Prevention II: Stay Away from the infected patient, and don't get close,"[43] a female nurse is depicted shooing away a young woman at the window of an ill patient. The nurse is wearing an all-white, long-sleeved uniform dress. Her mouth is covered with a white mask, and she has a starched, white nurse's hat on over her neatly curled hair. In her uniform, she looks similar to any nurse you might find in the United States and Europe in the middle of the twentieth century. Women are also presented as doctors, although not in a clear minority or majority in comparison to their male counterparts. In a poster promoting smallpox vaccination, a female doctor in a white lab coat is giving an injection to a young boy.[44] Her uniform, and the utensils on the table used for the vaccination, are nearly identical to the male doctor in another poster for preventative injections.[45] While the female and male doctor present as feminine and masculine respectively, they share a similar appearance, authority, and function in vaccination campaigns. Another poster for preventative medicine shows a female doctor amongst a group of adults and children, who each represent a facet of successful preventative medicine. The doctor holds a piece of paper with "preventative medicine" on it. Again, her appearance is very feminine. Although she wears a doctor's white coat in this photo, she is also clearly wearing a light blue *qipao*.[46]

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[43] Department of Education, Taiwan, "Smallpox vaccine," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047394#page/1/mode/1up.
[44] Department of Education, Taiwan, "Infection Prevention II," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047385#page/1/mode/1up.
[45] Department of Education, Taiwan, "Prevention injections (vaccination)," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047388#page/1/mode/1up.
[46] Except for the nurses, the women in these photos are always wearing a *qipao*, regardless of their profession or social role. In contrast, men are shows in Western-style suits or in Sun Yat-sen suits. Department of Education, Taiwan. "It is our responsibility to preserve/ protect our health," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047313#page/1/mode/1up.

The depictions of the women in the Taiwanese hygiene posters and barefoot doctors in the propaganda posters project different versions of similar professions and indicate different relationships between state medicine and women. In the case of the PRC, the medical profession is largely represented by barefoot doctors, but in Taiwan the representation of medical workers is more equal, with both men and women shown as doctors.[47] In terms of their relationship to the state, the evidence shows barefoot doctors were directly affiliated with the Party and were sent out as representatives of Party values. The posters from Taiwan do not offer as comprehensive of a depiction as the propaganda posters from the PRC, although they do provide some indications about differences in the relationships between the state and women as medical professionals. First, the female nurses and doctors depicted are not the clear majority of medical care providers. As a whole, then, there is not a strong feminization of medicine in the hygiene posters, but some scholarship on the transition period from the Japanese colonial government to the Nationalist government argues that the reliance on the pre-existing system of public health nurses did in fact feminize public medicine. As detailed in chapter two, when the Nationalists arrived in Taiwan, the Japanese colonial government had already managed many of the major infectious diseases. As a result, in 1950s the public health priority shifted to women and children's health.[48] Public health nurses and midwives were imbued with the responsibility to educate people and deliver public health services. Like midwives, public health nurses were women, and the positive consequence of this was that it made it easier for nurses to distribute information to women about their own health, birth control, and infant care.[49] However, it also reinforced a dynamic within

[47] Interestingly, there seem to be more posters of just Norman Bethune as a doctor than all of the Chinese male doctors combined.
[48] Hsien-yu Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," *Osiris*, 13 (1998), 332.
[49] Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," 338.

medicine and society that public health nurses were of lower status within the medical hierarchy. Chin Hsien-yu phrases it this way: "…public health nurses had little status within the medical structure; moreover, as women, they were by definition socially inferior."[50]

Although nurses and midwives were seen as inferiors to physicians in a male-dominated, doctor-centered system, they were essential contributors to the success of public health campaigns. The 1963 "Health Manpower in Taiwan" report attributed the low status of nurses to the Japanese occupation era, stating "Nursing has never been a high-prestige occupation in Taiwan. There is no strong, popular 'Florence Nightengale' tradition."[51] However, as I argued in chapter two, it is clear from discussions within the provincial government that training nurses and midwives was considered a time-sensitive and important endeavor. Yet, so long as women in a profession were considered inferior counterparts to men, the feminine portrayal of nursing and female doctors implied a role closer to public mother than medical professional. This is particularly clear in the case of public health because this work was often tied to other feminine-coded roles. Take, for example, the poster "I accept the sanitation squad's cleanness and neatness check every day," in which a teacher and the student leader of the sanitation squad are talking to a line of students.[52] Similar to posters from the PRC, teachers in the hygiene posters are mostly women, and they also functioned as a part of the public health system. In this instance, they are assisting with sanitation checks, but they also facilitated physical examinations at school. The "Parents' Meeting" features a group of women (presumably mothers) and children around a table.[53] At the head of the table is the student from the sanitation squad, dictating to another

[50] Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," 336-337.
[51] T.D. Baker and Mark Pearlman, *Health Manpower in a Developing Economy: Taiwan, A Case Study in Planning*, The Johns Hopkins Monographs in International Health, 1967, 77.
[52] Department of Education, Taiwan, "Examination," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047364#page/1/mode/1up.
[53] Department of Education, Taiwan, "Parent's Meeting," From Cushing/ Whitney Medical Library, https://findit.library.yale.edu/bookreader/BookReaderDemo/index.html?oid=16047409#page/1/mode/1up.

member of the sanitation squad. The full title of the poster includes the byline: "Report the results of the physical examination to parents. The family and school must work together." In this case, the relationship between the women of the school as teacher and facilitators of programs such as the sanitation squad and their relationships to the mothers is quite clear. Because the teachers are connected to the women in the local community through the children, they are also well-positioned to carry out many aspects of public health campaigns. This interaction between public health and the school system was a component of the ROC's state medicine in the 1930s, before they moved their headquarters to Taiwan, and it is shown here that they maintained this policy to some extent.[54] The convergence of these three groups – mothers, teachers, and nurses – was not simply about proximity, but rather a state-sponsored relationship that facilitated public health for the goals of the government. A byproduct of this grouping was also that public health often fell into the hands of women either as public health nurses, teachers, or mothers themselves.

Clothing is also a useful avenue of exploration for gender in these posters from China and Taiwan. Aside from their hairstyle, the barefoot doctors are shown in gender-neutral clothing. They wear button-up shirts and jackets with loose-fitting trousers. Although the barefoot doctors are clearly young women, they are dressed as young revolutionary women. Fashion evolved quickly in the middle of the twentieth century in China, and during the Cultural Revolution a miltaresque style emerged as a signifier of one's commitment to the revolutionary cause.[55] Although there was variation in what the average person wore before and through the Cultural Revolution, the artistic choice to show barefoot doctors in plain clothing also implied the

[54] Sean Hsiang-Lin Lei, *Neither Horse nor Donkey: Medicine in the Struggles over China's Mortality* (Chicago: University of Chicago Press, 2014), 248-9.
[55] Antonia Finnane, *Changing Clothes in China: Fashion, History, Nation* (New York: Columbia University Press, 2008), 234.

additionally clear articulation that barefoot doctors were not only healthcare workers but also representatives of the Party and socialist values. Barefoot doctors' clothing further delineated them from doctors and nurses, who are pictured in their respective uniforms in the Taiwan hygiene posters. On the positive side, this would have conveyed that they were part of the efforts to democratize access to medical care, but it might also have implied their lower status within the medical system.

In contrast, the women in the Taiwanese posters are shown exclusively in *qipao* (the only exception being nurses in their uniforms). Female doctors wore *qipao* under their white coats, teachers wore *qipaos*, and the mothers at the meetings wore *qipaos*, too. This dress remains an important and enduring symbol for Chinese culture, but in the mid-twentieth century, the *qipao* was also doing some heavy political lifting for the Nationalist government. Made famous in large part by the very public lives of the Soong Sisters (Soong Ching-ling was wife to Sun Yat-sen, Soong Mei-ling was wife to long-standing ROC leader Chiang Kai-shek, and Soong Ai-ling was a successful businesswoman), the *qipao* represented the modern Chinese woman. While the form ranged from conservative and practical to tight fitting and sexy, it was promoted by the Nationalists through the New Life Movement as the dress for women because it clearly categorized women into the traditional role of fragility and beauty.[56] This practice continued through the Nationalists first two decades in Taiwan, where the ROC government attempted to fully Sinicize the island and mark strong gender boundaries between men and women as well as clear political boundaries between Nationalists and Communists.[57] In the same way that military dress or the Mao suit in the PRC indicated support of the government through alignment with

[56] Finnane, *Changing Clothes in China,* 169-172.
[57] Lin Shih Ying, *Dress and Strategic Bodily Practice*, (Doctoral thesis, Erasmus University Rotterdam, 2013), 48-54.

their values, during the period of the White Terror (1947-1987) and martial law (1949-1987) in Taiwan, the *qipao* indicated alignment with the Nationalists. The depiction of medical workers in a *qipao,* then, conveyed more than femininity. It cast female doctors in a political light: not only were they part of the medical infrastructure, but they were also part of the political infrastructure, too.

Conclusion

The development of modern medical systems and the establishment of public health campaigns placed medicine and medical work on a public stage, and because both the PRC and the ROC governments employed a form of state medicine, doctors, nurses, and midwives were never only care providers but also representatives and facilitators of political goals. This was especially true for those working as public health nurses and midwives, as they were tasked directly with localized integration and care in remote and indigenous communities that were not accustomed to direct state intervention and may have had reasons to distrust medical information from government sources. In addition, efforts to normalize new forms of medicine were also frequently accompanied by other initiatives: women in new medical roles, political ideals and ideology, as well as modernity writ large. Cumulatively, through the 1950s, 1960s, and 1970s, state medical initiatives altered the relationship of women within the medical system. It shifted the dynamic between medical care providers as women by leveraging women in the medical workforce. In the PRC, the government entrusted the dissemination of medical knowledge – particularly medicine related to gynecology and family planning – to women, and the ROC entrusted public health nurses in Taiwan to carry out a number of initiates to improve maternal and infant health. In essence, they attempted to build social trust with women through women.

This networking through female medical professionals did make medicine accessible to a

greater number of families, but the campaign to promote it also cast women in these jobs alongside other nurturing work and, as a result, the women working in the medical profession were portrayed as a form of public mother as much as a trusted expert. Thus, the feminization of medical work, particularly in the PRC, was a double-edged sword. On the one hand, women were actively encouraged and supported in studying medicine; on the other hand, they were also frequently assigned to low status positions among the medical professions. The promotion of women in medicine contrasts with the masculinization of Obstetrics and Gynecology in the United States, but largely because the professionalization of midwives did not present a challenge to physicians' power or authority in China. Rather, a dynamic formed similar to the role of nurses, meaning that midwives, and later barefoot doctors, were not meant to replace physicians, but rather functioned as auxiliary care providers in their absence. It was not until after the Cultural Revolution that some of the people who worked as barefoot doctors matriculated to universities to study medicine more rigorously, and again, in an environment that desperately needed more, well-trained doctors. Midwives in Taiwan, too, were professionalized to work independently of physicians for the most part, a dynamic that functioned well through the end of the twentieth century.

Chapter 4
Pervasive Networks:
The Exertion of Medical Power through Early Family Planning in the PRC, 1960s and 1970s

> The Chinese have created a different kind of medical care, and it is one which I personally plan now to begin to sell in Washington. I am referring to a lower common denominator of basic medical worker: lower than a Medex or a nurse clinician. The very basic building block must be someone who takes less money, less training time, and has more availability. I don't recommend the phrase 'barefoot doctor' in the U.S.A., but some type of neighborhood health worker similarly trained is the way to break the back of the cost of medical care.[1]
>
> - E. Grey Diamond, M.D., 1976

In the People's Republic of China (PRC), family planning is commonly equated to the One-Child Policy issued in 1979, but this policy was a result of earlier efforts to promote late marriage and contraception. Before the establishment of the PRC, high birth rates were accompanied by high death rates, and so population growth appeared manageable, but as leadership stabilized and the government developed public health campaigns, mortality rates quickly declined. These initiatives were only the most basic forms of state-sponsored care such as vaccinations, and as more complicated changes like sewer systems were developed, more medical staff trained, and education improved, many of the preventable factors and exposures receded, further contributing to a potentially disastrous explosion in population growth. Some officials raised concerns about managing population growth early and were able to make a limited number of contraceptives available, but government-wide responses did not noticeably improve until after the famine caused by the Great Leap Forward. Through the 1960s and early 1970s, many different groups promoted late marriage and family planning as a way to help

[1] E. Grey Diamond, Letter "To All the Consultants to the Chancellor," From Rockefeller Archive Center (RAC) "National Committee on United States-China Relations records, RG 9, Accession 9 (FA1191).

reduce population growth. So, rather than a quick change from nothing to the intense the restrictions of the One Child Policy, family planning was a decades-long process that arose *ad hoc* as an increasing number of people became concerned about providing for the world's largest population.

Family planning policies have been categorized into four time periods, beginning with Mao Zedong and ending with the Hu-Wen administration. During the Mao period (1949-1976), family planning moved "from soft birth control to hard birth planning."[2] The earliest proponents of birth control were female cadres in the 1950s, who led the charge for access to contraception and abortion so that they could participate more fully in their work.[3] The Chinese Communist Party was not morally opposed to contraception and appears to have been more accepting of voluntary use than their pro-natalist Nationalist predecessors, but there was tension over heavy promotion of birth control because China's population was also one of its greatest assets. It had successfully propelled China through the Korean War and the first five-year plan; in many ways it was the basis of the Maoist approach to developing China's agriculture and industry. If during the 1950s only a small portion of the elite Party members were aware of or concerned with China's population growth, in the 1960s the liability of a population over 600 million became clear. The Great Leap Forward (1958-1962) and resulting famine led to malnutrition and death on an immense scale. Estimates from this time period vary considerably, but the range of deaths attributed to starvation between 1959 and 1961 are estimated to be between 15 and 40 million.[4] The cause of the famine is still highly debated, with blame placed on everyone from Chairman

[2] Susan Greenhalgh, and Edwin A. Winkler, *Governing China's Population: From Leninist to Neoliberal Biopolitics* (Standford: Standford University Press, 2005), 55.
[3] Greenhalgh and Winkler, *Governing China's Population,* 65.
[4] Felix Wemheuer, *A Social History of Maoist China: Conflict and Change, 1949-1976* (Cambridge: Cambridge University Press, 2019), 121-122.

Mao himself to the local cadres who inflated agricultural production numbers, but regardless of culpability, it highlighted the importance of managing population growth.

Given the potential repercussions, it is not surprising that proponents of family planning were insistent that a full mobilization of government bureaus and all parts of society was necessary to successfully curb population growth. Relying on the Ministry of Health and urban areas alone would constitute an insufficient response and would fail to reach those living in the countryside, who were most likely to have large families. Social values surrounding family size, lack of knowledge of scientific contraceptives, and general discomfort discussing sex would prove to be difficult hurdles to clear. This was especially true in rural areas, where, in the same way that some women resisted new-style midwifery, they would be hesitant to accept late marriage, delayed pregnancies, and fewer children. Advocates repeatedly argued that this required the full social and government network, including the deployment of medical staff and paramedical educators to the countryside in order to convince people family planning was necessary and then distribute new methods of contraception.

In this chapter, I show how pervasively medical and paramedical workers were embedded in society and mobilized to promote family planning. I focus on the role of barefoot doctors as medical educators in the increasingly urgent and stringent family planning initiatives of the 1960s and 1970s. Unlike new-style midwifery in the 1950s, when the government attempted to build trust with the people through the improvement of infant and maternal health services, the deployment of medical staff to rural areas to promote birth control was an exertion of medical power to support Party policy. This chapter further supports feminist scholarship on women and China's family planning policies that show women were not only the target for contraceptives; they were also the ones expected to promote and distribute them. As the public

faces of medicine and birth control, women were also burdened with the backlash during the reforms under Deng Xiaoping, when policies included coercing women into using IUDs and having abortions. The earlier efforts, during the 1960s and 1970s, were a mixture of medical authority and medical power, much in the same way vaccination campaigns used local-built trust alongside government incentives, but the shift towards using barefoot doctors for policy enforcement was a crucial turning point for the relationship between the state and the people.

This chapter begins with a discussion of *Internal Reference* articles on family planning and population growth, where I argue that the shift in mobilizing medical professionals to propagate contraceptives and build relationships with rural people begins the exertion of medical power. I continue this discussion with training manuals and education guides for barefoot doctors, examining their medical and educational roles. Finally, I conclude with the relationship between State medicine and women, building on the discussion of women in medical work from the previous chapter. Although contraceptive methods were available and promoted for both men and women, women quickly became the majority of people practicing birth control, and they also worked as the medical practitioners and educators to carry out family planning initiatives. Initially, the shared connection of womanhood, motherhood, and marriage facilitated the conversations around birth control, but as policies hardened, it weakened the medical authority women had earned in their professional positions.

