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Gender, health, and labor in Thailand's medical hub

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A B S T R A C T

As global economic and political conditions shift, Asian countries have placed technologies at the center of their development strategies, fostering new levels of wealth and expertise, but also generating new inequities. Among the most successful of these state-supported strategies have been efforts to develop and invest in new medical technologies, and recruit patients willing to travel across national borders for health care, in a process known as medical tourism. Medical tourism has afforded countries like Thailand greater wealth and prestige, and can also increase disparities for people in destination countries by encouraging specialized and privatized services catered towards wealthier patients. However, sparse research has focused on how these state strategies to promote medical tourism affect the health outcomes of people in destination countries, nor on the gendered labor that supports these state strategies. This article fills these gaps by analyzing medical tourism in Thailand as a *gendered techno-development strategy,* or a state-sponsored initiative which incorporates gendered labor and technologies, while also creating gendered health inequities. The article bridges a political economy approach to global health with gendered analyses of health and labor. The analysis draws on 14 months of ethnographic fieldwork in Thailand, conducted in 2016 and 2017–2018, and in-depth interviews with 62 participants. It illuminates the gendered labor relations that help foster state development strategies such as medical tourism, as well as gendered health outcomes for people in a destination country.

1. Introduction

As global economic and political conditions shift, Asian countries have placed technologies at the center of their development strategies, fostering new levels of wealth and expertise (Ong, 2010; Wong, 2011), but also generating new inequities. Among the most successful of these strategies have been efforts to develop and invest in medical technologies, and recruit patients willing to travel across national borders for health care, in a process known as medical tourism (J. Connell, 2015). To facilitate medical tourism, states have developed new government policies, public-private partnerships, and infrastructures – with millions of patients crossing borders and billions earned annually worldwide (Beladi et al., 2019; Yılmaz and Aktas, 2021). Medical tourism has afforded destination countries greater levels of economic capital and political prestige, but can also increase disparities for local people by encouraging specialized and privatized services catered towards wealthier clients (Chen and Flood, 2013). However, scarce research has explored how these state strategies to promote medical tourism affect the health outcomes of people in destination countries, and even less has analyzed how gendered labor supports these state strategies. This article fills these gaps by asking: how do states incorporate gender, labor, and technologies through their pursuit of medical tourism as a development strategy? What roles do people within the destination country play in the state-led medical tourism initiative? And, how does medical tourism impact their health care access and health outcomes?.

While medical tourism exemplifies neoliberal shifts in the privatization and commodification of health care (Turner, 2007), national governments and state institutions worldwide have advanced medical tourism through distinct policies and strategies. Thailand is one such example, as the Thai government has formally promoted medical tourism since the 1997 Asian Financial Crisis (Wilson, 2010). Now a global leader in medical tourism, Thailand earned $1.8 billion dollars from health and wellness tourism in 2015 (Oxford Business Group, 2017), and approximately 3.5 million medical tourists were treated in Thailand in 2019 (U.S. International Trade Association, 2021). Alongside the growth of private hospital chains and businesses (e.g. hospitality and airline industries), the Thai government has reaffirmed its commitment to medical tourism as a development strategy through the "Thailand 4.0" initiative. Launched by the government in 2016, Thailand 4.0 aims to promote five new engines of development and innovation through 2025, including robotics, aviation, biofuels/biochemicals, digital industry, and advancing the country's role as

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a "medical hub" for foreigners (Board of Investment, n.d. 1, 2).

A distinct dimension of the Thailand 4.0 plan is to bolster the country's already-existing reputation as a destination for cosmetic and gender-affirming surgeries (Board of Investment, n.d. 1, 2), the latter encompassing procedures that modify genital and non-genital characteristics, including breast augmentation, nose reshaping, or vaginoplasty. Thai transgender women – a distinct, heterogenous, and ever-changing third gender group (Jackson, 2011) – have worked in private medical tourism clinics catered towards wealthy foreigners, and have appeared in private health care marketing materials to attract medical tourists (Aizura, 2011; Enteen, 2014). With the Thai government appropriating resources and crafting policies to advance the medical hub, the country offers a lens to understand how state development strategies such as medical tourism incorporate gender, technologies, and labor – while affecting health outcomes for people in destination countries.

To explore these issues, my analysis draws on 14 months of ethnographic fieldwork in Thailand and in-depth interviews with 62 participants, including Thai transgender women, health and tourism state officials, civil society members, private hospital CEOs, health care providers, and others involved in Thai entertainment tourism and medical tourism industries. Bridging political economic approaches to global health with gendered analyses of health and labor, I argue that state efforts to support medical tourism in Thailand must be understood as a *gendered techno-development strategy* – that is, a state-led, technology-driven plan that relies on gendered labor, and produces inequities in both labor and health **–** in this case, specifically for transgender people.

I demonstrate how Thai transgender women's physical and symbolic labor helped establish the foundation for Thailand's medical hub initiative and Thailand 4.0. Thai state agencies strategically promoted gender-affirming surgeries to foreigners only after Thai transgender women had initiated demand for the procedures. Thai transgender women helped facilitate the state's medical tourism development strategy through their own consumption of medical technologies; their labor in private clinics (Aizura, 2011); their symbolic labor in publications by private clinics and Thai state agencies; and their broader reputation in entertainment and tourism industries. However, while supporting the growth of medical tourism, Thai transgender women now experience health inequities, including the inability to pay for high quality gender-affirming medical services, and indignity and discrimination in public hospitals for acute and basic health care services.