Family Planning in the *Internal Reference*, 1963 & 1964

The *Internal Reference* or *内部参考 Neibu Cankao*, has been described as "the most important controlled circulation information bulletin in the People's Republic of China."[5] It served as one of the official news sources for elite Party members, covering topics such as Party

[5] Michael Schoenhals, "Elite Information in China," *Problems of Communism* (1985) 34, 65.

policies, current political and ideological climates, as well as issues that were not suitable for reporting publicly (e.g. problems, natural disasters, and counter revolutionary issues).[6] It contrasted with news sources like *The People's Daily*, which were aimed at conveying Party-supported information to the broader population. Similar to regular newspapers, the *Internal Reference* was written and produced by *Xinhua* (New China News Agency) journalists, and while elite Party members might exert some influence on what was published, the journalists' goal was typically to highlight "errors" and "shortcomings" within the CCP as much as disseminate information about policies.[7] Perhaps for this reason, authorship is rarely included. Thus, reading these articles requires the consideration of both the author and audience. Although these articles may offer criticism of Party policies, most are not so critical as to break with the Party line, making them a useful internal resource, but one that should still be examined with larger political and social contexts in mind.

In the overall timeline for family planning, the 1960s was the beginning of state-sponsored introduction to late marriage, fewer children, and contraceptive use. It is worth highlighting that, while the 1960s may not seem so far in the past, most birth control methods used today were not yet or only just becoming available, even in places like the United States. Reports indicated that an effective and safe pill was not fully developed and made widely-available in the PRC until 1967.[8] At the time, most people in China were not familiar with scientific sex education and birth control, although of course historically many people used

[6] Schoenhals, "Elite Information in China," 66-67.
[7] Schoenhals, "Elite Information in China," 70-71.
[8] Oral contraception does seem to have existed before 1967, but they were not able to mass produce their own pill until 1967. Edgar Snow, "Letter from Peking," in *Population and Family Planning in the People's Republic of China,* 1971. From Rockefeller Archive Center (RAC) "Population Council Record, Public Information Office and Publications, Accession 2, RG 2, Series 14 (FA1434).

herbal medicines to prevent pregnancy or induce a miscarriage.[9] In addressing this early period of birth planning, Sarah Mellors has shown that the first state-driven initiatives to support contraceptive use were carried out through art and entertainment. In collaboration with factories, trade unions, and the Women's Federation among others, the public health departments "arranged exhibitions of contraceptives, lectures, and contraceptives sales stations as a complement to the birth control films."[10] Although the "scientific" aspect of birth control was repeatedly emphasized, medical staff were not initially summoned to help carry out this work. This is reflected in the *Internal Reference* publications, where the authors repeatedly state how crucial it was to mobilize many different departments and bureaus but only later indicate the utility of medical personnel.

The earliest *Internal Reference* edition dedicated to family planning and population growth was published on April 28th, 1963. The tension between the desire to mobilize the masses for the five-year campaigns and the fear of overpopulation are clear in this message, as can be seen in the contents of the document provided below. While some government officials had been concerned about China's potential population boom since the 1940s, when people such as C.C. Chen noted that with the reduction of infant mortality, the high birth rate would quickly overwhelm national resources, other officials still believed China's large population was too important of an asset to try to control its growth.[11] The discussion of family planning in this issue is thus appropriately accompanied by concern about population growth and obstacles to convincing people to accept new approaches to marriage and family building.

[9] Sarah Mellors, *Reproductive Realities in Modern China*: *Birth Control and Abortion, 1911-2021* (Cambridge: Cambridge University Press, 2023), 137.
[10] Mellors, *Reproductive Realities in Modern China*, 107-108.
[11] Lei, *Neither Donkey nor Horse,* 257.

Contents of document 3491:
认真提倡晚婚和計划生育 – Earnestly promote late marriage and family planning
上海市开展計划生育工作的初步經驗 – The Shanghai City carries out the initial family planning work
束鹿县开展計划生育工作的做法 –Shulu country carries out the methods of family planning work
深入解决群众对节育的想法问题 – An in-depth solution to the problem of masses opinions towards birth control
西河大队人口增殖对快带来的问题 – The problem of Xihe Brigade's population growth
四百例产妇早婚和多产情况 – Four hundred cases of early marriage and multiple births.
一些外国刊物談世界人口和节育问题 – Some foreign publications on global population and birth control issues

Table 4.1: "Contents of document 3491." A translation of the contents from Internal Reference *document 3491.*

The first article of this document, "Earnestly promote late marriage and family planning," offers foundational reasons for encouraging women to wait to marry and for families to have fewer children. First, the author states that it is particularly important in cities and in rural areas with dense populations to promote late marriage and family planning, as failing to do so would increase the population by degrees.[12] This rapid increase would unduly burden the country's resources and further exacerbate the issue of insufficient land per person (人多地少 *renduo dishao*).[13] Further, too many children would result in a lack of resources for protecting the health of parents and children, not to mention the disadvantages when it came to education. It also addressed issues for women, arguing that marrying early and having multiple children would heavily impact the women's work and education. Finally, the article concludes by emphasizing that promoting late marriage and family planning would not only benefit the socialist construction of society but would also work in accordance with everyone's expectations.[14]

As this is an internally circulated document, the audience for this information is relatively small, namely elite Party members. This issue is then not only reporting information, but it is

[12] *内部参考 Internal Reference,* 第3491期, April 28, 1963, 2, From the Chinese University of Hong Kong Library, Center for China Studies Collection.
[13] *内部参考 Internal Reference,* 第3491期, 3-4.
[14] *内部参考 Internal Reference,* 第3491期, 4-5.

making an argument on how to respond to unmanageable population growth to Party members themselves. While scholars have argued about who should have shouldered the responsibility for the mismanagement of food supply during that five-year plan, the general consensus remained that China's enormous population was both an asset and a burden. The arguments for family planning observed here are thus directed towards concerns about providing for the population which would have been fresh and active in the Party's mind in 1963.

The main challenges and projected statistics about population growth provided in the first article are followed by the two case examples: Shanghai City and Shulu County. Their early efforts offered specifics as to how family planning work could be carried out and to what effect. In Shanghai, the author highlighted a few of the obstacles and how to remedy them. First, they addressed the standing committee, emphasizing the importance of mobilizing every branch of the government and Party to do family planning work, including directly naming the Ministry of Public Health, the Women's Federation, the Trade Council, the Youth League, the Ministry of Civil Affairs, and the Ministry of Education. This shows the breadth of people the author considered responsible for assisting with and promoting late marriage and family planning. Second, the author stated that cadres initially had a misunderstanding about which group was responsible for carrying out family planning work. When discussed, local cadres in Shanghai said they knew a bit about family planning, but they thought it was a concern for the Ministry of Public Health or the Women's Federation, and that it was work for the female committee members. After the meeting, however, they understood that these initiatives were important and began to incorporate it into regular daily work. Convincing all cadres to treat this as serious, long-term work would prove difficult everywhere, so garnering their support was a particularly important component of promoting family planning. Third and finally, the author emphasized

that family planning should be done regularly, but meticulously and that it must not be done lazily.[15] This description of family planning work is significant at that moment in time because it argues that this work is a concern for the entire population. Interestingly, medical workers are not directly addressed in this issue. The author clearly states that this is not only the job of the health departments when they note the Shanghai cadres' misconceptions, and they repeatedly mentioned the other groups that should be contributing, but in this instance medical workers are not specifically listed.

The write up for Shulu County, located in Hebei Province, is much shorter than the one for Shanghai, but contains four methods used to carry out family planning work. As in Shanghai, the first order was to involve all leadership from the county to the brigade level. Then, they moved to a three-step process which spread an improved standard of living throughout the county through a process of localized experimentation. Third, in an effort to spread information about birth control, they established over 400 people as specialists and created birth control clinics to promote family planning. Finally, the specialists worked with local people and groups to spread information about birth control.[16] These specialists included a wide range of people, from cadres and the Communist Youth League to midwives (接生员 *jiesheng yuan*) and contraceptive salesmen. Among those listed, midwives are the only clear medical professionals; everyone else was a lay person.

In both Shanghai City and Shulu County, the studies showed that a concerted effort was made to engage a wide swath of people and groups to provide education as well as practical help for birth control and family planning. Similar to the transition to new-style midwifery,

[15] *内部参考 Internal Reference,* 第3491期, 7.
[16] *内部参考 Internal Reference,* 第3491期, 9-10.

introducing new contraceptive measures required a dialogue with the public that would improve their understanding of and trust in scientific approaches to birth control. In the same way that outdated thinking and lack of understanding of modern scientific standards were part of the conversation surrounding birth work, the reporters for *Internal Reference* also cited problems with thinking and a lack of understanding about birth control science. The issues included common beliefs about children and birth control, such as the general sentiment that "the more children the better," (越多越好 *yueduo yuehao*), and the common desire to have both sons and daughters before practicing birth control.[17] This article directly called out Du Zhong, secretary of a factory Party committee who had seven daughters, but refused contraception because he was holding out for a son. A female factory worker in Chengdu was also scolded for refusing contraceptives, but she argued that since she only had one son, she worried what would happen if he died after she had been sterilized.[18] The concern over having enough children was rooted in cultural expectations about having children for elder care and having male family heirs, but they were not the only concerns raised.

The same report also included several examples of ways birth control was categorized as "evil" (缺德 *quede*) and described as "interfering with yin and yang" (阴阳不合 *yinyang buhe*).[19] The government promoted a variety of contraceptive methods, all of which men resisted using themselves. Condoms were likened to masturbating in that it would cause harm to the male body over time. Some directly stated that contraception was unreasonable (不近人情 *bujinrenqing*) for men. Cases of men unwilling to accept sterilization were also common, so they

[17] *内部参考 Internal Reference,* 第3491期, 10-11.
[18] *内部参考 Internal Reference,* 第3491期, 10-11.
[19] *内部参考 Internal Reference,* 第3491期, 10-11.

insisted their wives have the surgery instead (硬要妻子去做绝育手术).[20] Women's concerns surrounded late marriage, the impact of age, and potential effects of birth control on conception later in life. People resisted state-supported contraception options – abstinence (through late marriage), condoms, and sterilization surgeries – for a variety of reasons, including misunderstanding how these methods worked, but what the reporter emphasized was that the outdated ideas about modern birth control resulted in the use of harmful alternative options. While some effective herbal forms of birth control existed, they were often complicated and required a deep knowledge to use effectively. In this case, the author highlighted examples of women who used herbal medicine to ill effect, including the possibility of hemorrhage and death.[21]

The final section of this issue was a discussion of foreign materials related to population and family planning, including the development of oral contraceptives (避孕药 *biyun yao*) which were only just being approved in the United States in the early 1960s. Intrauterine devices (IUDs) had existed since the beginning of the twentieth century, but were also not yet popularized by this time. Sterilization surgeries were heavily promoted, likely because they were permanent and did not require further maintenance. From the state's point of view, they would be the least time consuming and no further surveillance, however people were resistant to sterilization surgeries for the same reasons they state promoted them. As the female worker mentioned above stated, there was a concern that if a person had only one child and then underwent sterilization surgery, they could not have another child in the event of their first child's death. In terms of convincing people to accept birth control more readily, a contraception

[20] *内部参考 Internal Reference,* 第3491期, 11.
[21] *内部参考 Internal Reference,* 第3491期, 12-13.

method that was effective, harmless, and reversable (or removeable) was an important potential breakthrough to convince people to adhere to family planning policies.[22] The pill, which was approved and mass produced in China only four years after this article was published, would circumvent the drastic choice of sterilization surgery, promote delayed motherhood, and would also be a safe and reliable alternative to the herbal medicines already in circulation. At the time, however, it was worth mentioning so that it could be promoted as an accessible alternative in the future.

Reporting these concerns frankly to Party members likely had two functions. One is the direct application of educating the Party members who held similar ideas about modern contraceptives, particularly about condoms which have historically been reluctantly adopted. The readers of the *Internal Reference* were also those potentially making and supporting Party policy, so demonstrating the wider impact of these thoughts would emphasize the importance of family planning as part of national policy. In considering the relationship between family planning and medicine, this special issue shows that initially, medical professionals were not the core part of its promotion and propagation. While the mention of midwives indicates some utilization of existing medical networks, cadres play a much more prominent role.

In 1964, there were four substantial pieces on family planning in the *Internal Reference*, addressing initiatives in Shanghai, Beijing, and sometimes a mixture of places referred to broadly as "the countryside" (农村 *nongcun*). The February fourth issue contained an article titled "Most regions are carrying out pilot family planning programs in rural areas." In this case, the reporter indicated that men and women in the rural areas were willing to accept "scientific

[22] *内部参考 Internal Reference,* 第3491期, 16.

birth control methods" (科学的避孕方法).[23] The writer includes statistics about birth control practices in Shanghai City and Jiangsu Province, calling attention to the differences in urban and rural areas. The Shanghai of 1960 was far from its contemporary form, but it was still much more developed than Jiangsu Province directly to the north. The numbers provided show that Shanghai City alone had more instances of ligations (tubal ligations for women and vasectomies for men) than all of the counties surveyed in Jiangsu Province. Interestingly, the number of IUD users appears to be about the same in these two locations. Where available, IUDs were a much more flexible birth control option, and so it is not surprisingly that in rural areas where larger families were highly valued, there would be more people willing to use IUDs as opposed to sterilization surgeries.

Shanghai City
Total Ligations – 5,112
Women – 3,555
Men – 1,557
IUDS – 3,086
Abortions – 9,361

Jiangsu Province[1]
Total Ligations – 3,335
Women – 2,337
Men – 988
IUDS – 3,970
Abortions – 9,693

Table 4.2: "List of Ligations, IUDs and abortions in Shanghai City and Jiangsu Province." A translated list from Internal Reference *document 3588.*

Further, the author reported on three ways to convince people in the countryside to accept birth control as part of family planning measures. (1) They explained to local cadres and the people the convergence of food production and population growth. Although agricultural production was improving, with the expected growth rate, they would not produce enough food

[23] *内部参考 Internal Reference*, 第3588期, Feb. 4, 1964, 4, From the Chinese University of Hong Kong Library, Center for China Studies Collection.

for everyone. It followed that fewer children would mean healthier mothers and less suffering for children.[24] (2) They had Party branch leaders train men and women to pass along the information – men to men and women to women. (3) Cadres led by example by practicing a form a birth control.[25] Once again, the reporter is addressing the cadres specifically; as representatives of the government and its initiatives, they were best suited to be the example to convince people of the importance and safety of birth control.

In the subsequent paragraph, the article promotes a few issues with the system used to distribute information and practices above. Among them is the complaint that some cadres do not pay enough attention to family planning. In particular, this author believed that cadres held a rural-urban bias in their mind, thinking "in the city, and within the government it will work, but in the countryside it will not work."[26] Given the perceived importance of cadres as leaders within their community, dealing with the bias amongst cadres would also be an important part of promoting family planning. Moreover, because cadres were important connections in the mass line – the flow of communication from the people to the highest members of the government – their actions and roles within the community could facilitate or impede family planning work. This was similar to the earlier recruiting methods which directly addressed female cadres and tried to convince them to train as midwives. Since cadres were already representatives of the Party and connected to local communities, their cooperation could make transitioning to new medical approaches easier. In this case, a change in approach to contraception.

Concerns about cadres not taking family planning work seriously were reiterated in two May issues. In reporting on the improvement Beijing City had made with its family planning, the

[24] *内部参考 Internal Reference,* 第3588期, 5.
[25] *内部参考 Internal Reference,* 第3588期, 5.
[26] *内部参考 Internal Reference,* 第3588期,5.

author noted that there was a small number of cadres who did not sufficiently understand the necessity for long-term education. They apparently believed the work they had already completed was "good enough" (差不多 *chabuduo*), so they were too relaxed about it.[27] For advocates of family planning, the approaches were meant to be exhaustive and long-term. Even in just two issues, the authors provide many facets to promoting birth control and late marriage, making considerations for gender, age, and location. Increasingly, hospitals and medical teams were encouraged to educate themselves on contraceptive options and to help disseminate that information to the people. These articles demonstrate that this was not a casual initiative and that it was meant to serve the larger purpose of reducing the population. Improvement was not the goal. Instead, they aimed for a nation-wide use of contraceptives to drastically reduce population growth as quickly as possible.