This article adds to research on the political economy of global health (Birn et al., 2017; Keita, 2007) by analyzing how the Thai state and private sector convert health care into economic capital, with vastly unequal effects. Within the context of neoliberal globalization and transnational flows (Bell and Figert, 2012), the article focuses on the interplay between health and health care, gendered labor, and state development projects – especially those geared towards technological growth. The gendered techno-development strategy of medical tourism illuminates the often-unseen social actors and processes integral to state development and global health care sectors (Harris, 2017), specifically how gendered labor and technologies support political and economic growth (Hoang, 2015). Contextualizing Thai transgender health against the backdrop of medical tourism, the article expands our understandings of the social, political, and economic conditions that undergird gendered health inequities worldwide (R. Connell, 2021; Mojola, 2014). It highlights the embodied pitfalls of Asian biotechnology development strategies (Ong, 2010; Wong, 2011) by elucidating the inequitable effects of medical tourism (Alsharif et al., 2010; J. Connell, 2015; Sengupta, 2011), particularly for people in destination countries.

1.1. *Medical tourism as a gendered techno-development strategy*

As a convergence of the tourism and health care sectors, medical tourism involves sightseeing deals, hotel discounts, and airfare packages along with health services and medical procedures (J. Connell, 2015, p. 16). Due to the multiple institutions, social actors, and policies involved, medical tourism can be viewed as an assemblage, which incorporates state and private initiatives, technologies, cultural discourses, global trade agreements, and various industries (Holliday et al., 2015). Using an assemblage lens, research has analyzed the various networks and connections between travelers, technologies, institutions, and discourses in cosmetic surgery tourism, demonstrating historical underpinnings - as well as gendered and racialized components (Holliday et al., 2015). This research has analyzed the cultural ideals that manifest in health care settings worldwide – and the relationship between medical services and national pride – yet it has not thoroughly assessed how state strategies specifically advance such assemblages. Nor has much research focused on how transnational health assemblages are connected to gender, labor, or health outcomes of people in destination countries.

Governments worldwide have created national development plans to target medical tourism in countries such as Singapore and Malaysia (Leng, 2010), Thailand (Pitakdumrongkit and Lim, 2021; Sunanta, 2020), Turkey (Yılmaz and Aktas, 2021), and Latin American countries (Beladi et al., 2019, p. 121). To highlight the role of the state in advancing medical tourism, scholarship has conceptualized medical tourism as "post-developmental nation building" (Ormond, 2013, pp. 10, 16), in which governments shift from "inward" development strategies that focus on national self-sufficiency to state entrepreneurial plans connected to global enterprises (e.g. from manufacturing to knowledge economies). Governments create incentives through foreign direct investment, new visa policies for medical travelers from particular nations, and public-private partnerships. Although research has highlighted the role of governments in advancing medical tourism worldwide, scholarship has focused less on how gender figures into medical tourism development strategies – whether through the gendered labor that supports medical tourism, or the gendered health effects that incur.

States facilitate economic and political growth not only through medical tourism and technologies more broadly, but also through gendered labor. Labor in the global economy involves "strategic gendering" (Sassen, 2010), and the term "gendered labor" has been used to distinguish the global divisions of work based on gender (Moghadam, 1999, p. 379). Gendered labor encompasses the gendered roles and expressions that are incorporated and institutionalized in global workplaces, often involving "domestic, sexual, and affective labor" (Velasco, 2020, p. 1). Scholarship has expanded research about transgender experiences in U.S. workplaces (C. Connell, 2010) to theorize the specific labor roles, interactions, and expectations for transgender people in a global economy (David, 2015). Research has also examined some of the labor dynamics of medical tourism, demonstrating how gender, race, class, nationality, and ethnicity produce new workers and subjectivities within transnational health care markets (J. Connell and Walton-Roberts, 2016; Kaspar et al., 2019; Sunanta, 2020). However, much of this work has focused on health professionals and formal/informal caregivers in medical tourism, leaving gaps about the more diffuse entanglements of medical tourism and labor beyond health care settings. As states and industries structure and depend on labor roles that are differentially assigned to cisgender and transgender people within a global order (David, 2015), sociological research has mostly left untouched medical tourism as a state development strategy that incorporates gendered labor and technologies, while creating unequal health outcomes for people worldwide.

Research has called for a greater focus on health equity implications of medical tourism (Alsharif et al., 2010). Instead of solely focusing on the experiences of medical tourists, scholars have assessed the negative impacts of medical tourism on public health sectors (NaRanong and NaRanong, 2011; Nooseeisai et al., 2016; Noree et al., 2016; Sengupta, 2011). In destination countries, medical tourism can prompt a “brain drain” and “resource drain” of medical expertise and health technologies from public to private sectors, with local people "crowded out" of health services as foreign patients are targeted instead (Cerón et al., 2019; Pocock and Phua, 2011). Yet, we still know relatively little about how state-sponsored medical tourism policies impact health care access, resources, and health outcomes for people in destination countries, and especially for those across sex and gender spectrums.