Although initially these articles emphasized the importance of mobilizing everyone to support family planning, increasingly the focus was placed on the role of medical infrastructure and the staff within it. The May 22nd edition of *Internal Reference* contained two articles that focused on the hospital's contribution to family planning, one in Jiading and one in Beijing. At the People's Hospital in Jiading, there was a concentrated focus on training hospital staff (医服人员 *yifu renyuan*) and cultivating the necessary expertise and technology. They also reported that the staff were enthusiastic, and thus created a good impression of family planning work, in contrast to the lackluster attitudes of some of the cadres mentioned earlier.[28] The description also implied that the role of the hospital staff was different than that of cadres. While they were still

[27] *内部参考 Internal Reference,* 第3622期, May 5, 1963, 6, From the Chinese University of Hong Kong Library, Center for China Studies Collection.
[28] *内部参考 Internal Reference,* 第3623期, May 22, 1963, 10-11. From the Chinese University of Hong Kong Library, Center for China Studies Collection.

invested in reaching the countryside, the hospital staff were only visitors conducting outreach, so their goals were reassurance and education. The hospital staff needed to build relationships with local people so that they could feel confident in choosing to undergo ligation surgery at the hospital. Phrases such as "warm welcome" (热烈欢迎 *reliu huanying*) were repeatedly used to demonstrate that, while the hospital may appear formidable or strange, it was a place full of enthusiastic, well-trained staff. As earlier reports suggested, many people in the countryside were not familiar with biomedical approaches to contraceptives, so hospital staff also spent time sharing information about the surgical procedures and contraceptives so that people could improve the level of their medical knowledge (提高医学常識水平).[29]

Reaching the countryside was important but providing different options for family planning was a necessary allowance for building trust with women. The report on Beijing's medical team (医疗队 *yiliaodui*) demonstrated that promoting contraception was not always a straightforward job. The article cautioned against blindly applying the methods used in large urban hospitals to rural areas, in part because many women in the countryside required medical attention before the use of birth control, particularly IUDs.[30] For example, the author writes that for women with cervical erosion, an IUD would not be suitable. In the case of inflammation, treatment would be required first and then the woman could then have an IUD inserted.[31] In this way, the hospital and the medical team built a relationship with women that extended beyond the dispersal of contraception or a tubal ligation. They demonstrated that state-sponsored medicine could also provide a holistic approach that was centered on patient health. Although in some ways this built trust, and therefore some medical authority between the hospital and people in the

[29] *内部参考 Internal Reference,* 第3623期, 12.
[30] *内部参考 Internal Reference,* 第3623期, 14.
[31] *内部参考 Internal Reference,* 第3623期, 14-15.

countryside, it was also an exertion of medical power by the state through the medical infrastructure. The aid offered was extended as a way to build a network that would facilitate the dispersal of IUDS, not simply as a healing service. Of course, these hospitals were already in place, and the services could have been sought out by these women on their own, but the medical care proactively offered by the state was connected to promoting policy. This differed from the offer of midwife services in the 1950s because the training and placing of midwives benefitted the women themselves. It was part of a state policy, but one that was focused on improving infant and maternal health as part of the promise made during the initial revolution. In the case of the IUDS here, the focus was on family planning policy rather than individual health.

The inclusion of more medical personnel and the focus on the hospital system appears to have occurred quite quickly, although the positive representation of medical workers above might obscure some of the obstacles faced in reality. Not only were there rural-urban divides over implementation of contraceptives, in some instances the medical personnel themselves were not well-versed in birth planning and methods. In instances where the lack of experience affected sterilization surgeries (failing to actually cut the vas deferens, for example) and abortions, poor medical service might have been worse than no medical service at all.[32] Educational staff, in the form of cadres and street committee leaders, were easy to train and had already built a relationship with local people, however as support for family planning intensified, women emerged as clear contenders for the face of birth control.

Entangled Networks: Barefoot Doctors and Street Committees

Just as the authors of *Internal Reference* articles advocated, many different groups were mobilized to promote family planning. Between 1964 and 1979 when the One-Child Policy was

[32] Mellors, *Reproductive Realities in Modern China*, 132-133.

implemented, the reach of state medical networks, and by proxy nodes of leverage to popularize the use of contraceptives, were expanded considerably. This network was made up of a mix of medical care providers and lay people. For the barefoot doctors, depending on their training, this could mean that they were only a degree or two removed from lay people. In some ways, this was their advantage. It was not easy to frankly discuss birth control and sex, especially with women in rural areas, so recruiting locals to train as barefoot doctors in their own villages and using women on street committees to share information was essential to developing these connections. People from rural areas were also often distrustful of or uncomfortable in hospitals, hence the need to send out medical staff as public liaisons. The medical care providers and the lay people who provided this medical education, then, were not only necessary to bridge the geographic gap between rural and urban, but the epistemological gap as well.

The barefoot doctor initiative began in 1968, only a few years after the above articles from the *Internal Reference* were published, as a way of building stronger networks between rural people and the state medical system, but it differed from earlier iterations of paramedical training programs meant to bridge the urban-rural gap in healthcare. The barefoot doctors were a category of medical worker created at the direct behest of Mao Zedong as part of his attempts to disrupt the power networks of the urban elite.[33] Like Red Guards (categories which could overlap), they were participating in the Cultural Revolution, but barefoot doctors had specific revolutionary praxis to carry out through medicine. They were meant to be the progenitors of a new revolutionary medicine that melded Chinese medicine and Western medicine for the benefit of the people, particularly those in the countryside.[34] Although the goal was for them to be drawn

[33] Rosenthal and Griener, "The Barefoot Doctors of China," 330.
[34] Miriam Gross, "Between Party, People, and Profession: The Many Faces of the 'Doctor' during the Cultural Revolution," *Med Hist.* 62(3), 2018, 341.

from rural areas and, in many ways, to upend the existing hierarchical networks of medicine, they were also always meant to be part of state medical infrastructure. In *Barefoot Doctors and Western Medicine,* Xiaoping Fang described them as "at the heart of the radical changes that implanted medical institutionalization in Chinese villages."[35] Thus, they were an important component of the human medical infrastructure for both practical and political reasons. Here, I aim to contribute to this scholarship on barefoot doctors by highlighting their role in the exertion of medical power through family planning policies. I show that the government facilitated family planning to rural areas through the broader distribution of medical care and medical education provided by barefoot doctors and other paramedical staff. While this provided greater access to medicine, it also created greater leverage to convince people – usually women – to accept contraceptives, such as IUDs, and undergo sterilization surgeries.

In 1976, The People's Publishing House released a book titled "A Profound Revolution on the Health Front," (卫生战线的深刻革命), a curated collection of newspaper articles that explained changes in healthcare and promoted cooperative (合作医疗 *hezuo yiliao*) medicine, including the barefoot doctor. Although other campaigns to improve medical access existed before this, cooperative medicine and barefoot doctors were a new iteration of medical care and provider that came as a part of the Cultural Revolution. The book began with a reproduction of one of Chairman Mao's quotations, the final line of which read: "Take medical and health work to the countryside."[36] This quote was common in a variety of medical materials that emphasized rural health care. Covering a broad range of topics related to health and medicine, one of the reports from 1975 discussed the role of leadership, identifying the barefoot doctors and

[35] Xiaoping Fang. *Barefoot Doctors and Western Medicine in China* (Rochester, NY: University of Rochester Press, Rochester Studies in Medical History, 2012),16.
[36] *卫生战线的深刻革命* (人民大社出版, 1976), title page.

cooperative medicine as "new things that emerged from the Great Proletariat Cultural Revolution."[37] Earlier iterations of medical training programs had focused on recruiting ordinary people into medical work, and the social and political changes during the Cultural Revolution fueled renewed attempts to recruit younger people from rural areas.[38] This initiative was about mass mobilization as much as a practical response to supporting cooperative care. Recruitment for barefoot doctors often aimed to draw candidates from the rural areas themselves, in the hopes that barefoot doctors who were serving their own villages would have a built-in trust-based relationship with people and that those barefoot doctors would be willing to remain in the rural areas.[39] What is clear in this collection is the connection between the different government bureaus, cadres, and medical workers. In the same way that the *Internal Reference* connected these people to promote family planning, these authors connect different people and agencies in the name of cooperative medicine.

As nodes of the medical network, barefoot doctors were trained specifically to promote family planning, too. A variety of guides provided to the barefoot doctors contained chapters with detailed advice on this work, including the definition: "Family planning includes promoting late marriage, birth control, abortion, and sterilization…"[40] IUDs, condoms, contraceptive caps, birth control pills, abortion, and sterilization surgery (for both men and women) were explained in both a Shanghai and Jilin version from 1977. This included how each method worked, its rate of efficiency, effect on the body, and when it was best to use which method, but it did not include step-by-step instructions for the barefoot doctors to carry out the abortion, the IUD insertions, or the sterilization surgery. In both instances, the information provided about family

[37] *卫生战线的深刻革命* (人民大社出版, 1976), 49.
[38] Fang, *Barefoot Doctors and Western Medicine in China,* 16.
[39] Fang, *Barefoot Doctors and Western Medicine in China,* 163.
[40] *赤脚医生教村* (人民卫生出版社, 1977), 1020.

planning was more about providing an argument for family planning than carrying out any related medical procedure. This is to say that in this case, the medical front the barefoot doctors were prepared for was largely an epistemological one.

In the Jilin edition, the preamble clearly shifts the question of family planning away from the family itself and towards national goals, stating that "family planning is about China's national economy and the people's health."[41] While half of this concern is "the people's health," what the author indicates here is a concern about resources and the eventual impact on their health. By the end of the same paragraph, they state that "…family planning is not a family's private matter, but a matter for the country," further indicating that these resources are not at the behest of the people, but of the state.[42] This phrase was common in relation to family planning and the One-Child Policy, and it was published as a way to normalize the increasingly close relationship between the state and family matters. In addition, at the end of the section on family planning, there are formulas for the reader to determine population growth, and the impact of late marriage and the use of birth control on that growth.[43] Again, the format and contents indicate that these books – in both Shanghai and Jilin – were meant for the educational purpose of supporting family planning.

The goal of this chapter is to demonstrate the pervasiveness of medical networks and how this provided new connections between state policy and daily life. In considering the importance of guides for barefoot doctors, I highlight the educational rather than the practical medical skills because one of the most significant contributions that barefoot doctors made was with medical education. It is difficult to precisely mark the limits of barefoot doctors' medical training.

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[41] *赤脚医生教村* (吉林: 人民卫生出版社, 1977), 448.
[42] *赤脚医生教村* (吉林: 人民卫生出版社, 1977), 449.
[43] *赤脚医生教村* (吉林: 人民卫生出版社, 1977), 454-455.

Marilyn Rosenthal and Jay Griener's anthropological work in the 1980s recorded a three-tiered training model for barefoot doctors. Model One was the basic level of training, lasting between one and three months. At this level, barefoot doctors were often under direct supervision of a physician, but they were responsible for vaccinations, common illnesses, and family planning (specifically they noted the dispersal of birth control pills). Model Two did not require more training, but participation in practicums at commune hospitals, again under physicians, where they might learn to perform surgeries such as appendectomies and vasectomies. Model Three required a minimum of six months of training, after which the barefoot doctor would continue to train at the hospital to improve their skills.[44] This explanation suggests that there were barefoot doctors who performed many of the same roles as medical students and physicians, but neither this article nor other scholarship offer specific numbers for each model level. Reports suggest that Model One was the most common, but that all three tiers existed in the same commune or brigade clinic at the same time. Miriam Gross's research on barefoot doctors notes that while they were supposed to train for between three and twelve months, many trained for less before returning to their hometowns to practice.[45] Even Xiaoping Fang's book-length work offer statistics only about specific prefectures. The reports from Americans visiting during the 1970s at the beginning of this chapter also assessed barefoot doctors as competent for paramedical professionals, but they did not consider them to be equally competent to university-trained physicians.

My point in detailing this is to acknowledge the variation in training and commitment to medicine amongst this group – estimated at over one million in 1964 – means that it is difficult

[44] Rosenthal and Griener, "The Barefoot Doctor of China," 332.
[45] Gross, "Between Party, People, and Profession," 341.

to assess what barefoot doctors brought to the table in terms of medical skills.[46] While scholars have demonstrated that barefoot doctor training was far more regulated than previous short-term training programs and the test to earn the certification as a barefoot doctor was standardized, what each barefoot doctor performed adequately seems to have varied. Certainly, some Model One barefoot doctors returned home and practiced their basic medical skills without developing them more; they were, after all, not only paramedical, but part-time medical workers. Others worked closely with clinic staff, which could have included physicians, nurses, midwives, and Chinese medical doctors. Given the directive to weave Western and Chinese medicine together to create a revolutionary medicine as well as the social backdrop of the Cultural Revolution, it is not possible to know what training each received.

In reports on surgical skills in Hangzhou Prefecture communes, abortions, IUD insertions, and sterilization surgeries are listed,[47] but barefoot doctors training manuals do not explain the practical elements of these skills. In a 1971 Hunan edition of the barefoot doctor manual, the entire section on abortion was less than 180 Chinese characters (roughly 100 words) and includes only (1) when an abortion is useful or necessary, and (2) noted that while some Chinese herbal medicines (中草药 *zhongcao yao*) are useful, they are sometimes unreliable and cause excessive bleeding.[48] Under "birth control," (避孕 *biyun*) only herbal medicine, oral contraceptives, and condoms are listed and explained. There is a section on sterilization (绝育 *jueyu*), which includes an explanation for the ligation surgery and an herbal method. While the explanation of the herbal medicine is extensive and precise, the information for the surgery

[46] Gross, "Between Party, People, and Profession," 341.
[47] Fang, *Barefoot Doctors and Western Medicine,* 143 & 145.
[48] *赤脚医生手册* (湖南人民出版社, 1971) 123.

focuses on reassuring the reader that the surgery is safe and simple.[49] This indicates that there was no expectation that all barefoot doctors would be performing such operations, but rather that their role was to explain contraception to people. Considerably more detailed information about contraception was available in contraception guides (避孕指导手册 *biyun zhidao shouce*), which were developed for a more general audience. One example produced in 1957 provided guidance for birth control and abortion, including a wider range of options and more in-depth explanations. In this case, too, women were directed to the hospital, but the explanation for the procedure was more detailed.[50] These services were often mentioned alongside reference to barefoot doctors, and aspiration abortion was already a popular and safe method that barefoot doctors could have been trained to perform, but there is not clear evidence to show that they actually did so or that a large number of them were trained to do it. Commune clinics and brigade medical stations are repeatedly described as understaffed – one of the needs barefoot doctors were meant to meet – but they did typically have physicians and medical university students.[51] It seems likely that there were better trained medical staff who performed abortions and sterilization surgeries, although some barefoot doctors would have been trained by the clinic staff to do so.

I am detailing the difficulty in understanding barefoot doctors' medical roles as a way to demonstrate that there were a multitude of medical pathways developing in the 1960s and 1970s. Moreover, these pathways did not need to be primarily medical or provide advanced medicine to be effective forms of communications and connection between state-sponsored medicine and people in rural areas. In considering the development of medical power, the importance of

[49] *赤脚医生手册,* 122-123.
[50] 宋鴻釗, *避孕指导手册* (北京: 科学普及出版社, 1957).
[51] Fang, *Barefoot Doctors and Western Medicine in China*, 142-143.

barefoot doctors was not necessarily about the medical skills they would use, but rather the connections they fostered, particularly with women. They did not need to be the ones carrying out the medical procedures in order to be the ones applying the pressure to conform to state policy. This could be particularly effective in situations where the barefoot doctor was from the village in which they were assigned to work. Fang argues that the doctor-patient relationship between barefoot doctors and their patients shifted over time from a "one of their own" style of communication to a slightly more hierarchical system in which the barefoot doctor exerted the authority of science to diagnose and prescribe with much less patient input, and thus functioned more like a Western-style biomedical doctor than a Chinese-style doctor. The social dynamic of the Cultural Revolution further reinforced the hierarchical role of the barefoot doctor, as refusing to heed the young, politically aligned barefoot doctors' advice was considerably more difficult than ignoring the cadre's advice to consider family planning (particularly when cadres were not practicing it themselves). When it came to family planning, a combination of relationship and status positioned barefoot doctors as purveyors of knowledge – both medical and ideological – regardless of the amount of training they had received.

The role of barefoot doctors as medical educators seems particularly clear in propaganda posters promoting family planning. The 1975 poster "Birth control is good," (Fig. 4.1) featured a barefoot doctor standing in front of a crowd, explaining the benefits of family planning. Behind her is a row of posters, strung up between two trees, to which she gestures during her speech.[52] "Practice birth control for the revolution" (Fig. 4.2) shows a barefoot doctor as carrying out one of the revolutionary activities akin to studying Chaiman Mao's writings and supporting

[52] Houcheng Song, "Birth control is good," Aug. 1975, Illustration, Shaanxi renmin chubanshe, Landsberger collection, https://chineseposters.net/posters/e15-99.

revolution.[53] The depiction of family planning work, like the depiction of medical work in general, is saturated with women. In these two examples, the work is very public, as it was in action. Therefore, as much as these posters supported family planning, they also normalized barefoot doctors discussing sex and contraception in a public forum. Casting family planning as revolutionary work further emphasized the importance and support for it, and it also reinforced the role of the young, female barefoot doctors as the propagators of medical education.

Figure 4.1: "Birth control is good." A female barefoot doctor explains birth control to a crowd of people with posters.

[53] Revolutionary Committee of Shanghai Municipal, "Practice birth control for the revolution," May, 1972, Illustration, Shanghai renmin chubanshe, https://chineseposters.net/posters/e15-31.

Figure 4.2: "Practice birth control for the revolution." A female barefoot doctor is shown with her medical kit and a booklet about birth planning. On each side, revolutionary activities such as farming, studying, and marching are shown.