To fill these gaps, this article conceptualizes medical tourism in Thailand as a *gendered techno-development strategy*, a purposeful state effort that advances technological growth by incorporating gendered labor, with distinct health effects. The concept transcends individual bio-behavioral models of health by analyzing how state-sponsored technological growth (such as through medical tourism) relies on gendered labor and affects embodied health outcomes. The gendered techno-development strategy underscores the gendered components and impacts of state development projects – in this case, for transgender people, who face unique barriers to health and health care, and employ various tools of resistance across time and place (R. Connell, 2021; Hanssmann, 2020; Reisner et al., 2016; shuster, 2021).

2. Methods and epistemological orientation

The article draws on in-depth interviews with 62 participants, and 14 months of fieldwork in Thailand, conducted in 2016 and between January 2017 and February 2018. The fieldwork took place in the Bangkok metropolitan area, Nonthaburi, Phuket, and Pattaya, which are prominent sites for medical tourism and/or places where many Thai transgender women live and work. During fieldwork, I conducted 58 interviews, one of which was via e-mail and one via video conference. Six additional interviews were conducted in 2020–21 via video conferencing, with one civil society member, three Thai transgender women living in Songkhla province, and two follow-up interviews with Thai transgender women who were previously interviewed during fieldwork (see Chart 1 and Table 1).

Table 1
36 Thai transgender participant demographics.

Age	Between 19 and 44 years old, average age of 27
Education	
Master’s degrees	3
Bachelor’s degrees	10
University students	7
High school graduate	10
Middle school graduate	2
Did not report	4
Employment	
Worked full-time	24
Worked part-time/freelancer	4
Full-time students	7
Unemployed	1
Average income for full-time workers	17,430 baht/month ($550 USD)

In 33 interviews with Thai-speaking transgender women, I was assisted by Thai interpreters who were familiar with the specificities of sex, gender, and sexuality in Thailand; they also translated and transcribed the interviews conducted in Thai. Thai transgender women were recruited through a transgender health clinic and snowball sampling, in which participants referred me to other potential participants; this strategy helped increase the sample diversity and mitigate risks of sampling bias. In accordance with the norms of the transgender health clinic, Thai transgender women were compensated for their time. All interviews were recorded for accuracy and edited slightly for grammar and coherence, and coded in NVivo. All health care facilities and participants are referred to in the text by pseudonym; in keeping with Thai cultural norms, I use pseudonymous nicknames rather than full first names.

During fieldwork, I visited various health care sites, including public hospitals serving mostly Thai people, private clinics and hospitals serving medical tourists, as well as public and private health care facilities in Singapore and Malaysia to better understand the regional dynamics of medical tourism. I spent time with Thai transgender women at their workplaces, and attended several LGBTQ activism events in Bangkok, and regional civil society meetings about transgender health and social rights. I triangulate the observations and interview data with

36 Thai transgender women

6 health care professionals

6 Ministry of Public Health officials

4 civil society members

2 Thai transgender cabaret owners

2 private hospital CEOs

1 medical tourism publisher

1 medical tourism facilitator

1 Thai transgender beauty pageant creator

1 Tourism Authority of Thailand executive

1 United Nations-related agency representation

1 medical tourist

Chart 1. Participants.

analyses of state policies, publications about Thailand 4.0, and news media reports. Building off research on the discursive construction of medical tourism (Turner, 2007), I analyzed marketing materials appearing on blogs, in private hospitals, and from state agencies. The research was approved by Institutional Review Boards in the United States and Thailand.

Power relations are embedded in research from the Global North (R. Connell, 2021), which I attempted to mitigate by involving participants in all phases of the research process (Gkiouleka et al., 2018, p. 97). While I refer to participants as a whole as Thai transgender women and recognize the imperfections of this categorization (Aizura, 2018; Hanssmann, 2020; Valentine, 2007), I refer to each participant using the terminology they used to identify themselves. Some identified as "*sao praphet song*," which translates to "second kind of woman." Others found that word offensive, stating it denoted they were second-class citizens. Many found the commonly used word "*kathoey*" derogatory, while others stated that they would be stereotyped by society no matter which identity category they used. By focusing on transgender women and not employing a parallel case to understand cisgender people's experiences, there arise risks of exoticizing transgender people in research (Valentine, 2007). However, focusing on transgender women helps center the experiences of people often excluded from narratives and policies about health and health care (Hanssmann, 2020; Reisner et al., 2016; shuster, 2021), labor (C. Connell, 2010), and the global political economy (David, 2015; Irving, 2008).

3. Findings

In the sections that follow, I first analyze medical tourism in Thailand as a gendered techno-development strategy, spotlighting the role of Thai transgender women in catalyzing and promoting the global commodification of gender-affirming surgeries for foreigners. I demonstrate how Thai transgender women formed the initial demand for gender-affirming surgeries, and then advertised the global industry through physical and symbolic labor – representing both medical technologies and LGBTQ diversity. I then focus on Thai transgender women's health inequities in the context of medical tourism, in private and public health care settings. As a result of their successful work promoting medical tourism, they were crowded out of high-quality gender-affirming health care (as it was directed to medical tourists), and experienced discrimination and mistreatment in public health care settings. Public hospitals are organized into binary male or female wards, nurses have refused to bathe and care for transgender people, and Thai transgender women face embarrassment when they are publicly misgendered in health care settings.

3.1. State promotion and gendered labor of medical tourism

The Thai state has long supported and promoted medical tourism as a development strategy amid changing geopolitical and economic conditions. Medical tourism in Thailand is assembled from global, regional, national, and local conditions – including the Vietnam War, 1997 Asian Financial Crisis, government policies, and Thai transgender women. Although Thailand was never formally colonized, imperialist or "cryptocolonial" relations have influenced Thai economic and political arrangements (Herzfeld, 2012), including the growth of medical tourism. For instance, the United States began training Thai doctors in plastic surgery after the many physical injuries suffered by soldiers during the Vietnam War (Wilson, 2010, p. 128). After the 1997 Asian Financial Crisis during which the Thai currency plummeted, medical tourism became the national solution to economic instability (Wilson, 2010), p. 132). During this time, structural adjustment packages from the International Monetary Fund also constrained government spending (Harris, 2017, p. 253), and the Thai state turned to domestic and foreign investors, and tourists, to spark economic recovery. Alongside strategies enacted by private hospitals, the government created tax incentives for foreign investors in medical technologies (Supakankunti and Herberholz, 2011, p. 148). Additionally, the government created new visa categories for medical travelers.

The Thai government further formalized the medical tourism development strategy in 2003 through the "Center of Excellent Health Care of Asia" initiative, recruiting patients and investors from international events, and launching tax exemptions for investment in health facilities that targeted medical tourists (Noree et al., 2016, p. 30). From the beginning, gender-affirming surgeries were highlighted in the state's advancement of medical tourism in Thailand. In the 2000s, for example, a government-produced medical tourism iPhone application listed a drop-down menu for procedure options, including lasik procedures, dental treatments, and "sex reassignment surgery." With the launch of Thailand 4.0, gender-affirming surgeries – referred to in state publications as "sex reassignment," "sex change," or sometimes bundled under "cosmetic" surgeries – continue to figure in the state's Thailand 4.0 medical hub strategies. For instance, the Thai Board of Investment published a brochure entitled "Thailand's Medical Hub," describing the 2016–2025 medical hub policy; the brochure states that Thailand offers not only cancer treatments or heart surgeries, but also "sex change operations" (Board of Investment, n.d. 1).

These state strategies, however, were dependent on the bodies and labor of Thai transgender women from the beginning. A revealing example of the Thai government's gendered techno-development strategy is the experience of Dr. Somchai (a pseudonym), one of the most prominent gender surgeons in the country and world. Dr. Somchai was trained in vaginoplasty by a Thai "pioneer" surgeon, and began practicing in a private clinic in the 1990s. Dr. Somchai reported that his initial patients were roughly 60 Thai transgender women a year, many who worked in entertainment venues such as cabarets, and "very few" foreign patients, who had learned about his work through word of mouth. During the 1997 Asian Financial Crisis, hospital executives and the Ministry of Public Health (MOPH) incorporated Dr. Somchai's medical services into a larger government strategy to attract foreign patients when Thais could no longer afford services in private hospitals. Officials from the MOPH, provincial health offices, and hospital executives invited Dr. Somchai to meetings and events, coordinating with the media to publicize his practice. After making headline news, Dr. Somchai recalled that the international demand for his gender-affirming surgeries accelerated "like a bomb."

Indeed, while the Thai state and private hospitals have benefitted from this boom in medical tourism for gender-affirming surgeries, it was Thai transgender women's travel and migration that first paved the way for this gendered techno-development strategy, as they spread the word about Thai surgeries to foreigners. In my interview with Dr. Arun, who has been performing gender-affirming surgeries in public and private settings for several decades, he recalled: "The Thai transgender people traveled abroad, and they have their own [transgender] community, so they talked to each other … so I think that's why patients from around the world started to come here." Thai medical tourism originated not just from "cosmetic surgery," presumably for cisgender people (Cohen, 2008, p. 27), but distinctly gender-affirming surgeries, the demand for which was initiated by Thai transgender women themselves – not foreigners.

Thai transgender women have also played a role advancing medical tourism by working in gender surgery clinics, teaching patients how to apply makeup during their convalescence and serving as an embodiment of surgical success (Aizura, 2011). This affective, or emotional, labor demonstrates the gendered behaviors that help facilitate cross-border consumption of medical technologies. In addition, gender clinics use images of Thai transgender women in marketing discourses to promote surgical technologies (Aizura, 2011, p. 154; Enteen, 2014). Thai transgender women have performed highly visible roles in the entertainment industry, including cabarets and beauty pageants; as part of the larger tourism industry, this work often involves them accessing gender-affirming services to become emblems of "ultra-femininity" (Aizura, 2011, p. 154; Interview Data). Through their broader work in

the entertainment industry, Thai transgender women have bolstered the country's reputation as welcoming of diversity, becoming brands of medical technologies and icons of an LGBTQ-friendly Thailand.