In much the same way that the reporters for the *Internal Reference* and the guides for barefoot doctors emphasized the importance of reaching the countryside, posters also demonstrated that barefoot doctors would bridge the gap with practical necessities and education. In "Deliver medicine to the doorstep, do a good job in birth control work," (Fig. 4.3) the barefoot doctor is shown giving a woman booklets and a bottle of oral contraceptives.[54] Further, in another poster titled "Practice birth control for the revolution" (Fig. 4.4) a barefoot doctor is shown holding a bottle of birth control pills, with a large pile of boxes labeled "family planning supplies" (计划生育用品 *jihua shengyu yongpin*) strapped to the back of her bicycle.[55] The background shows her in a mountainous area, far from a city, indicating that she would use her bike to deliver the contraceptives herself. Although the IUD became the government's preferred method of birth control after the institution of the One-Child policy, once the pill was mass

[54] "Deliver medicine to the doorstep, do a good job in birth control work," 1974, Illustration, Tianjinshi jihua shengyu weiyuanhui bangongshi, https://chineseposters.net/posters/e13-867.
[55] Baogui Zhang with Liaoning Provincial Pharmaceutical Company, "Practice birth control for the revolution," C. 1975, Illustration, Private Collection, https://chineseposters.net/posters/pc-197b-003.

produced in the PRC, it was widely promoted. Barefoot doctors had enough knowledge of birth control pills to explain their use, and from the patient's perspective, it was far less invasive and permanent than IUDs and sterilization surgeries. The pill, however, was most effective when taken regularly, so any disruption – through access to supply, accidental or intentional misuse – would lower its success rate. It is for this reason that the state later promoted other options. In terms of developing networks, barefoot doctors were expected to disseminate information and birth control pills to the furthest reaches of the countryside as part of their revolutionary work.

Figure 4.3: "Deliver medicine to the doorstep, do a good job in birth control work." A barefoot doctor delivers contraceptives and a booklet to a woman.

Figure 4.4: "Practice birth control for the revolution." A barefoot doctor holds up a bottle of oral contraceptives. Behind her is a bike with birth control supplies strapped to the back.

Barefoot doctors are often included in discussion of medicine in the PRC, perhaps in part because of their large numbers, but they were not the only paramedical workers trained and deployed during the 1960s and 1970s to expand medical networks. In the way that barefoot doctors were meant to support medicine and family planning in rural areas, "worker doctors" and "red guard doctors" were meant to function as medical educators in urban factories and neighborhood health stations, respectively. Although much less mentioned in scholarship than barefoot doctors, these two other forms of paramedical workers were defined in a 1971 article by Victor W. Sidel. In urban areas, the "worker doctor" was described as similar to a barefoot doctor, but with less formal training, who focused on preventative measures such as vaccinations and education about health hygiene.[56] Work doctors operated exclusively in factory clinics and

[56] Victor W. Sidel, "The Barefoot Doctors of the People's Republic of China," 1971, 29, From Rockefeller Archive Center (RAC) "Commonwealth Fund records, Division of Publications, SG 1, Series 13 (FA285).

usually only for a couple days a month; the rest of the time they worked as laborers in the same factory. The "Red Guard doctor" is not as immediately descriptive, as Sidel writes that this is usually "a housewife who has been given formal training for about 10 days and has received on-the-job training since."[57] They worked in their neighborhood health stations alongside a physician. Like the worker doctors, the Red Guard doctor's work was focused on preventative medicine, mostly vaccinations and "great patriotic health movements." Unlike the worker doctor, the Red Guard doctor was tasked with the propagation of birth control education.[58] They also gathered data about contraception use in their neighborhood through monthly visits to local homes. Based on these descriptions, worker doctors and Red Guard doctors were not expected to perform at the level of physicians, but they did constitute components of the medical network. They approached vaccinations and birth control with the same epistemological paradigm as the physicians that worked in the clinics, and they probed much deeper into society through their relationships with coworkers and visits with neighborhood women.

During the 1973 visit discussed in the previous chapter, the group of Americans attended a meeting of the Feng Shen Street committee in Beijing to discuss women's equality in the PRC and the local clinic's work. This neighborhood clinic reported that they regularly provided injections, acupuncture, and vaccinations to over one thousand people in four hundred households.[59] According to the Chinese liaison, the local clinic conducted family planning work through housewives and later reached out more generally to local families. The recording of this conversation does not refer to these women as "Red Guard doctors," but the description shows

[57] Unfortunately, because this is an English-language only source, I do not have the Chinese terms for worker doctor or red guard doctor that Sidel is translating. Victor W. Sidel, "The Barefoot Doctors of the People's Republic of China," 29.
[58] Victor W. Sidel, "The Barefoot Doctors of the People's Republic of China," 31.
[59] Bobbye S. Ortiz, "Feng Shen Street Committee 20B." From Stanford Libraries: Stanford Digital Repository. https://purl.stanford.edu/jj599bq5202.

that it is a similar if not the same system. Using housewives as a mode of distributing information was critical because women were often unwilling to discuss issues such as dysmenorrhea with men, but felt more comfortable discussing it with other women in their own homes.[60] Single women were not targeted for the conversation about birth control because there was an expectation that unmarried women would not be sexually active, and in this case it seems that only married women were used as outreach in neighborhood clinics, too.[61] This could have been a contributing factor to the high number of abortions recorded, as young people were having sex, with or without knowledge of and access to birth control. In addition, the group reported, the clinics and the women from street committees helped distribute birth control in the forms of the contraceptive pill, the ring, and condoms, free of charge. Notably, women were usually the ones practicing birth control, and so they were the ones making choices about contraception with the recommendations from the clinic staff.

The Feng Shen Street committee was located in Xicheng district, a fairly central location in Beijing, near the Forbidden City. The clinic staff there had reportedly undergone one month of training for prenatal care, delivery, anatomy, and common diseases. By 1973, universities had reopened to matriculating medical students, but training enough staff for clinics continued to prove difficult. During an earlier visit to Sun Yat-sen Medical College in Guangzhou, the Americans learned that the training schedule for biomedical doctors had been reduced from six years to three, with an additional half year on basic courses.[62] The college listed three reasons for shortening medical education: 1) a growing demand for doctors and therefore a need to train

[60] Victor W. Sidel, "The Barefoot Doctors of the People's Republic of China," 31-32.
[61] Bobbye S. Ortiz, "Sun Yat-Sen Medical College," Tape 1 Side B. From Standford Libraries: Stanford Digital Repository. https://purl.stanford.edu/fp971bp6459.
[62] They did not elaborate on what the extra basic courses were and noted that Calculus had been one of the courses deemed unnecessary and cut. Ortiz, "Sun Yat-Sen Medical College," Tape 1 Side A. https://purl.stanford.edu/fp971bp6459.

more with a faster curriculum, 2) the identification of unnecessary courses during the Cultural Revolution, and 3) the integration of Traditional Chinese Medicine into the curriculum.[63] Importantly, one of the three years of training took place in the countryside to reinforce the idea that the medical staff was there to serve the people. During the Cultural Revolution, the college reported sending "over 400 doctors to the counties in order to improve the medical care in rural areas. The 400 doctors have settled there. They don't come back to the hospital…" [64] This is to say that, while some doctors were reassigned to the countryside on a more permanent basis, their numbers were not yet great enough to meet the medical needs of the people. Colleges then turned to shortening training periods for doctors so that, in addition to the barefoot doctors being trained, better-equipped physicians could provide more advanced medical care. It appears, then, that even places in Beijing relied on staff with only basic medical training to provide medical care.

The placement of medical students in the countryside was an important component of the Cultural Revolution, which displaced medical experts who did not demonstrate sufficient Party loyalty in favor of young, politically fervent people. The tension between "red" and "expert," (political consciousness and the expertise of scientists) caused issues in the highest forms of government and the most mundane parts of life.[65] While physicians were important components of the medical system, they were also typically "urban elite" labeled as the "intelligentsia" and were generally at odds with the standards of Party members who were put in supervisory roles over them. Moreover, in the same way that Red Guards (not necessarily the Red Guard doctors)

[63] It is not clear why this shortened the period of study, but it was an important shift after the medical college reopened, post-Cultural Revolution.
[64] Ortiz, "Sun Yat-Sen Medical College," Tape 1 Side A.
[65] Cong Cao, "Red vs. Expert: Membership in the Chinese Academy of Sciences," *Problems of Post-Communism* Vol. 46, no.4 (1999), 43.

disrupted the hierarchies in schools, medical students often reported and displaced their superior physicians for not aligning with the Party. This is exemplified in one of the most famous historical films produced in China, Zhang Yimou's 1994 movie *To Live*, in which the character Xu Fengxia dies in a childbirth because the doctor had been locked up by his medical students. This dynamic caused issues far beyond medicine, and following the dissipation of the Cultural Revolution's political fervor, colleges and the state sought ways to balance the practical issues with political concerns. The result was a combination of programs that produced a variety of paramedical workers and physicians, albeit with a shortened education.

While medical authority requires the healer or doctor to prove their expertise in some manner, medical power does not require those exerting it to be medical experts. What it requires instead is leverage. In the case of family planning in the PRC, political consciousness and alignment were more useful than expertise, although this was coupled with scientific medical education. Barefoot doctors, worker doctors, and Red Guards doctors, among other paramedical workers could function as essential parts of the medical network through basic medical training and scientific education. It was the pervasiveness of the networks that made them effective, even when people did not have confidence in their medical skills.[66]

Conclusion

In carrying out family planning, women held up more than half the sky. They were repeatedly tasked with preventing pregnancy, both within their own bodies and as medical educators in their community. In the three decades after the establishment of the PRC, women were uplifted as capable medical workers, but they were also brought under close scrutiny. The networks employed to promote family planning were a mixture of the political, medical, and

[66] Rosenthal and Griener, "The Barefoot Doctors of China," 332.

social. They pervaded every aspect of life outside the clinic: at work, school, and home. I am not arguing that the state intentionally developed this system of medical and paramedical professionals in order to carry out family planning policies, but policies of the Cultural Revolution expanded medical networks as a form of revolutionary and ideological work. Despite the fact that this program was developed in part as a way to "undercut professional control of medical work," one of the most significant contributions of barefoot doctors was that they bridged the gap between village clinics and hospitals in urban areas.[67] The women working in their local neighborhoods or at factories had little medical expertise, yet they emphasized the importance of "scientific" birth control, spreading new epistemological approaches about sex and contraception. The overlapping goals of these different groups show how they coalesced into an exertion of medical power. Each group individually lacked the ability and resources to carry out family planning alone. Barefoot doctors and committees could provide information in the form of personal consultations, public presentations, and literature, but the more complicated medical procedures needed at least a well-equipped midwife and sometimes a physician. Enforcement required an entire system, one that relied heavily on women to perpetuate it.

Moreover, the depiction of women in the medical field as I addressed in chapter three, positioned female barefoot doctors as the core of these medical networks. In instituting family planning initiatives, then, the government had already developed a large network of female medical workers who could facilitate education and distribution of contraceptives through their relationships with other women. Had this effort to make birth control more widely available been in response to calls for access or as an option for people to prevent and delay pregnancy, this dynamic would not have constituted an exertion of medical power. However, because birth

[67] Rosenthal and Greiner, "The Barefoot Doctors of China," 330.

planning became increasingly stringent between 1963 and 1979, these networks were not used for the benefit of women's health but rather at the behest of government goals to manage population growth.

While the argument for this policy was rooted in a realistic concern about resources, it did not change the reality for women in China, and here the quiet ways medical colonialism seeped into modern medical systems as a form of surveillance is quite clear. Their bodies were increasingly brought under surveillance, through their early years of marriage when they should be using birth control and eventually to nation-wide hospital-centered birthing practices. This period is a particularly clear example of how medical power can be formed and applied. Medical workers assigned contraceptives based on the structural requirements of family planning and, when women were not open to contraception, enforced their use through political and social pressure. The news articles, manuals, and other publications repeatedly raised the scientific nature of these contraceptive options to assure women that they would be safe and healthy, but as restrictions increased, the cooperative nature of choosing preferred methods fell away, and the importance of trust between state medicine and the people dissipated, too.

Chapter 5
Medical Colonialism:
Colonial Vestiges in Birth Work, Twentieth-Century East Asia

The transformation of healing into a modern, scientific medicine coevolved with public health systems to provide many effective measures against previously devastating diseases. Neonatal tetanus is now considered eradicated in most countries – including China and Taiwan – and maternal health outcomes have improved, along with prenatal and postpartum education. Despite the many scientific advancements, there are still criticisms of contemporary healthcare systems as perpetuating issues of misogyny and racism. A notable example for birthing-people is that the hospital-centric approaches to birth limit patient autonomy and often in ways that negatively impact their health. The rate of cesarean sections (CS) is frequently used as a way to assess healthcare where high rates of cesarean sections indicate that birthing parents do not have full understanding of or control over their labor experience. When necessary, this major surgery can save lives, but its use in modern medical facilities is not always about patient need or preference. Currently, the World Health Organization (WHO) states that an ideal CS rate is 10-15%.[1] The rate in the United States and Taiwan has hovered around 30% over the last decade.[2] Although this percentage is close to the global average, it still considered high and concerns about the CS rates and public health implications have been raised frequently in medical advocacy spheres.[3] In the People's Republic of China (PRC), CS surgeries are even more

[1] Sexual and Reproductive Health Team, "WHO statement on caesarean section," World Health Organization, April 14, 2015, https://www.who.int/publications/i/item/WHO-RHR-15.02.
[2] TC Liu, Chen CS, Tsai YW, and Lin HC, "Taiwan's high rate of cesarean births: impacts of national health insurance and fetal gender preference," *Birth* (2007) Jun;34(2):115-22. doi: 10.1111/j.1523-536X.2007.00157.x. PMID: 17542815.
[3] CM Angolile, Max BL, Mushemba J, and Mashauri HL, "Global increased cesarean section rates and public health implications: A call to action," *Health Sci Rep.* 2023 May 18;6(5):e1274. doi: 10.1002/hsr2.1274. PMID: 37216058; PMCID: PMC10196217.

common: between 2008 and 2018, it was estimated that over half of women in urban areas gave birth via cesarean section. Although initially the number of women in rural areas undergoing CS was lower, by the end of the study in 2018, the rates were also near 50%.[4]

Criticisms of highly medicalized birth come from patients and professionals alike. As biomedicine developed as a replacement for traditional healing practices, the medicalization of birth work created systems that pathologized pregnancy and delivery, transforming them from deeply embedded social experiences to strictly clinical ones which disempowered patients in a system that privileged state policies instead. In this chapter, I explore changes in China and Taiwan's medical systems to understand the impact of medical colonialism on birth work. I begin by outlining medical colonialism and making a case for its use in the context of Modern East Asia, a place where colonialism was "semi-colonialism" or rebranded as Pan-Asianism. Then, I examine how the shift to state medicine in China and Taiwan reproduced aspects of colonial medical dynamics that disempowered patients, weakened their bodily autonomy, and disrupted cultural birthing practices. Further, in exploring the changes in reproductive medicine through this paradigm, I aim to highlight how vernacular medical knowledge and practice responded to and shaped contemporary medical institutions.

Defining Medical Colonialism

In *Delivering Modernity,* Tina Phillips Johnson notes that the United States, far from being the representational norm, was frequently the historical aberration in its development of medicine. By this she meant that, if one views medicine in East Asia through the lens of the history of medicine in the U.S., then it will appear as if it is China and Taiwan that are unique. In

[4] Q Long, Zhang Y, Zhang J*, et al., "*Changes in caesarean section rates in China during the period of transition from the one-child to two-child policy era: cross-sectional National Household Health Services Surveys," *BMJ Open* 2022;12:e059208. doi: 10.1136/bmjopen-2021-059208.

reality, the institutionalization and standardization of medicine in the U.S. is the extreme example. I agree with Johnson that the forms and functions of medicine in China and Taiwan are not interesting simply because they differ from the American model, but it is compelling that despite the many differences in the development of medicine, there are similar end points of medicalization. There is great utility in using the United States as a point of comparison to understand medical colonialism. The healthcare system in the U.S. is highly medicalized, even biomedicalized: Every part of a person's body can be minutely investigated and altered through a medical practice, but knowing a body on the molecular level does not always translate into better medical practices or experiences.[5] Despite the highly developed medical science and technology available in the United States, it has some of the poorest infant and maternal health outcomes in the developed world. According to the 2015 Global Burden of Disease study, the Maternal Mortality Ratio (MMR) for the U.S. was 26.4 – that is number of maternal deaths per 100,00 live births.[6] For comparison, Canda's MMR was 7.3, Japan's was 6.4, China's was 17.7, and Taiwan's 11.5. However, the U.S. CDC's Pregnancy Monitoring and Surveillance System recorded the U.S.'s MMR as 17.2 for the same time period, translating into about 700 maternal deaths per year.[7] Even at this lower number, maternal health outcomes for birthing people are abysmal given the advanced state of medicine in the country. The explanation for and response

[5] Medicalization is "the process through which aspects of life previously outside the jurisdiction of medicine come to be constructed as medical problems." Adele E. Clarke, et. al., *Biomedicalization: Technoscience, Health, and Illness in the U.S.,*(Durham: Duke University Press, 2010), 47. "Biomedicalization is our term for the increasingly complex, multisited, multidirectional process of medicalization that today are being both extended and reconstituted through the emergent social forms and practices of a highly and increasingly technoscientific biomedicine." Clarke, *Biomedicalization,* 47

[6] Explore the full table HERE. From "Global, regional, and national levels of maternal mortality, 1990-2015: a systematic analysis for the Global Burden of Disease Study, 2015," *The Lancet* 388, Iss. 10053, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31470-2/fulltext#seccestitle80

[7] Emily E. Peterson et. al., "Vital Signs: Pregnancy-Related Deaths, United States, 2011-2015, and Strategies for Prevention," *CDC Morbidity and Mortality Weekly Report* (68(18), 2019), https://www.cdc.gov/mmwr/volumes/68/wr/mm6818e1.htm

to this high MMR rate range from improving access to healthier foods to expanding Medicaid coverage and implementing new hospital protocols.[8] As advocates for Reproductive Justice would agree, the American healthcare system is failing birthing parents and their children in almost every way. These failures are a consequence of how birth work was medicalized during the nineteenth and twentieth centuries: the accumulation of racial and gender biases in the U.S. medical system are a result of the larger phenomenon of medical colonialism. As I argue throughout this chapter, the systems of biomedicine are colonial in nature and as a result even when they are implemented by a Chinese government in China, they are burdened with those flaws. This is why it is worth bringing the history of medicine in the U.S. into conversation with the history of birth work in China and Taiwan. Although I will raise examples in this chapter of how people and governments in these two places resisted medical colonialism, the points of similarity will highlight the ways that medical colonialism affected birth work in China and Taiwan.