In addition, the Tourism Authority of Thailand (TAT, n.d.) strategically featured Thai transgender women in its website marketing brochures and YouTube videos, advertising Thai surgeries to English-speaking foreigners. For example, the promotional pamphlet, "Thailand is a Global Center for Sex Change Operations," which was available on the Tourism Authority of Thailand (TAT) Medical Tourism Portal website around 2010, included a photograph of seven Thai transgender beauty pageant contestants juxtaposed with a list of gender-affirming procedures offered. The TAT brochure was accompanied by a 2010 YouTube video of the same title, which included in its acknowledgements Miss Tiffany, a Thai transgender cabaret. In interviews, Thai state officials explicitly linked Thai transgender women to Thailand's growing economic prosperity through its reputation as a medical tourism hub. In response to a question about Thailand's popularity as a destination for gender-affirming surgeries, Kannika, an MOPH official replied: "[T]he transgender women in Thailand: they win the beauty queen competitions, and if you see them they are very beautiful, so I guess Thai doctors have a lot of cases to practice on!" In this speculation, Kannika drew on the image of Thai transgender entertainers as evidence of how Thai doctors have grown their skills performing gender-affirming surgeries, becoming safe and reputable for global consumers. This also suggests that local people serve as "practice" for global customers, implying a hierarchy of who receives more fine-tuned services.

Prameth, a TAT executive, suggested that Thai transgender women have played a role in symbolizing Thai surgical advancements and advertising medical tourism: "In terms of [medical tourism] promotion, maybe we have an advantage from the reputation of the Thai 'ladyboy' or Miss Tiffany [transgender cabaret] Show. They can prove what is made by the Thai doctor." By "proving" the talents of Thai surgeons, Thai transgender women, specifically those in the entertainment industry, have formally and informally advertised the legitimacy of Thai medical technologies, as well as an ideal of transgender cultural acceptance.

Medical tourists seeking gender-affirming surgeries may be drawn to Thailand not only because of the medical legitimacy symbolized by Thai transgender women, but also because of the narrative of tolerance they represent. Kali, a transgender medical tourist from New Zealand, said that the reputation of Thai transgender women helped her make the decision to travel to Thailand for surgeries, stating: "I definitely think Thailand is very LGBTQ-friendly … [I]t influenced my decision because they're known for trans people and sex changes." Pravat, an official from the MOPH, stated: "You can see in some touristy places like Pattaya or Phuket, transgender people are superstars – they are celebrities – so we are quite open to that." His comments affirm that the country is known as an accepting place for transgender people due to Thai transgender women's prominent roles working in tourist hubs. In a Thai magazine on medical tourism sponsored by government agencies, the cover reads, "Quick Sex," with a subtitle stating: "Crossing Barriers: Thailand's transgender surgery attractions include first-class transgender surgeons, third-class prices, and a tolerant culture." Along with the cost-savings and "first-class" medical expertise, the magazine promoted the "tolerant culture" of Thailand, signaling the convergence of medical tourism with global norms of diversity. Yet Thai transgender people do not typically benefit from Thailand's reputation as queer-friendly, as researchers and activists have long complicated the "myth of the Thai gay paradise" (Jackson, 1999; see also Pramoj na Ayutthaya, 2007).

As Thai state agencies actively shift the country's reputation from sex tourism to a health destination (Nuttavuthisit, 2006, p. 28), TAT and MOPH officials acknowledged Thai transgender women's formal and informal roles in advancing medical tourism, elucidating how they perform "display work," in which their physical appearance is a service (Mears and C. Connell, 2016). As images of a Gamma Knife are used to symbolize medical advancements in medical tourism promotional materials (Turner, 2007, p. 311), Thai transgender women showcase medical technologies and LGBTQ acceptance to foreigners, capturing tourist attention and currency.

To summarize, medical tourism is a gendered techno-development strategy, or a national development plan that relies on technologies and gendered labor in a global neoliberal order, and impacts health outcomes. Thai transgender women formed the initial demand for gender-affirming surgeries. They helped the state propel the gendered techno-development strategy of medical tourism through their travel and migration, their work in gender clinics, and display work in the entertainment industry and state/private promotional materials, representing medical technologies and LGBTQ acceptance. As I now discuss, Thai transgender women have faced barriers accessing clinically- and culturally-competent health care alongside the state's medical tourism plans.

3.2. *The crowding out effect*

Dr. Somchai now works in a multi-million dollar plastic surgery center within a large private hospital network. Seated together in his light-filled office with lush green trees outside, he explained that his surgery prices have increased roughly 400 percent since the time Thai transgender women were his patients. With his patient population shifting from Thai transgender women to mostly foreigners, Dr. Somchai explicitly acknowledged the multiple tiers of health care services in Thailand, remarking that Thai transgender women can still receive services from less expensive health care facilities. He said: "They can go to cheap surgeons, like Dr. Bank at Nuun Clinic. There is a handful of Thai plastic surgeons and general surgeons who offer very cheap surgery. They offer simple surgery at a cost like $2000." Although Dr. Somchai characterizes the surgery at Nuun Clinic as "simple," some online reviews and interview participants described it as a "mortuary" and "a hell," notorious for its lower quality services.

In contrast to the 60 internationally-accredited health care facilities in Thailand (JCI, 2022), several Thai transgender women discussed their experiences with botched surgeries from low-quality or unregulated clinics. Kitti, who preferred no label, had breast augmentation and testicle removal at Nuun Clinic, and said she did not receive any anesthesia for her surgeries. She said: "For this clinic, they don't use sleep anesthetic but use sleep [medication] and [topical numbness] anesthetic mixed together. Because if we use complete sleep anesthetic, we need to wait for an anesthetist. It wastes time. And there is no [inpatient] admission. We just have two hours of recovery." As Jin, a beauty pageant winner who identifies as *sao praphet song,* remarked, the number of gender clinics has expanded with the growth of medical tourism to include some clinics which are "less responsible." Jin experienced botched procedures, with silicone dropping from her forehead to her eyes, as well as scars and keloids forming after nose and eye surgeries. Jin said: "My scars looked like centipedes, so I decided not to have genital surgery since I'm afraid the results will not be good."

In addition to lower quality services and facilities, some Thai transgender women said that the interactions between health care providers and patients are compromised in settings such as Nuun Clinic. Nin, who preferred no label and went to Nuun Clinic for breast augmentation, said: "The customer relations are very bad … I think the nurses are too harsh … The words they use and attitude they show are too harsh. I just feel hurt while they speak to me badly … 'Hey, you should treat me better, shouldn't you?'" In comparison to other health facilities, especially those which are internationally-accredited, Thai transgender women who were crowded out and could not afford the cost of these clinics lacked access to basic levels of quality surgical procedures, including the use of anesthesia, time for bed rest, and appropriate follow-up care.

The experiences of Thai transgender women contrast with those of Kali, a medical tourist who traveled to Thailand for genital

reconstruction, breast augmentation, and five facial feminization surgeries, and said her experience was very positive. Kali recalled: "Thailand is so much better [than Australia, where she also had surgeries] when it comes to aftercare because they really take care of you during recovery … Once I left the hospital, I had a nurse visit me daily to check up on me, change my dressings and to help me out with anything I needed." In comparison to other health care facilities, especially those which are internationally-accredited, Thai transgender women sometimes lack access to basic levels of quality surgical procedures, including the use of anesthesia, time for bed rest, and appropriate follow-up care.

Civil society members, MOPH officials, and health care providers in Thailand all expressed concerns about brain drain and crowding out effects in Thailand. A 2014–2018 MOPH strategic plan on medical tourism also explicated the need alleviate any adverse effects of medical tourism (Pitakdumrongkit and Lim, 2021, p. 455). According to Dr. Arun: "Since the private hospitals have a lot more money and doctors are better paid – sometimes tenfold than in government hospitals – you can imagine many doctors are drained to [working in the private sector], so that's a problem." At the same time, Thailand's position in the global economy creates differential health care access and outcomes for Thais versus medical tourists, as a government-sponsored medical tourism magazine had touted "third-class prices" to foreigners. For many Thai people, whether cisgender or transgender, cost barriers or rural location can prohibit access to quality medical care in private urban settings. Yet for all the wealth they bring into Thailand, Thai transgender women are rarely wealthy themselves, and can face difficulties accessing basic culturally-competent health care, sometimes seeking surgeries in "shophouses," or rooms rented in hospitals (Aizura, 2011, p.150).

While Thai transgender women formed the bedrock of medical tourism by initiating demand for gender-affirming surgeries, medical tourism has exacerbated a tiered health care system, in which surgeons such as Dr. Somchai now treat wealthier, mostly foreign patients who can afford exponentially more expensive services. Thai transgender women's experiences with "less responsible" clinics demonstrates that medical tourism does not just create a "brain drain" of medical personnel from the public health care sector to the private, but also creates various tiers of quality services within the private sector. Nuun Clinic reflects the proliferation of unregulated and lower-quality private health care services, and the sharp contrast between the spaces serving locals versus medical tourists.

3.3. Public health care inequities

While crowded out of higher-quality private health care settings, Thai transgender women also face inequities in public health care facilities, particularly as the government promotes the medical hub for foreigners. Public hospital infrastructure concretizes the sex and gender binary with male and female wards, sometimes proving inadequate for Thai transgender people. According to Patcharin, a Thai LGBTQ activist, health care in Thailand is:

> … similar to other institutions that do not recognize more diversity in the people – so they assume people to be men or women and to be heterosexual, and most people who don't fit those criteria are trying to find their ways to go about in the health care, and other institutions, as best they can. But sometimes they run into some humiliating experiences.

Among such experiences, Patcharin described doctors putting their hands in the pants of masculine-presenting women, grabbing their genitals to ask if they are a man or woman. She continued: "There are stories of transgender women [in hospitals] who were refused to join female wards and refused to join in men's, and put in the corridor because there is no ward to go to. When these things happen, they are out of sight by their communities and it happens when you're most vulnerable – so people can't defend themselves or get services." The binary organization of hospital wards as only male and female, and interpersonal relations that take place between provider and patient, are key areas of inequity for Thai LGBTQ people in public health care settings.