Japan's twentieth century empire-building projects are an illuminating example of how colonialism disrupted pathways of medical practice and knowledge, but to draw conclusions only from the Japanese imperial projects would obscure the broader origin and impact of colonial thought and function. The Japanese empire created its systems of healthcare on German models and was developed in response to Western encroachment in East Asia. While previous Japanese governments attempted to expand their territory, including in places like the Korean peninsula, the Japanese empire of the nineteenth and twentieth centuries grew in concert with European imperial powers; it was necessary for these empires to base their rule on similar justifications in order to compete with each other. Moreover, the Nationalist government of the Republic of

[8] Peterson et. al., "Vital Signs," Table 3.

China (ROC) drew inspiration for their own public health systems from exchange with Western powers, the United States not the least among them. Conceptions of disease and health were often mediated through the Japanese imperial government in Taiwan and through public discourse of Japanese public health standards in China during the first half of the twentieth century.[9] This occurred through the exchange of medical literature and by Chinese students who studied at Japanese universities (Chiang Kai-shek, leader of the Nationalists from 1925 to 1975, among them). This is to say nothing of those Chinese students who spent time learning in places like Germany, England, France, and the United States (Sun Yat-sen spent many of his school years in the Kingdom of Hawaii). The result is that whether a country was a colonial power, trying to compete as one, or attempting to prevent being colonized themselves, they took part in the global discourse on medicine's role in the government and public order. There are, then, many ways to discuss how birth work was changed by colonialism in the twentieth century. Here, I offer just a few modes of exploration and their connection to birth work.

There are a number of arguments and definitions that have been made for the use of "medical colonialism" and "medical imperialism." Moreover, these terms have been defined and redefined since at least 1974 with Schreier and Berger's "On Medical Imperialism," and the scope of what fits under each of these terms shifts depending on the author's intentions.[10] In Canadian studies, medical colonialism is defined by indigenous genocide, while concerns about medical colonialism and imperialism circulating among medical providers in the 1970s included the recruitment of medical workers from developing countries to developed ones and the power dynamics inherent in sending American doctors to developing countries as part of humanitarian

[9] Ruth Rogaski, *Hygienic Modernity: meaning of health and disease in Treaty-port China* (Berkeley: Univ. of California Press, 2004), chapters 4 and 5.
[10] HA Schreier and Berger L., "Letter: On medical imperialism," Lancet. 1974 Jun 8;1(7867):1161. doi: 10.1016/s0140-6736(74)90640-0. PMID: 4136961.

efforts.[11] Medical colonialism has also been used to refer to the long-standing issues stemming from sending medical students abroad to work in communities that were previously under colonial control. This is demonstrated by articles from as early as 1987, "Medical Colonialism," to more recent editorials like "It's Time to End the Colonial Mindset in Global Health," from 2019.[12] Although these definitions and discussions of medical colonialism are important paradigms for understanding the many ways institutional medicine is part and parcel of colonial and imperial projects, they are not quite the way I am using "medical colonialism" in this work.

My definition of medical colonialism is centered on identifying the embedded forms of colonialism – with concerns about race, gender, and sexuality – in modern medical systems. I am pointing to the ways modern medicine has displaced personal bodily knowledge and autonomy in the name of science, and I am indicating how colonial mindsets shaped medicine and science, thus altering conceptions of the body – anatomically, functionally, emotionally, and socially. These changes occurred in such a way as to present the objective body, the objective ailment, the objective treatment. With treatments' effectiveness measured as clinically and specifically as possible through testing and labs, they become immutable – except through further scientific testing – medical facts to be memorized and prescribed. Any other presentation of the body is therefore *not* scientific (fair by its definition) and also *useless* (but unfair by its functionality). Consequently, alternative presentations are not only unscientific: they are *wrong.* They are not appropriate for understanding the body. So, they disappeared, folded into history as a mythological understanding of the body before the perfectly descriptive anatomical models were

[11] Samir Sheheed-Hussain, *Fighting for a Hand to Hold: Confronting Medical Colonialism against Indigenous Children in Canada*, (Quebec: McGill-Queen's University Press, 2020).
[12] TA Holt and TJ Adams, "Medical Colonialism," J Med Ethics. 1987 Jun;13(2):102. PMCID: PMC1375438. Abraar Karan, "Opinion: It's time to end the Colonial Mindset," *NPR*, Dec. 30, 2019. Accessed: Oct. 2023. https://www.npr.org/sections/goatsandsoda/2019/12/30/784392315/opinion-its-time-to-end-the-colonial-mindset-in-global-health.

created by the objective, scientific minds in the modern West.

This definition, and the impacts I explore in this chapter, were inspired by Reproductive Justice and Anti-Colonial/Decolonizing scholarship. Because this exploration of birth work is situated in the individual body and highlights the conflict of multiple healing methods, the lens of Reproductive Justice (RJ) is well-suited for exploring the plural medical landscapes in China and Taiwan. RJ is defined as "the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities."[13] This definition is both broad and historically situated, so there are limitations of the RJ framework in the context of East Asia. Most obviously, that it is a term developed in the U.S. by a collective of Southern, Black American women based on their experiences of medicine and society. Despite this, there is a key component of RJ that makes it very suitable for the exploration of medical colonialism in this chapter: Reproductive Justice centers self-knowledge. One of the pioneers of the RJ movement, Toni M. Bond Leonard, wrote "There was and remains a level of intentionality behind the Reproductive Justice framework that recognizes women of color as experts of their own lives."[14] Moreover, although this conceptual framework was created in 1994 by a group of Black women in response to the Health Security Act of 1993, its endorsement at the first national SisterSong conference in 2003 has expanded its application to women of color more broadly.[15] The need to emphasize an individual as an expert of their own life and body is a response to medical colonialism, which displaced individuals as an authority of themselves and disrupted the cultural practices of healing. The expansive nature of RJ, which

[13] Sister Song, "What is Reproductive Justic?" Sistersong.net, Accessed Oct. 2023. https://www.sistersong.net/reproductive-justice
[14] Loretta J. Ross, et. al., *Radical Reproductive Justice: Foundation, Theory, Practice and Critique*, (New York: Feminist Press at CUNY, 2017), Loc. 787.
[15] Ross, *Radical Reproductive Justice*, LOC 641 & 817.

includes not only a right to *choice*, but a right to effective medicine and social stability, will help to illuminate differences in the context of China and Taiwan. For example, in the Pro-Choice context, access to abortion is demonstrative of human rights, but in the period shortly after the implementation of the One Child Policy in the PRC, every woman had *legal access* to abortion, but they did not all have equal ability to choose when to have children. So importantly, RJ emphasizes that access is not the full marker of success. Instead, it is a holistic framework that encapsulates individuals, community, and the interconnectedness of reproduction and reproductive work in society.

Linda Tuhiwai Smith's work in *Decolonizing Methodologies* helped to frame my exploration into the impact of colonial scientific methodologies. This chapter incorporates a variety of scholarship on social science and medical research to contextualize the ways biases are quietly disseminated through medical knowledge and practice, even when they are carried out by local actors. Through extraction and categorization, researchers in colonial projects not only helped to colonize the land and people but they also facilitated the colonization of knowledge. The evolution of medical and healing language I discussed in chapter two is one aspect of this colonization. As Smith argues, changing the language of knowledge rewrites and redefines previous knowledges.[16] It changed the definition of midwives in China and Taiwan, and it also altered how people communicated about illness. It is important to consider how using Western-style research and medicine altered practices and experiences in these instances. In the case of the PRC, the Communist Party actively tried to resist adopting Western pattens of medicine and public health, attempting instead to reshape them to fit the needs of China and a socialist state. However, even in this direct attempt to resist obvious forms of colonization, the influence of

[16] Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (New York: ZED Books, 2021), 73.

Western-style medicine remained. The presence of the Nationalists in Taiwan, much like the earlier Japanese colonization, was not widely welcomed, and although Han Chinese were the ethnic majority, many still felt Nationalist control as a colonizing power. This is to say that, dynamics between strong, centralized governments and people included a system by which a small number of people in the highest parts of the government made decisions for the majority of the population. While there were local variations and resistance to government policies, that they were constructed on a state-backed medical model meant that the policies often carried with them some components of medical colonialism.

In the same way that the U.S. is a useful comparison because its own healthcare system is the strongest example of medicalization, the political responses to the problems caused by medical colonialism in the U.S. are also useful frameworks to understand the consequences. I have used the U.S. as a point of comparison in other parts of this dissertation to highlight the absurdity of the U.S. as a medical standard or a historical medical precedent of normality, but in this chapter, I have turned to organizers and theory in the U.S. as a way to elucidate medical colonialism in the context of China and Taiwan. The utility of this approach may be debated but, like early twentieth-century discourse on eugenics and populations studies, reproductive politics do not exist in an American vacuum. So much more so when we consider the fluctuating relationships between the U.S., the PRC, and the ROC governments. In "Choosing the Right to Choose," Chao-Ju Chen follows the extended life of the 1973 *Roe v. Wade* ruling in Taiwan's abortion access debates. The activists of Taiwan's New Feminism movement in the 1970s contested the government-sponsored justification of abortion, which granted access but limited use to "eugenics and medical, ethical and economic indications."[17] *Roe*, as presented by

[17] Chao-Ju Chen, "Choosing the Right to Choose: *Roe v. Wade* and the Feminist Movement to Legalize Abortion in Martial-Law Taiwan," *A Journal of Women Studies*, 34, No.3 (2013): 78.

Taiwanese feminists, centered individual freedom over one's body rather than a set of exceptions meted out by the state. "When the government prepared to legalize abortion as a means of population control and family planning, the NF [New Feminism] movement proposed an alternative justification for the legalization of abortion and strategically combined policy framing, and *Roe* served as a reference for this feminist justification."[18] The 2022 reversal of *Roe* is only the most obvious failure of its protective qualities in the United States. Legalization never protected access to abortion services because it only decriminalized the medical procedure. People immediately faced obstacles under *Roe*: for example the Hyde Amendment (1977) prohibits the use of federal funds towards abortion procedures, meaning that those who relied on Medicaid could not use that medical coverage for abortion.[19] As evidenced by the subsequent development of the Reproductive Justice framework, people have been struggling for true bodily autonomy at the place of *Roe*'s inception, but this does not discount the ripple effects it had on the New Feminism movement in Taiwan. Chen ends her paper questioning the appropriateness of "privacy-right-based framing" in addressing the issues of "compulsory motherhood." This conclusion raises very similar questions as Reproductive Justice, which encompasses more than access to abortion. The example of *Roe*'s use in Taiwan will not apply equally to similar issues in China – indeed it should not – but it elevates the relevance of RJ as a framework in this chapter. The issues of compulsory motherhood, bodily autonomy (at least from the state), and class are present in all three places; their forms differ but their impacts are similarly limiting.

I have developed three criteria to assess the impact of medical colonialism. First is a shift in accountability, second is the disruption of an individual's bodily authority or autonomy, and finally is the displacement of cultural healing practices. These aspects of medical colonialism

[18] Chen, "Choosing the Right to Choose," 92.
[19] Pub.L. 105-119, § 617, Nov. 26, 1997, 111 Stat. 2519.

also mirror the relationships I have covered throughout this dissertation between 1) the state and medical infrastructure, 2) medical infrastructure and the people, and 3) state medicine and women. The first criterion, the shift in accountability, refers to whom the medical care provider is accountable. Historically, healers were accountable to their patients and social group, but in the nineteenth- and twentieth- centuries, the professionalization of healing shifted the accountability to state standards *over* accountability to the patient. The second criterion is one of the consequences of this shift. Individuals were disempowered as experts of themselves and their lived experiences in favor of professional medical assessment. While this is sometimes pragmatic – patients are not typically trained in medical science – it is also sometimes a hinderance when medical professionals dismiss the patient's personal assessment of health, which can lead to poor diagnosis and treatment. This disempowerment came alongside the objectification of the patient and health as objects of study. Illness and health were numerically and scientifically measurable, and therefore treatment was neither subjective nor collaborative. Similarly, the displacement or erasure of cultural healing practices is a by-product of the sterilization of modern medicine. Scientifically tested medicine and procedures replaced indigenous practices as superior options until they were the only medical option available.

Colonial Medical Systems in East Asia

In chapters one and two, I discussed how midwives were redefined according to modern, scientific standards in the twentieth century. During the Republican period (1912-1949) in China, trained nurses undertook additional training to be certified as modern midwives and assist in birthing. Advocates such as Yang Chongrui were vocal about the need for high standards and well-trained nurses in the field, but despite the acknowledged need for improved birthing services, hospitals and colleges could not train midwives quickly enough to meet these requests.

The challenges, then, were not a lack of awareness of best medical practices, but the social and political climates of the Republican period. This was a deeply unstable time, disrupted by warlords, infighting between Nationalists and Communists, World War II, and the Chinese Civil War, which meant that the professionalization of both nurses and midwives suffered as a result. It was not until after the establishment of the PRC in October of 1949 that large-scale efforts to improve midwife services were possible. In China during the 1950s and 1960s, existing traditional midwives and new recruits were then trained in new-style midwifery. During the Japanese colonial period (1894-1945) in Taiwan, the colonial government trained midwives in modern medical practices. At first, these midwives were only Japanese women, but Taiwanese women were gradually accepted into the training programs and certified. As in China, there were already midwives in Taiwan who were quite successful in their work, and many of those trained to Japanese standards were middle-class women who had not previously been midwives.[20]

In both cases, the professionalization of midwives redefined their role through their training and certification. This also included an expansion of their duties from just labor and delivery to pre- and post-partum care. During the Republican period and in Taiwan, nurses underwent additional training to be certified as midwives, and in the PRC, even when midwives were trained in short-term training programs, their role was framed as proactive, meaning their job description expanded from labor and delivery assistance to encompass a broader spectrum of care. Before midwives were certified by the government, their social connections were more important than their education and state-provided credentials; however, when the government standardized midwife training and certification, it created a divide between certified and

[20] Wu Chai-ling. "Have Someone Cut the Umbilical Cord: women's birthing knowledge, networks, and skills in colonial Taiwan." *Health and Hygiene in Chinese East Asia: policies and publics in the long twentieth century* (Duke University Press, 2010), 172.

uncertified midwives. Certification demonstrated a particular level of training, but it did not automatically win people's trust. Although the governments often offered the ability to train and certify old-style and lay midwives in China and Taiwan, respectively, over time those unwilling to undergo certification were marginalized and barred from work.[21] The midwives who continued to practice – and there were many through the 1980s in both China and Taiwan – were beholden to the government standard. Certification required that midwives first meet the requirements of the state through medical training, and while there were benefits to this process, it also shifted accountability away from the birthing person and their family.

This accountability was intertwined with medical authority and medical power. It indicated who or what decided whether a midwife was sufficiently competent to do their job. In the case of modern midwives, professional medical standards are set by a combination of medical associations and the government, to the point that the line between what is medicine and what is the government is sometimes difficult to differentiate. For example, the Ministry of Health is a government office, but it employs public health and medical specialists. Similarly, a country's Center for Disease Control is a government agency, and it may conduct experiments, run clinics, offer medical services, etc. In contrast, a university is not part of the government structure, although it may be a public institution. Medical students of all kinds take courses at universities and technical training centers that meet national and/or state standards. This is to say that the medical standard is derived from a multitude of places and cooperatively upheld. Importantly, however, failing to meet these requirements bars one from practicing medicine: It is *illegal* to practice medicine without meeting the necessary standards for one's profession (i.e.

[21] The English-language literature on midwives in Taiwan and China uses different terms for midwives who were not certified or trained by the government. In the works about Taiwan, "lay midwife" and "indigenous midwife" are common, while work on China, particularly the PRC, uses "old/ old-style midwife." For a deeper discussion on this and the Chinese terms used in both places, see chapter two.

passing tests, acquiring specific degrees, completing residencies, etc.).