Som, who preferred no label, said that she was refused care by nurses several years ago due to her gender, stating: "When I was 20, I had a severe car accident …. The nurses asked me to take a shower and wash my hair by myself. Despite my open forehead, they still insisted on denying my request for help." Som also spoke of her experience sleeping in a male hospital ward, stating: "At that time, my hair was very long, so people just stared at me and my name tag because my title is 'Mister,' but I look like a girl. And people interrogated and laughed at me a lot …" Som's experience was not an isolated nor particularly exceptional one. Sunny, a *sao praphet song,* was also hospitalized for a severe car accident, and said that doctors were "treating [her] as a male patient rather than female." Sunny recalled:

> When I had to be washed up, for instance, they were slightly reluctant whether a male or female nurse needed to handle the task in order to look after me. Then they decided to ask my parents to be responsible for this task instead of themselves.

Similar to Som, Sunny encountered nurses who refused to bathe and care for her, delegating the task to her parents instead. MOPH official Dr. Wirat acknowledged that the lack of clinic and hospital wards for transgender people is a distinct issue in the public health care setting. He stated:

> I think the system needs to change. For example, in the inpatient wards, we have only male and female wards for our patients and if you are transgender sometimes it's difficult for the health care provider, for the nurse, for the doctor. [We don't know] which ward we should put patients in, either the male ward or female ward.

Despite this awareness, policies have not yet adapted to allow transgender people to receive care based on their identities, rather than sex assigned at birth.

Since Thai transgender people cannot yet change their legal identification cards to reflect their genders, several Thai transgender women were called "Mister" in public hospital outpatient waiting rooms, even though they identify and present as women. Fai, a Thai transgender woman, described her experiences in outpatient departments of public hospitals:

> I dress up as a woman, and I am a woman, but at the outpatient department they call the title of your name in front of 100 or 300 people. Have you ever been to a government hospital at 6am and 200 people are lined up very crowded? And if you are transgender and they call "Mr. Fai, Mr. Fai," and you have to show up, and you walk to the counter and the announcer keeps saying 'Mister,' and you have a very big disagreement … And nobody wants to face that kind of situation. So if you feel sick, you take self-medication and buy medicine over the counter in the drugstore – and it doesn't fit your symptoms.

Facing humiliation and confusion from their legal identification cards, Fai stated that some Thai transgender people might avoid public hospitals altogether and instead treat, and possibly mistreat, their symptoms on their own. The binary organization of health care facilities can dissuade Thai transgender people from seeking care, especially as they might hear about negative experiences through word of mouth.

Many Thai transgender women said they would opt to pay more to receive care in a private health care setting, where they can access their own room and won't face issues in the outpatient department of public health facilities. Nan, who preferred no label, asserted that access to economic capital is a determinant of health care choices and outcomes:

> It seems that if you don't have money, you will get less choices and another kind of treatment from hospital staff. I think it is because the system, that if you have more money, you get a special room, and you can have more privacy. But if I don't have money, I need to stay in a

normal room with a bunch of patients, and face the binary gender system. So it is about how much money you have. If you don't have money, you need to wrestle with these kinds of problems, such as staying in a male ward or [facing] discrimination.

Nan emphasized that Thai transgender people must pay extra to receive *basic* clinically- and culturally-competent health care, encapsulating a core element of the gendered inequities that arise as Thailand 4.0 evolves. Som echoed:

The binary opposition of gender categories affects medical doctors and medical services - [with] separate male buildings and female buildings - and trans people face difficulties because they don't fit in those boxes. Trans people don't want to access medical services because they know from word of mouth what they have to face - they don't want to go to a public hospital. And that is a barrier because at a public hospital, maybe they pay less and they can also use public health insurance; but they don't want to go, and they have to pay more at a private clinic …

Especially for transgender people who may also experience employment discrimination and difficulties securing steady income (Interview Data), the necessity to pay more for basic health care in a private setting is particularly insidious.

As an example of the inequities that persist amidst medical hub strategies, health care professionals may also demonstrate implicit or explicit biases towards transgender people more broadly. Dr. Wirun said that while medical personnel at private hospitals can be more "open-minded" towards Thai transgender women, the public healthcare system might not be as prepared to handle transgender diversity due to stereotypes about transgender people. He explained: "People can be conservative on this. They don't want this group of trans people to come and then act weird – [makes loud noise] – in patient wards sometime." Dr. Wirun emphasized that stereotypical beliefs about Thai transgender people might manifest in health care settings and encounters. Dr. Wirat at the MOPH expressed that Thai society does not completely accept Thai transgender people and some "feel it's not natural." Taken together, Drs. Wirun's and Wirat's comments elucidate how negative societal beliefs of Thai transgender people can become institutionalized in health care policies, settings, and practices. For foreigners who come and go, Thailand might be a place for transgender acceptance, but for local transgender people, such freedom is not nearly as accessible.

Additionally, universal health coverage (UHC) does not include gender-affirming surgeries, so Thai transgender women cannot access such services as part of their public insurance plan, demonstrating how health care access is still "uneven" for certain groups (Harris, 2013). Gender-affirming surgeries are offered in some public hospitals, but the wait is typically years long. Transgender people must also pay out of pocket for hormones and other gender-affirming health services. For Patcharin, UHC in Thailand "is noble but doesn't address LGBT health care." Dr. Wirat added that providing transgender health services under UHC would be "too much" for public approval.