In contrast, pre-standardization midwives were not professionals by our current definition.[22] They *practiced* midwifery, but they could do so without a centralized power granting them credentials. Instead, many women apprenticed through experienced midwives and learned through their personal and larger family's birthing experiences. The existence of literature on birth and delivery indicates an exchange of information at the level of publishing (a level to disseminate) and there were also common expectations for birthing practices. Applying sesame oil to a freshly cut umbilical cord is one example from both China and Taiwan.[23] However, whether a midwife met those expectations or could introduce new approaches was determined by the person giving birth and their family. Because there was no singular central authority defining "midwife," they were instead accountable directly to the person and family they were assisting. Again, in someways the standardization of midwives had positive effects; many people in the 1950s in China did not understand how neonatal tetanus was contracted, for example.[24] Thus, a certified midwife was a useful assistant. The problem with the medicalization of birth work is that, over time, it disempowered people from being able advocate for themselves. That the PRC and ROC governments supported certified midwives and dissuaded people from seeking out old-style and lay midwives shows that state's standards could outweigh those of the patient. As a consequence of standardization, the midwife was *most* accountable to the legally recognized medical criteria because failing to uphold it could bar them from practicing with *everyone*, while failing to adhere to a singular patient's standard might only

[22] "In fact, before PUMC, there was no medical *profession* in China. Medicine was not legalized, institutionalized, or standardized. PUMC granted the first government-sanctioned medical diplomas in China." Tina Phillips Johnson, Childbirth in Republican China: Delivering Modernity (Lanham: Rowman & Littlefield Publishers, 2011), 74.
[23] Wu, "Have Someone Cut the Umbilical Cord," 168.
[24] See chapter two for more details and examples.

affect a midwife's ability to work with that *singular* person. As a result, accountability, which had previously been to the patient, was subordinated to accountability to state-sponsored science.

State-sponsored science is the above-mentioned amalgamation of medical professionals, medical associations and agencies, and degree-granting institutions. It is an important component of medical power because it derives jurisdiction from both the state and science, a governing body and objective reality, respectively. Although people's support for "science" enhances its effectiveness in applicability, state-sponsored science does not need the approval of patients. This does not mean that medical doctors and midwives perform medical services against patients' will (although sometimes they did), but it does mean that medical professionals operate to the standard of state-sponsored science first.

The consequences of this are sometimes lost behind the practical reality that patients are not usually medical doctors, and that standardization is accompanied by a variety of positive medical benefits. In addition, standardization, at least within a country, should ensure that regardless of which doctor attends to a patient, the diagnosis and treatment of an illness is essentially the same. Training and standardization, then, *can* facilitate trust between doctors and patients at large, but there are negative consequences of shifting the accountability away from the patient, too. First, it changes the patient from a participant in a healing-focused dialogue to the host of a medical problem to be solved. The resulting second impact is that the dialogue takes place between the doctor and science, rather than between the doctor and patient. The agency to understand and participate in the process is then often removed from the patient. Third, the possibility, reliability, and the accountability of that treatment is decided between the doctor and the medical standard. The doctor is a necessary mediator between individual and treatment because modern medicine is not designed to be legible to the average patient. This dynamic

alone is not a problem – healers have mediated wellness in physical and spiritual ways since their inception – but in the case of medical science, the doctor, nurse, and midwife do not need to account to the patient because they instead account to an "objective" science. In the case of conflict between the two, the doctor is not required to defer to the patient's preference, although of course the patient can usually reject treatment.

This framework is effective when medical science understands an illness as it relates to each patient and when each patient is treated as a fully autonomous human being. This framework is ineffective when medical science is inaccurate or understands illness in only certain kinds of patients, when medical providers treat patients as objects rather than individuals, and when the science is not derived from representative studies, but formulated through racism, misogyny, and classism. In other words, accountability to medical science does not meet the needs of patients when it transforms subjective paradigms of society into neutral scientific language. If the medical standard providers are accountable to is plagued by these deficiencies, it fails the patient. Moreover, the shift in accountability from the patient to the state-sponsored science facilitates these deficiencies in the system. The insularity created by standardization embeds itself into society under the aegis of objective medical science and protects itself by eliminating competing medical options either through promotion or criminalization.

To be direct: this does not mean that biomedicine should be discarded. It means that it was created by a system with built-in biases, and that these biases have effects on the quality of medicine. These biases are often ignored or misunderstood because science has been presented as objective and free of social biases. The following examples I provide are meant to demonstrate some of the ways these biases were embedded in science and how they have been hidden by the objectivity society ascribes to science. Further, they highlight that even when a

government or the people actively attempt to create anti-colonial and anti-imperial systems, they unknowingly perpetuate parts of those systems. This is the tension with biomedicine. It can offer so much, but it is also burdened with societal values, some of which were established hundreds of years in the past.

Modern medical science functions most effectively for the population it is created for and becomes increasingly less useful/ more harmful with each degree of removal from "normal." Normal is a developed concept of what is average, which in the case of medicine is pathologized through a categorization of healthy/unhealthy. The healthy range is the normal derived from case studies conducted by medical and social scientists and then that normal is compared against a patient to determine illness and health.[25] The problems with this can be obscured when normal ranges function well for diagnosis. When testing for HIV, for example, a person's blood is tested for HIV antigens and antibodies. Their presence or absence determines the patient's status, offering an objective representation of HIV status, but not all measures of health can be assessed so objectively.

Take the Body Mass Index (BMI), for example, which is a commonly utilized measure of health through body fat percentage. BMI was developed by Adolphe Quételet, an eighteenth-century Belgian scholar, as he collected data to understand and define the "average man."[26] In *Belly of the Beast,* Da'Shaun Harrison discusses the problems with Quételet's BMI and the long-term impacts of its incorporation into medical practices. First, Harrison notes that Quételet's

[25] Certainly, there have been examples of less-than-qualified people making claims about health and wellness with great effect. See the following discussion of BMI.

[26] Da'Shaun L. Harrison notes that Quételet was a mathematician and sociologist. In "Adolphe Quetelet (1796–1874)—the average man and indices of obesity," Garabed Ekynoyan describes him as "Belgian mathematician, astronomer and statistician, who developed a passionate interest in probability calculus that he applied to study human physical characteristics and social aptitudes." I have simply referred to him as a "scholar" in the manner that eighteenth-century men studied many subjects and asserted their opinions about them. Importantly, none of the sources I searched mentioned anything about medical or health-centered training. Da'Shaun L. Harrison, *The Belly of the Beast: The Politics of Anti-Blackness* (Berkeley: North Atlantic Books, 2021), 79.

samples were collected only from Scottish and French soldiers, which failed to provide a realistic representation across race, gender, or age. If this had only been a local descriptive case study, Harrison may not have mentioned Quételet's work at all, but Quételet did not simply create a bell curve of height/weight ratios for the Scottish and French soldiers. He used that bell curve to "create a standard for male beauty and health, built only with white Europeans in mind…"[27] The impact of BMI was solidified as it was reified by doctors as a marker of health in the 1900s. In the U.S., this was due in part to calculations made by life insurance companies which "indicated that body weight, adjusted for height (Wt/Ht), was an independent determinant of life expectancy."[28] Although perhaps most publicly articulated through anti-obesity campaigns in the U.S. in the early 2000s, BMI was adopted in many places during the twentieth century, so this formula for determining obesity – and therefore health – became a medical norm.

BMI demonstrates how poorly conducted science can be integrated into medicine with lasting effects. Even as a currently hotly contested standard, it continues to serve as a measurement of health at most doctors' offices in the U.S., but the influence of BMI is greater than a bad measurement of health or body fat percentage: it is an inequitable measurement of health. Because Quételet's study consisted of a very limited diversity of people, even if it was a reliable way to measure body fat, it would only be reasonably accurate for that specific population and only at the *population level*, not for individuals. Body type and size have varied over space and time as have embodied conceptions of health, but institutionalized medicine makes it possible not only to create and assert specific standards of health but also to disseminate them. Harrison's discussion of BMI is centered on how it was derived from anti-Black race

[27] Harrison, *The Belly of the Beast*, 79-80.
[28] Frank Q. Nuttal, Body Mass Index: Obesity, BMI, and Health: A Critical Review. Nutr Today. 2015 May;50(3):117-128.

science and contributed to the eugenics movement by holding the white, cis-male body as the standard by which science determined healthy body weight. For every degree of removal from the white, cis-male participants, those numbers become decreasingly meaningful. In addition, Harrison's point is not that BMI does not work for Black Americans, but rather that it actively works *against* them. This categorization of weight disproportionately described Black Americans as overweight and obese: categories with social stigmatization. Consequently, BMI transformed weight into an opportunity for moral classification and a justification for social inequities from slavery to segregation.

There are similar examples of how social paradigms were incorporated into medicine and then perpetuated without interrogation in East Asia. The development of public health and empire during the Japanese colonial period is particularly useful in understanding how medical colonialism functioned in Taiwan and China. The social impact of Quételet's BMI was not a fluke in medical history. As colonial governments expanded their empires, they also sought ways to understand the people, places, and things in their burgeoning territories. Statistics – as compiled through data collection and research – provided insight into who made up colonized populations, and it allowed statisticians to organize those people into categories. Like physics and chemistry, statistics is a science, therefore protected by its status as an objective representation of reality.[29] Like BMI, however, the collection and presentation of statistics was not free from social and political bias.

As a late comer to imperialism on the global scale, the Japanese colonial government needed evidence of their fitness as a colonial power.[30] Scholar-officials in the late stages of Qing

[29] Smith, *Decolonizing Methodologies,* 49-52.
[30] The beginning and definition of imperial ambitions are often debated, but the Japanese government was expanding control and building empire in places we would not consider part of Japan before they held a colonial

rule had similar concerns. The looming threat of European encroachment in East Asia put pressure on governments to prove they could govern themselves at the same standards as Europeans, but in order for the Japanese to become a colonizing power themselves, they needed to do more than maintain their sovereignty. They also had to demonstrate that, like European empires has done in their colonies, Japan was superior to the people they were colonizing. This would require more than a stable, modern government: it required scientific proof of racial superiority. Moreover, the Japanese government could not simply create new criteria to measure themselves against. As Sabine Frühstück shows in her work *Colonizing Sex*, Western colonial powers had already established the categories of racial hierarchy by the mid-nineteenth century, when Japan started to develop its modern health regime. Frühstück writes,

> Respected philosophers such Inoue Tetsujirō maintained Western advantages in skill and brain size would translate into a competitive edge over the Japanese. Physiologists who engaged in the creation of the "biochemical race index" claimed that the brain weight of Asians – then considered an indicator of intelligence – was lower than the brain weight of Caucasians but emphasized that Japanese men's and women's brains were weightier that those of Chinese, Koreans, and Formosans [Taiwanese]. Claims of racial difference that positioned the Japanese below Caucasians prompted debates about how improvement would be possible.[31]

The race index situated Japanese intelligence beneath Caucasians, but it was not a metric they could ignore. Frühstück continues her discussion with examples of how Japanese scientists and philosophers tried to improve their racial fitness. Even if they could not position themselves in the same class as Europeans, racial hierarchy remained an effective tool of colonialism because the Japanese government did not need to assert themselves in Europe, they only needed to prove they were the superior *Asian* race to colonize other parts of East Asia. They did this, in part,

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presence in Taiwan, Korea, or Manchuria. See "The Making of Imperial Subjects of Okinawa," by Alan S. Christy for a discussion on the Ryukyus as an early part of Japan's imperial project.

[31] Sabine Frühstück, *Colonizing Sex: Sexology and Social Control in Modern Japan* (Berkeley University of California Press, 2003), 19-20.

through colonizing new territory, because as citizens of an imperial power, they could be the "honorary white" people of Asia, but as many scholars of modern Japan have argued, this position as "white" also needed to be reinforced by scientific "facts."

Like Quételet's data for BMI, the data for Japan's "biochemical race index" was gathered from military conscripts.[32] In the case of the Japanese empire, this included Japanese, Korean, Chinese, and Taiwanese men. While potentially better representative of the regional population, the categorization of potential soldiers was still framed in moral terms. Conscripts were categorized into five classes based on their fitness for military service. Data collected during examinations not only included measurable qualities (in order to get into class A, the top group, one had to be taller than 1.55 meters – about 5 ft. – for example), but also on their character.[33] Unenthusiastic conscripts were labeled with terms such as "lazy" and "effeminate."[34] Moreover, Frühstück repeatedly notes that the purpose of collecting this information was not simply to train the best-available conscripts; rather, this data was intentionally created for wide dissemination. The "national body" was not only an internal government standard but was meant to be clearly articulated to Japanese people and the international community. Those who wished to establish and maintain racial hierarchy relied on this open discourse to repeatedly confirm their status.

My point in discussing the Body Mass Index and the "biochemical race index" together is to highlight the similarities and continuity in colonial practices in different empires. Data collections and statistical examinations of them were frequently placed under the umbrella of "public health," which made it not only scientific, but geared towards a humanitarian good. The "truth" elucidated through this data was often adopted into medical practice and disseminated for

[32] Frühstück, *Colonizing Sex,* 22.
[33] Frühstück, *Colonizing Sex,* 28-30.
[34] Frühstück, *Colonizing Sex,* 29.

popular consumption. As Roopika Risam argues in her work on Post Colonial Digital Humanities, colonial cultures extracted data in order to construct a reality of the people and places they colonized.[35] This data not only made the colonized people knowable to the colonizer, it gave the colonizer the ability to define the colonized to themselves.[36] Methods for data collection and presentation were not neutral but were presented as science-based explanations and thus facilitated the goals of the colonial government in a way that was difficult to challenge. In the case of the Japanese empire in Taiwan and Manchuria, the pipeline of information appears quite direct, but during the Qing empire and later in China in areas under Nationalist rule, colonial ideas and standards were perpetuated in a more indirect manner.

Medical Accountability in Taiwan and China

The person or entity to which a medical professional is accountable affects how care is provided. The historiography I provided in chapter one shows that historically, medicine in premodern China was often a collaborative practice rather than a strictly prescriptive one. This meant that there was considerable shared medical and body knowledge between patient and provider, and thus opportunities for the patient to advocate for their own health needs. Much of the collaborative nature of healing was lost in the development of modern medical systems as the doctors' accountability shifted from the patient to state standards. Again, this is a complex issue because the standardization of medicine included many positive results. The downside was that it simultaneously weakened people's body knowledge and autonomy, making it more difficult to self-advocate. For those disadvantaged by economic or social status, this weakening was even more severe.

[35] Roopika Risam, "A Post Colonial Vision for Digital Humanities by Roopika Risam," YouTube, Streamed as part of "Indian Writing in English UoH," on Dec. 7, 2021, https://www.youtube.com/watch?v=K5-nmtgf1Xo.
[36] Smith also argues this in chapter two and three of *Decolonizing Methodologies*.

The professionalization of midwives in Taiwan occurred in two major waves: the first during Japanese colonial occupation and the second under ROC rule. Public health was one of the most important facets of Japanese colonization in Taiwan. Unlike the Korean peninsula and Manchuria, Taiwan offered little in terms of resources, but it served as a strategic military location. However, as the first part of Japan's larger imperial project, the government still believed it was important to develop Taiwan as a model colony. Despite a shortage of medical experts and resources, medical doctors and academics were deployed to Taiwan to develop a public health system.[37] Establishing Taipei Imperial University, setting up quarantine systems for infectious disease, and standardizing healthcare through certification were a few of the many initiatives that the colonial government carried out. Importantly, these campaigns were not for the sake of the Taiwanese people, but rather the imperial government. Like their European counterparts, the Japanese government was also concerned about protecting its own people from tropical diseases, and maintaining a healthy political and economic colony also required a physically healthy colony.[38] In "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan," Chin Hsien-yu argues the "Public Health was a priority not because individuals had the right to a healthy life but because the good of the state demanded a healthy citizenry."[39] Chin's sentiment clearly articulates that colonial medicine was not meant to serve Taiwanese people at its inception, but this dynamic changed over time as Taiwanese people were

[37] Shiyung Liu, "The Ripples of Rivalry: The Spread of Modern Medicine from Japan to Its Colonies," *East Asian Science, Technology, and Society*, 2 No. 1 (2008), 50. In this article, Liu argues that public health experts were sent to Japanese colonies because of disagreements in medical and academic networks, rather than as a result of politics. However, as Liu mentions in this and other words on the Japanese colonial system in Taiwan, even if much of the motivation was derived from academic medicine, the Japanese government approved and supported the development of public health systems in the colonies for their own reasons.
[38] Shi-yung Liu, "Building a Strong Empire: the critical period of building colonial medicine in Taiwan," *Japanese Studies* 24:3, (2004): 303.
[39] Hsien-yu Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," University of Chicago Press, History of Science Society. Vol.13, 1999. Pg. 328.

able to enter more positions of influence. Chin also writes that initially "With the establishment of this system and related regulations concerning medical practice, physicians trained solely in Chinese medicine were gradually marginalized; the Taiwanese were forced to accept Western medical treatment through the elimination of any alternative."[40] There were many forms of healing practices in Taiwan, including those developed by indigenous peoples. Like in China, the medical landscape in Taiwan was diverse and pluralistic, so there was not a singular "Chinese" medicine to replace, but rather a variety of local practices that were marginalized by the colonial system.

Establishing a centralized, Western-based medical system meant the transfer of accountability from the individual patient to the colonial medical authority, but that did not necessarily translate into a direct shift in *how* people accessed medical care. Professionals certified by the colonial government had to meet the standards for certification, but Taiwanese people were not immediately required to use colonial medical facilities. Liu Shi-yung observes that during the early years of colonization, "…it was difficult for Taiwanese to see it [the hospital] as a symbol of mercy of Japanese colonial rule when only Japanese patients could be found there. Most Taiwanese consequently saw the hospital as a symbol of Japanese colonization."[41] However, over the next couple decades, Taiwanese people were incorporated into all parts of the Japanese colonial structure, including the medical one. Not only did Taiwanese people advocate for representation in the colonial government, but perhaps particularly because the medical resources from Japan were scarce, Taiwanese people were also recruited, trained, and certified under the Japanese system.[42]

[40] Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," 328.
[41] Shi-yung Liu, "Building a Strong and Health Empire: the critical period of building colonial medicine in Taiwan," *Japanese Studies,* 24:3, 305.
[42] Liu, "The Ripples of Rivalry," 51.

Chai-ling Wu explains that for midwives in particular the transition from lay midwives (*a-po*) to certified midwives (*san-po*) was not immediate, although by 1902, the Japanese government did attempt to ban uncertified midwives.[43] One of the reasons for this – as it would be in China – was that midwives operated through connections. They were deeply embedded into the social fabric of Taiwanese society. In Wu's interviews she observed that "They (a-pos) were so skillful some women saw no difference between the lay midwives and the licensed midwives," and "…birthing women saw these midwives as respectable, experienced women from the community or family circle."[44] A combination of familiarity and personal authority made a complete transfer to certified midwives more complicated. The Japanese government promoted their san-po through scientific literacy campaigns, but unless they experienced a particularly complicated birth, women consistently preferred the services of the lay midwives.[45]

Despite this resistance, over time certified midwives became the majority birth attendants and Taiwanese people made up a greater proportion of medical care providers within the colonial medical system. Liu writes that "Colonial medicine after the 1920s had a colonial structure but was operated by the colonized." The progression of colonizing power establishing a system and the colonized upholding it could not be better encapsulated in a single sentence. The system to which certified midwives were accountable was created by the Japanese colonial government and its medical experts but was slowly adopted and perpetuated by the Taiwanese people. This is significant because when Taiwan was ceded to the ROC government, the Nationalists did not initially see the need to alter the existing medical infrastructure. In fact, they put public health nurses in charge of campaigns to improve women's and children's health during the 1950s.[46]

[43] Wu, "Have Someone Cut the Umbilical Cord," 164.
[44] Wu, "Have Someone Cut the Umbilical Cord," 165.
[45] Wu, "Have Someone Cut the Umbilical Cord," 171.
[46] Chin, "Colonial Medical Police and Postcolonial Medical Surveillance Systems in Taiwan, 1895-1950s," 331.

In appeals to the provincial government in the 1950s and 1960s, Taiwanese council members requested more certified midwives in order to respond to concerns about infant and maternal health in mountainous regions. These reports indicated a disparity in access between urban and remote areas, but they also implied some believed it was the government's responsibility to train new midwives and to make sure existing midwives were certified. This is not surprising, given that by the 1950s, the Taiwanese people had already been participating in and contributing to the medical system in Taiwan for three decades. One petition alleged that in 1955, 54% of births were attended by medical personnel, while others were often attended only by family members.[47] However, the issue cited was not that people were unwilling to use midwifery services but rather that they lacked access to them. In addition, it proved difficult for nurses in places such as Tainan to travel to Taipei to take the test required for certification. The council members requested that the public health department make the necessary arrangements for more local testing options, and that this would increase the number of nurses certified as midwives.[48] While these repeated requests from all over Taiwan implied that the Nationalist government was failing to maintain the infrastructure to facilitate training and certification for midwives, it also suggests that government standardization was a welcome component of midwife work.

The shift in accountability in the Taiwanese healthcare system was not as intense as in the U.S. context. Although we can observe how certification was set by the state (whether the Japanese colonial government or the ROC government) thus centering government priorities, midwives were not initially or intensely marginalized and their social role was not completely distorted. In fact, the council members' requests for midwives were also appeals to strengthen

[47] TPA 002-02-04OA-07-6-8-00-00376.
[48] TPA 002-02-04OA-07-6-2-04-00216.

their roles, particularly in remote areas without well-developed medical infrastructure. For example, multiple council members asked that midwives be granted the authority to issue birth and death certificates, particularly in the case of a stillbirth.[49]

I am suggesting that council members' appeals to the government indicate that midwives were a valued part of medical care in Taiwan. Certification shifted some accountability to the government through the standardization of training, but it did not require the elimination of socio-cultural birthing practices. At-home and local clinic births remained particularly prevalent in Taiwan in part because the call for midwives was articulated as a need to improve access to healthcare in remote areas (council members mentioned locations as far out as the Penghu Islands).[50] This meant midwives moved *toward* their patients, rather than redirected patients to the hospital setting, as was the case in the U.S. The prevalence of birth stations and home visits did not require women to go to the hospital for pre- and post-partum checkup or labor and delivery help unless the woman was experiencing a birth complication.[51]

An important difference between the development of midwife networks in Taiwan and China is the distinctive approaches the PRC and ROC governments took to rising concerns about over population. While both governments considered policies and campaigns to support family planning, the ROC did not implement stringent birth restrictions. As a result, family plannings choices were not directly connected to political goals, and as a result, midwives and birth stations functioned as patient-centered options rather than an extension of government policy.

Similar processes to train medical personnel took place in China under the Qing government, the ROC government, and eventually the PRC government. Midwives had operated

[49] This request was eventually granted. TPA 0011170240006.
[50] TPA 0016120440007, TPA 001-01-11OA-00-5-3-0-00190.
[51] Kang-Wang, "The Midwife in Taiwan: An Alternative Model for Maternity Care," Society for Applied Anthropology 39:1 (Spring 1980): 74.

in all parts of China, even when *fuke* doctors were available and served important social as well as medical roles, but the increased interactions with Western medical missionaries in the 1800s initiated the development of Western-style medical infrastructure. During the Republican period, the Nationalists supported the development of midwife training programs as additional training for nurses, but the number of nurses trained in the Nationalist controlled areas was never high enough to meet the needs of the people in China. Prior to 1945, managing existing midwives also proved difficult, so although there were practicing midwives, infant mortality rates were still high.[52] As I highlighted in chapters one and two, the establishment of the PRC was a turning point in midwife training and standardization because it was part of a long-lasting centralized government which had the ability to devise and implement large-scale public health policies that would strengthen the relationship between the government and medical care providers.

An important distinction between the expectations for midwife training programs in Taiwan and China was the length of the training and the importance of political affiliation. By the 1950s, midwives in Taiwan were nurses with additional training in maternity wards. Some practicing midwives were lay midwives who were certified under the Japanese government or through programs under the ROC, but the council members' calls to establish more hospitals to train midwives included the training through nursing school plus additional time (up to two years) of residencies in maternity wards or similar experience. Because the nurse-midwife training programs that were developed during the late Qing and through the Republican periods had never produced enough midwives, the PRC's Ministry of Health supported short-term training programs in the hopes of providing more modern support for birth work as quickly as

[52] Tina Phillips Johnson, *Childbirth in Republican China: Delivering Modernity* (Lanham: Rowman and Littlefield, 2011), 16, 81.

possible.[53] These programs trained old-style midwives and women without any medical experience to the contemporary standards of birthing techniques and sterilization in as little as 21 days.[54]

There were advantages to retraining old-style midwives because of their experience. At one training program, the old-style midwives had collectively delivered 2,651 babies, with most of these midwives having over 5 years of experience.[55] In addition, old-style midwives could transfer modern birthing standards to rural areas more easily because of their existing client network and reputation. As in Taiwan, it could also prove difficult to find women willing to train and then move out to remote places, so re-training established midwives mitigated this problem to some extent. Yet, political affiliation was also important. Midwives who were also Party members or supporters of the Chinese Communist Party (CCP), would not only bring safer birth practices to rural areas, but they would also serve as good representatives of the newly founded PRC. Female cadres were repeatedly addressed in news articles, both as examples of women who had participated in training and as potential recruits. This recruitment often met with some resistance as young female cadres believed that "practicing midwifery is not young women's work. Studying it would not be useful for us [female cadres]" (接产不是青年妇女的工作．我们学它也没有用).[56] In the 1950s and 1960s, then, support of the CCP was leveraged as a reason for politically minded young women to study and practice midwifery.

Homogeny and surveillance were not hallmarks of birth work before the Cultural

[53] This is not leveled as a failure of either government, rather, as I discuss in chapter two, there were practical reasons why the Qing and the Nationalists couldn't train enough nurses quickly enough to distribute them to rural areas.
[54] "冀南三专区 创办助产训练班," *人民日报 The People's Daily,* May 22, 1949.
[55] "吉林九台县举办助产学校 训练农村助产士 惠南县改造旧接产妇," *人民日报 The People's Daily,* January 14, 1950.
[56] 衡水专署通讯组, "推广新法接生减低婴儿死亡率 衡水专区训练三千接生员," *人民日报 The People's Daily* July 28, 1950.

Revolution (1966-1976). The changes during that time period focused on a loosely standardized midwife training that was intended to move towards people in rural areas, but it included two different groups of midwives. Old-style midwives already had an established accountability to the people in their villages, while the newly recruited female cadres had an investment in their relationship with the Party and the government. These training programs were important because they were an early extension of government-sponsored medicine into the countryside, but controlling how midwives operated was not easily accomplished. News reports indicate that old-style midwives were sometimes resistant to new birthing standards and methods, saying that "some found the new midwifery methods troublesome and were unwilling to use them" (一般感到新的接产方法麻烦，不愿用.).[57] Without the ability to enforce new standards nation-wide, there was little shift in accountability to the government medical standard at a large scale.

In the PRC, the shift in accountability towards a state-standardized medicine strengthened during and after the Cultural Revolution, when barefoot doctors were trained to work in rural areas as a way to gain revolutionary experience. Barefoot doctors were the last of several iterations of medical professionals who underwent short-term training to provide urgently needed medical services to rural areas, but they were created with a specific political directive. While some of the women mentioned above were cadres, and therefore politically oriented, barefoot doctors were often current or former Red Guards and were very supportive of Mao Zedong and Mao Zedong Thought. In respect to birth work, barefoot doctors were not simply general doctors, they also received training in modern delivery practices. In an interview, one woman described her experience as a barefoot doctor in the outskirts of Suzhou from the 1970s until

[57] "传爱祁县举办训练班 集训旧接生妇 进行科学接产教育," *人民日报 The People's Daily,* January 1, 1950.

1990.[58] She had above average schooling for a girl in her village, having complete middle school before she completed medical training. She stated, “There was a whole course: delivering babies, doing stitches - everything. I could do it all -- inserting IVs, everything. At the time there was a test you had to take, which all the Jiangsu Province rural health doctors had to take as well.”[59] Her experience seems typical. As Xiaoping Fang argues in *Barefoot Doctors and Western Medicine in China*, "Though men outnumbered women in the program, newly trained female barefoot doctors gradually replaced the aging granny midwives in delivering babies, while they also became the key force implementing the maternity and family planning programs in Chinese villages."[60] As a result, in the 1970s and 1980s, barefoot doctors partially replaced old-style midwives and facilitated access to birth control.

The two groups – midwives and barefoot doctors – initially appear to have similarly short-term training, and some of the earlier midwives were also politically inclined, but as the old-style midwives retired or were pushed out of work, the number of medical providers with explicit commitment to Mao Zedong and his political ideologies significantly increased. This change in the political make up of these doctors indicates a greater political influence in the medical system, but true ideological conviction was also not required to transport Party-sponsored healthcare to rural areas. In 1976, a delegation of medical students and faculty from the University of Missouri-Kansas City School of Medicine traveled to the PRC to “examine health care and health education at all levels.”[61] The letter they wrote presented a positive

[58] The interviewee does not mention exactly when she started working as a barefoot doctor.
[59] Haihui Zhang, interviewer, “We didn’t have anything to stanch the bleeding…I used rice wine to disinfect my hands,” May 4, 2017, 7:50, From ULS Digital Collections: *China’s Cultural Revolution in Memories: The CR/10 Project*, https://digital.library.pitt.edu/islandora/object/pitt%3A7198632/viewer.
[60] Xiaoping Fang, *Barefoot Doctors and Western Medicine in China* (Rochester, NY: University of Rochester Press, Rochester Studies in Medical History, 2012), 52-53.
[61] E. Grey Diamond, “Letter to All the Consultants to the Chancellor,” From Rockefeller Archive Center (RAC) “National Committee on United States-China Relations records, RG 9, Accession 9 (FA1191).

assessment of the health care system, praising the consistent work and hospital-based system. Regarding the barefoot doctors, Dr. E. Gray Diamond wrote "No 'barefoot' physician stands alone, but he is the peripheral hand of a hospital-based health care system."[62] From his assessment, it is clear that the system Diamond observed was one aimed at connecting villages to hospital care with the assistance of barefoot doctors. This is to say that healthcare was increasingly standardized and better connected to state-sponsored medical standards.

In chapter four, I addressed medical networks and family planning policy in more depth, but here I want to emphasize that regardless of these policies, there was a shift in accountability towards the state and away from the patient. While barefoot doctors did not *have* to be deeply invested in Maoism or the Party leaders, those who did carried out policies that privileged state goals over patient-centered practices. This is especially clear with the implementation of the One-Child Policy 1979, when barefoot doctors and midwives not only provided birthing services, but also functioned as surveillance for family planning policies.

Scholars of the PRC might point out that the way medical networks developed during the Mao years and just beyond are specific to China. A deep tension existed between Western ideas shaped by capitalism and imperialism and the values of Maoism. These midwives and barefoot doctors themselves are evidence that science and medicine was meant to be accessed and practiced by the average person, not locked away in an institutional tower. Despite this, I believe that the shift in accountability and affiliation towards the Party-state is a result of medical colonialism's impact because it utilized the mechanics of colonial public health and privileged Western medicine when possible. The colonial system, as it also appeared in Taiwan, is one that is structured for state policies, which are sometimes established for people's health and other

[62] Diamond, "Letter to All the Consultants to the Chancellor."

times for the benefit of the state.

One of Xiaoping Fang's major arguments is that, rather than "consolidating Chinese medical knowledge and treatments on par with biomedicine… barefoot doctors effectively converted rural populations to a preference for Western medical treatments."[63] Meaning that, although one of the explicit goals of the barefoot doctors was to medicalize local healing practices, in reality they also often transferred Western medical practices to rural areas instead. This does not mean that barefoot doctors did not use Chinese medical knowledge. As nearly any report about working in the countryside notes, most barefoot doctors did not have reliable access to Western medical technology and treatments until 1977 and relied heavily on local herbal remedies. [64] However, this shift included more than the practical reality of providing medication. It was also about the fact that training for barefoot doctors was based on Western-style medicine. So, while Chinese medicines were part and parcel of the medical practice in rural areas, training focused on Western-medical epistemology.[65]

This was true of the midwife programs in the 1950s and 1960s, too. Some news article specifically mentioned "scientific midwifery education" (科学接产教育) and descriptions of programs for both midwives and barefoot doctors list training in IVs and vaccination injection.[66] The barefoot doctor training strengthened Western medical epistemology as well. Whereas earlier midwife training programs varied in length of time and topics covered, by the 1970s the medical teaching texts were standardized, published, and widely transmitted.[67] In addition,

[63] Fang, *Barefoot Doctors and Western Medicine in China,* 3.
[64] Fang states that from 1977 forward, Western medicine was cheaper and easier for BFDs to provide because they didn't' need knowledge of local herbs, methods or collection or cultivation in order to use it. Fang, *Barefoot Doctors and Western Medicine in China,* 3.
[65] Fang, *Barefoot Doctors and Western Medicine in China,* 46.
[66] "传爱祁县举办训练班 集训旧接生妇 进行科学接产教育," *人民日报 The People's Daily.*
[67] Fang, *Barefoot Doctors and Western Medicine in China,* 58.

Chinese medical texts were traditionally written in Classical Chinese, making it difficult for barefoot doctors to use them to study. In contrast, Western medical texts, were easier to understand because they were written in simplified characters and straightforward language, so they had a lower learning curve for use.[68] Since barefoot doctors were actively taking medical knowledge and practice to rural areas, they moved the Western-style medical epistemology with them. Their presence, then, transmitted facets of medical colonialism through Western medical epistemology.