As the medical hub expands under Thailand 4.0, Thai transgender women themselves experience distinct difficulties in public health care settings, including embarrassment and refusal of care, sometimes paying more for basic care in private settings. Their experiences contrast with transgender medical tourists such as Kali, who may instead receive the "Rolls Royce treatment" in private, more expensive clinics (Aizura, 2011, pp. 143, 148).

4. Conclusion

Medical tourism in Thailand is a gendered techno-development strategy, a state development plan that advances technologies and incorporates gendered labor, while impacting health outcomes for people in destination countries. Bridging the political economy of global health with analyses of gendered labor, the article reveals how nation-states are inextricably linked with both gendered labor (David, 2015; Hoang, 2015; Vijayakumar, 2013; Radhakrishnan, 2008) and technologies (Jasanoff, 2004; Winichakul, 1994; Wong, 2011) – with great effects on health outcomes. Conceptualizing medical tourism as a gendered techno-development strategy pinpoints how the state incorporates Thai transgender women's physical labor and display work (Mears and C. Connell, 2016) to advance its own transition to Thailand 4.0 and promote medical hub initiatives. In addition to global and regional conditions such as the Vietnam War and 1997 Asian Financial Crisis, Thai transgender women helped grow the state's medical tourism strategy by: 1) informally raising awareness of Thai surgeries through their engagement in a transnational, transgender community; 2) serving as "proof" of the skills of the medical providers, and thus featured in marketing by state and private actors; 3) providing gendered labor in medical facilities (Aizura, 2011) – both as embodying surgical outcomes and facilitating medical tourists' affective responses to their surgeries (e.g. helping with cosmetics); and 4) through their broader labor and reputation in tourism hubs and the entertainment industry, representing an image of an overall accepting, tolerant, affirming experience for tourists. As the state promotes medical tourism, the article underscores the global social production of health inequities, focusing on Thai transgender women's experiences being crowded out of health care services; with lower-quality or unregulated clinics and doctors; their mistreatment in public health care settings; and their insufficient health insurance coverage.

With health care practitioners and policymakers still expressing negative beliefs about transgender people, Thai transgender women experienced discrimination and difficulties in public health care facilities. MOPH officials such as Dr. Wirat were aware of the fact that hospitals that do not have proper rooms for transgender people, yet policies have not yet been implemented to amend this. Although Thailand is a landmark case for the passage of universal health coverage (Harris, 2017), the onus often falls on Thai transgender people to secure adequate health care themselves, sometimes paying extra to afford basic health services in private settings. Rather than ban or exclude gender-affirming services from health insurance policies worldwide, it is imperative that these services are designated as essential.

While Thai transgender women helped catalyze Thailand's transition to a medical hub in the era of Thailand 4.0, their rights are decentered and often ignored by the state, underscoring the need for greater protections and state accountability for the lives of transgender people worldwide (Hanssmann, 2020). This includes allowing them to change their legal identification cards to align with their gender identities. State agencies must regulate clinics and health care facilities more thoroughly to ensure safety. Health care providers should be frequently trained in LGBTQ-competency, and health care infrastructure made inclusive for transgender and non-binary people. COVID-19 has also exacerbated queer and transgender people's access to health care, social services, and employment worldwide, and greater governmental and institutional support must address their precarities. It is doubtful that government subsidies, which encourage private sector growth and advance medical tourism (such as tax incentives for building hospitals) benefit broader public health aims (Pocock and Phua, 2011, p. 6). Policies and government regulations can make medical tourism more equitable for people in destination countries (Hopkins et al., 2010, p. 193; Labonté et al., 2018), such as using medical tourism revenues to address inequities, and working to achieve universal health care coverage (Kanchanachitra et al., 2012, p. 83) that is LGBTQ-inclusive.

Future research might apply the gendered techno-development strategy concept to better understand how ongoing shifts in state-led technological growth – such as through "smart cities," "technology parks," and "technopoles" – augment gendered labor and health outcomes worldwide. Local places and labor practices are consistently transformed amidst global economic and technological shifts (Quark, 2007), and scholarship can continue to examine the relationships between gendered labor, health outcomes, and state development in this ever-changing technologizing context. As transnational health care evolves and governments worldwide have promoted medical tourism

throughout COVID-19, research can analyze how medical tourism – and other technology-driven – policies impact the health and labor outcomes of people in destination countries, attending to intersections across socioeconomic status, sex, gender, race, ethnicity, citizenship status, and other social identities.

This article adds to research on the painful micro-level effects of global political and economic hierarchies, which manifest in everyday health outcomes (Birn et al., 2017; Farmer et al., 2019). As a gendered techno-development strategy, medical tourism elucidates how state development strategies and the private sector incorporate gendered labor, while spurring new health inequities. Using this concept, we see more clearly how global transgender health (Reisner et al., 2016) is constructed within an always-changing political and economic context (Irving, 2008), and how health care resources are divided and accessed unequally across sex, gender, and nation-state. This article addresses how and why certain "seams and sutures" appear on some people's bodies in a global neoliberal order, and how state and private actors may profit off of one's inevitable scars (Stryker, 1994, p. 238).

Credit author statement

Reya Farber: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Data curation, Writing - original draft, Writing - review & editing, Visualization, Funding acquisition.

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