More than the spread of Western medicine, these care providers were part of a transformation in medical infrastructure under the aegis of public health. Midwives were trained by local ministries of public health (政府卫生部 *zhengfu weishengbu*) and their work was framed as public health work (卫生工作 *weisheng gongzuo*). While these initiatives brought important benefits to birthing women, public health was not always at the service of the people, but at the service of the government. Public health can also function as a form of public order as detailed in Emily Baum's work on asylums during the early 1900s, in which she demonstrates that rather than providing health care for mental illnesses, asylums offered a way to remove and contain people who would not conform to social standards.[69] Similarly, Mary Augusta Brazelton's work on vaccinations, in which the Nationalists administered vaccinations to people in areas surrounding their bases for the sake of their soldiers, shows that public health was often about other government concerns. Bridie Andrews even argues that "The main difference between the Chinese government's concept of public health and the West's was that in Republican China, public health activities were, first and foremost tools of government

[68] Fang, *Barefoot Doctors and Western Medicine in China,* 61.
[69] Emily Baum, *The Invention of Madness: state, society, and the Insane in Modern China* (Chicago: University of Chicago Press, 2018).

control."[70] This is not to say that the PRC adopted previous institutions of public health wholesale or that initiatives cannot improve people's lives, but aspects of Western systems were part of their creation of medical systems. Certainly, the midwife programs helped to lower infant mortality, among other improvements, and the emphasis on medicine as accessible to the people initially displaced the expert doctor-layperson dynamic. However, my point is that while there are benefits to developing a public health system, its connection to a government means that accountability for the appropriateness of any public health initiative is oriented towards the government and ruling Party.

As the network of public health workers developed throughout the PRC, so did the power to set and enforce a medical standard. This was also the case for Traditional Chinese Medicine (TCM), which operates as a standardized medicine alongside biomedicine in both China and Taiwan. Although the coexistence of TCM means that the state made allowances to preserve it as an alternative option, TCM had to undergo many changes in order to assert itself as useful and reliable. Once it was regulated, TCM doctors were accountable to the state authorities in the same way as biomedical doctors. While this offered standard practices and some improvements, it is also another example in which medicine was altered to earn state approval, and in doing so displaced other indigenous medical practices.[71]

Bodily Authority and Cultural Practices

Birth work as a medical practice is intriguing because pregnancy and birth are not inherently pathological. While illness can occur within that process, many women in history have moved through the stages of conception, pregnancy, birth, and postpartum with only the assistance of their relatives. The creation of obstetric and gynecological biomedicine, which

[70] Bridie Andrews, *The Making of Modern Chinese Medicine, 1850-1960* (UBCPress: Vancouver, 2014), 110-111.
[71] For more on this see chapter eight of Andrews' Making Modern Chinese Medicine.

brought all components of this process under doctor supervision, led to the pathologization of pregnancy in unique ways. As state medicine increasingly encompassed birth work – first through midwives and nurses, then through physicians – it set new parameters for normal pregnancy and delivery that devalued cultural practices and marginalized bodily autonomy. In the cases of China and Taiwan, I want to highlight the transition to hospital-centered births, the division of birth work into separate social and medical roles, and finally the role of family planning in the PRC. These examples are part of the larger transformation of birth from a social event, supported by extended family and local networks, to a strictly clinical experience that isolated birthing patients from their social support networks and brought labor under the sterilized supervision of the biomedical doctor.

In both China and Taiwan, local health centers facilitated the delivery of modern medicine to rural and remote areas. In the 1930s, the Nationalists empowered village health workers and clinics to handle infectious disease and other practical, but non-specialized, medical procedures.[72] The Communists used similar approaches with rural health clinics through the 1980s, and in Taiwan local health clinics are still the norm, although they are contemporarily staffed by physicians and specialists of all kinds. Localized healthcare served to both increase the accessibility of medicine by addressing preventable diseases and also connect those in remote regions to the broader medical infrastructure. As the networks of medicine developed through the second half of the twentieth century, more people frequented hospitals. This transition is particularly notable in the case of labor and delivery, which had taken place in the home. In the 1950s, women were advised to go to the hospital, even for a regular delivery, as doing so would decrease infectious disease risk and midwives assisting women at home or in clinics were

[72] Sean Hsiang-Lin Lei, *Neither Horse nor Donkey: Medicine in the Struggles over China's Mortality* (Chicago: University of Chicago Press, 2014), 235-237.

directed to refer complicated births to the hospitals.[73] As mentioned in chapters three and four, when barefoot doctors entered the field, they also facilitated the network of hospital-centric medical care. If they could not provide the appropriate medical service, they would connect the patient with the nearest clinic or hospital.

This transition to the hospital was innocuous enough; certainly, the connection to specialists and surgeons promoted healing, however, the subsequent impact of Western medical epistemology must not be left unexamined. Hospital-centered births, with delivery rooms managed by male, biomedical doctors, altered the ways women gave birth by more than just location. The supine birthing position is a widely cited example of how changes in delivery practices can become standard even when it does not necessarily serve the patient. In the United States, prior to the 1800s, male doctors generally did not enter the birthing rooms, but births were instead supported by experienced women, who assisted the birthing women moving into different positions throughout the labor and delivery process. However, male doctors preferred for women to deliver on their backs because it was easier for the doctor to observe. As male doctors replaced midwives and other experienced women as the attending physician and women increasingly moved to the hospital after they entered labor, women also transitioned to the supine birthing position.[74] The displacement of women from labor and delivery through the marginalization of midwives in favor of doctors resulted in a shift in perspective towards male doctors' preferences rather than medical necessity. Moreover, as a male- and doctor-dominated space, the hospital was not a place where women could effectively negotiate labor and delivery practices. Hospitals also isolated the individual from communal support and input. This meant

[73] "婴儿四六风的预防法," *人民日报 The People's Daily,* March 25, 1949. "辽东岫岩县助产训练班的经验," *人民日报 The People's Daily,* April 27, 1950.
[74] Judith Walzer Leavitt, *Brought to Bed: childbearing in America 1750-1950,* (Oxford: Oxford Univ. Press, 2016), 7.

that over time, norms established in the hospital, such as the supine birthing position, became increasingly difficult to challenge because women did not have other experiences to weigh against their own.

This transition to this new birthing position was initially most common in the West, but as the number of Western-trained medical doctors and professionalized midwives increased in China, so did the prevalence of Western-style birthing practices. This occurred not only in hospital setting, but the standard trickled down through the other medical workers, such as midwives and barefoot doctors, who were trained in Western-style biomedicine. In *Gender of Memory,* Gail Hershatter states that new style midwifery was characterized, in part, by "having women in labor lie down rather than sit."[75] Given the vast geographic space of the PRC (much of which did not have hospitals or even clinics to support birth in earlier periods) it is impressive that this network of barefoot doctors was expansive and efficient enough to alter birthing practices so notably. While the movement of midwives and later barefoot doctors limited male doctors' direct influence because labor and delivery typically took place outside of hospitals until the 1990s, the epistemological network still conveyed values from the colonial medical system to people in rural and remote areas. As a result, this approach to labor and delivery displaced previous practices that involved equipment such as birthing chairs, which allowed women to adjust to sitting, kneeling, and standing positions in order to ease the process of labor and even make delivery less painful.[76] This is one salient example of how medical colonialism functions to disrupt patient options and displace cultural practices that can support healthy deliveries.

[75] Hershatter, Gender of Memory, 157. Hershatter specifically mentions "new style midwives" rather than barefoot doctors. Her interviews for the "Midwife" chapter are also focused on an earlier time period.
[76] Here is one example from Chen Chien-Pei's art exhibit "Midwife Overture." https://www.mocataipei.org.tw/en/ExhibitionAndEvent/Info/Midwife*Overture—Solo*Exhibition*by*Chen*Chien-Pei.

While the professionalization of midwifery often expanded the scope of midwife services to include pre-natal and early childhood vaccinations, biomedical standards also removed many of the cultural and social practices surrounding pregnancy and birth. This resulted in a split between the socio-cultural components of birth work and the strictly medical ones into the doula and the nurse-midwife, respectively. The nurse-midwife and new-style or government-trained midwives served similar roles in that their work was primarily medical. This was not an immediate transition, as the examples of midwife clinics in Taiwan attest. In some cases, midwife clinics maintained permissive attitudes towards allowing additional support people – husbands, friends, children – to accompany women through the long process of labor, but the midwife's training was focused on medical standards, not cultural practices. In both the United States and China, this created a gap in pre- and post-natal care needs. Over time, the socio-cultural role was filled by doulas, who differ from midwives in that they are directly employed by the birthing person, and they do not make medical decisions.[77] Doulas provide a range of support, depending on the individual, including pre-partum, delivery, and post-partum services. Some doulas even work as "death doulas," helping those through miscarriage and early-childhood death. Historically speaking, it is difficult to provide a sufficiently equal term for the modern doula, in large part because what a modern doula provides is community support.[78] In a society where women give birth at home, with access to their female relatives and friends, this community support is already available. It is also possible that what we may in retrospect refer to as midwife is actually more closely aligned with the modern role of doulas because although a doula is not a medical professional, they do have significant knowledge that can contribute to

[77] Zoe. Z Dai. "Maternal Healthcare and Doulas in China: Health Communication Approach to Understanding Doulas in China," (Radford: Spring Publishing, 2021), 2.
[78] "Doula" as it exists in the U.S. and the PRC now originated in the 1970s, coined by Dana Raphael.

better infant and maternal health outcomes. Recent work addressing maternal health in the PRC has shown that Chinese women are looking for a community to help them navigate the otherwise highly medicalized process of pregnancy and birth. While in the United States doulas have enjoyed some popularity since the 1970s, in China and Taiwan, doulas began integrating into the clinical setting during the mid to late 1990s.[79] Scholarship on doulas in the 2000s and the 2010s, indicates that high cesarean rate was one factor in the increased demand for doula support in Taiwan, while a demand for greater continuity of care around pregnancy.[80] In both cases, contemporary birth practices are limited in support and education. This is a consequence of the way medical colonialism reconfigures birth into a clinical setting.

Modern, hospital-centered delivery practices isolate individuals and their birthing experiences. It shifts the medical staff's accountability towards the institution, rather than the individual and replaces social and cultural practices with clinical norms. So, I am arguing that the emergence of the doula is a response to the way medical colonialism removes social and cultural support historically provided or permitted by healers. The contemporary nurse-midwife is a specialized medical professional, and while some do perform home deliveries, others work in maternity wards in hospitals. While some doulas are also employed in hospitals, they typically function outside of that system. Importantly, their main goal is to advocate for their patients.[81]

Birth control and family planning have a complex, shared history. During the twentieth century, two groups concerned themselves with birth control: those who wanted the ability to limit and plan their births for personal reasons and those who wanted to limit births as a way to

[79] Dai, "Maternal Healthcare and Doulas in China," 5.
[80] Chen-I Kuan, "'Suffering Twice: The Gender Politics of Cesarean Sections in Taiwan," (*Medical Anthropology Quarterly*, 28, Issue 3): 402. Dai, "Maternal Healthcare and Doulas in China," 9. Dai also acknowledges that doulas function primarily within the private hospital system.
[81] Doulas sometimes also conceive of themselves as bridges between patients and doctors, but recent discussions have focused on the important of the doula as separate from institutions. Discussion from Birthworksforhumanrights posted June 2 in response to https://www.prodoula.com/hospital-credentialing-for-doulas-yea-or-nay/.

curb population growth.[82] As infant and maternal health improved and infant mortality declined, women looked to birth control as a way to limit the number of children to which they would give birth. Other women wanted to abstain from pregnancy all together in order to maintain their autonomy, pursue career goals, and as part of feminist movements. In this way, access to birth control was an important facet of exerting bodily autonomy for many women, but the larger political narrative controlled access and use of contraception. Political debates about contraceptives in Taiwan and China intensified in the 1960s and 1970s, as both governments tried to address what they feared would grow into an unmanageable population. In Taiwan, the government incentivized the use of a form of IUD called the "Loop" as well as birth control pills by providing free initial care and conducting outreach.[83] Although the ROC government was concerned about the birth rate, as they estimated a similar natural decline in the birth rate as Japan experienced after World War II, they did not institute a highly interventionary policy. This, in conjunction with later marriages and a greater number of women entering the workforce, meant that a moderate attempt to make birth control accessible would result in the necessary decline in birth rate. It is worth noting that, although Taiwan did not implement stringent family planning polices as were carried out in the PRC, access to birth control and abortion were mitigated through state agents. By this I mean that Taiwan also had family planning workers who promoted the use of IUD contraceptives and facilitated the distribution of birth control pills. They were, thus, still a critical intermediary when it came to access and promotion.

The PRC's family planning policies, as covered in the previous chapter, are often used as an example of the ways high-level state policies interact intimately with individuals. When it

[82] Two groups, which, of course, sometimes overlapped.
[83] L.P. Chow, "Experience in Family Planning Program Evaluation in Taiwan, Republic of China," March 30, 1970, From Rockefeller Archive Center, no file numbers attached.

comes to the question of bodily autonomy, the enforcement of the One-Child policy demonstrates how state medicine was able to prioritize policies. The shift away from bodily autonomy can be seen in the placement of IUDS, which were reliable and long-lasting forms of birth control. Theoretically, the insertion and removal of these birth control devices needed to be mediated by a medical professional and were therefore less subject to individual misuse. However, it is clear from internal and publicly-available material that there was resistance to all forms of birth control, and as a result, it appears that some midwives and physicians placed IUDs in women directly after birth without their knowledge or consent to enforce the One-Child Policy.[84] In some cases, women used the string attached to the T-shaped IUD to remove it themselves in order to get pregnant again. This practice was common enough that it prompted the redevelopment of the Graefenberg ring with stainless steel. The circular shape of this IUD made it more difficult to remove without assistance. The early years of implementation of the One-Child Policy are perhaps the most extreme example of how bodily autonomy was displaced by a medical system, where the failure to adhere to family planning meant social stigmatization, loss of access to medical and education benefits, among other incentives.[85]

The earlier developments of medical infrastructure and moves towards hospital-centered (or at least hospital-connected) care contributed to the state's ability to enforce the use of contraception in the face of people's rejection of state policies. Again, the benefit of expansive medical infrastructure is increased access to standardized medicine, but state medicine functions on an exclusionary model. Even when, in the case of TCM in the PRC and the ROC, there is room for more than one form of medicine, they must all come under state regulation. TCM

[84] Jing-bao Nie, *Behind the Silence: Chinese Voices on Abortion* (London: Rowman & Littlefield Publishers, 2005), 176.
[85] Greenhalgh and Winkler, *Governing China's Population,* 112.

underwent a dramatic transformation in the second half of the twentieth century, which required leaders in Chinese medical circles to consolidate knowledge, choose methods to keep and discard, and then advocate for the utility of chosen practices.[86] This standardization and regulation of TCM and its practitioners was further supported in the PRC as a way to provide medicine when other options were not viable, as we can see by the relationship between barefoot doctors and Chinese herbalists.[87] As long as it was a medicine regulated by the state, it could also be leveraged by the state when necessary. Medical options, then, did not apply broadly, but only when state medicine determined it was permissible.

Conclusion

Modern medical systems are a by-product of relationships built between the state and medicine over the last two hundred years. Biomedicine attributes its superiority to its scientific objectivity, which has produced many critical medical innovations, but these innovations were also built on racist and misogynistic understandings of the world. Exploring the intersections between medicine, the state, and the people in East Asia illuminates the vestiges of these issues. Throughout this dissertation, I have examined the development of medical authority through trust-building initiatives and the exertion of medical power through institutionalized networks. While I have focused on birth work, every medical project carries similar burdens. Recently, movements to exercise greater influence and bodily autonomy have arisen globally, including an increased demand for the socio-cultural support through pregnancy, delivery, and postpartum in China and Taiwan. While modern medicine has much to offer patients, it was not designed to empower them as advocates for their own health nor treat their illnesses holistically. The co-existence of modern medicine and TCM indicates that governments can accommodate a wider

[86] See chapters 8 and 9 from Bridie Andrews' *Making Modern Chinese Medicine*, for an in-depth explanation.
[87] Fang, *Barefoot Doctors and Western Medicine in China,* 36.

variety of healing practices, but the history has demonstrated that the inclusion of these other forms of medicine are heavily mitigated through government regulation, and thus often contain the same problems as biomedicine.

The impact of medical colonialism and the development of medical power are part of global changes in the modern era, but that is exactly why they are so compelling to examine in China and Taiwan specifically. I began this research in an attempt to understand why the medical cases, TCM exists as a state-certified alternative to biomedical care and remains popular among both populations; something not available in a standardized form in the U.S. In addition, particularly in the PRC, attempts to remake medicine by and for the people was an important part of the state-building process during the Mao years, yet by 1979 it was clear that, when needed, extensive resources would be deployed to enforce medical policies even in the face of great opposition. The now defunct One-Child Policy has been debated in many disciplines of scholarship, but viewed as part of the history of medicine, it is an example of how medical power is not necessarily a by-product of liberal politics or capitalism. Rather, it shows that medical power is about the intervention of the state in the medical system.

The women from chapter one, who suffered the loss of multiple children, were likely (if only eventually) relieved when the state intervened to train new-style midwives. Those affected by early family planning initiative less than 15 years later might have felt the opposite. Others, still, certainly welcomed access to birth control. It was and remains a complex situation. Modern medicine has offered much to birth work. It has also sometimes taken too much. Modern states have offered much to support the development of scientific medicine. They have also sometimes done so at the unneeded expense of life and bodily autonomy.

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