



# The feminization of medicine in Latin America: ‘More-the-merrier’ will not beget gender equity or strengthen health systems

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## Summary

This viewpoint addresses the lack of gender diversity in medical leadership in Latin America and the gap in evidence on gender dimensions of the health workforce.

While Latin America has experienced a dramatic change in the gender demographic of the medical field, the health sector employment pipeline is rife with entrenched and systemic gender inequities that continue to perpetuate a devaluation of women; ultimately resulting in an under-representation of women in medical leadership.

Using data available in the public domain, we describe and critique the trajectory of women in medicine and characterize the magnitude of gender inequity in health system leadership over time and across the region, drawing on historical data from Mexico as an illustrative case. We propose recommendations that stand to disrupt the status quo to more appropriately value women and their representation at the highest levels of decision making for health. We call for adequate measurement of equity in medical leadership as a matter of national, regional, and global priority and propose the establishment of a regional observatory to monitor and evaluate meaningful progress towards gender parity in the health sector as well as in medical leadership.

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## Introduction

Latin America epitomizes what has been documented globally: women produce the majority of paid and unpaid health care and caregiving,<sup>1</sup> while men hold most leadership positions and concentrate the decision-making power in health institutions.<sup>2</sup> A thick glass ceiling of prejudicial cultural norms and stereotypes, discriminatory and dangerous workplaces, poor access to

advancement opportunities in both education and work, rigidity in work cultures and policies, and long hours and overlapping caregiving responsibilities that reflect inadequate responses to the need for work-life balance, persist because of inadequate measures to respond to work-life balance. Yet, a critical mass of women in leadership positions, able to garner buy-in from male colleagues, is essential to implement gender-focused transformative policies that evoke the change necessary to strengthen health systems and achieve universal health coverage.<sup>3,4</sup>

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As in many parts of the world, the number of women graduating with medical degrees and practicing medicine across Latin America has dramatically increased. As of 2019, women accounted for most medical doctors in the region.<sup>5,6</sup> Yet, headcounts mask inequities. More physicians are women, and more women are physicians; however, medical leadership is not gender balanced and therefore, not representative of the population of physicians or health providers. Indeed, the highest levels of leadership – where key decisions on the design and operation of health systems are made and those roles with the power and authority to advance the provision of medical education as well as the agenda for health and health systems – remain bastions of male predominance.

In this viewpoint, we collate published data from Latin America to document the persistent gender inequity in medical leadership to help fill the gap in evidence on gender dimensions of the health workforce in low- and middle-income countries.<sup>2</sup> For the case of Mexico, we also present a historical view spanning over a century. We focus on medicine as a tracer profession that provides a glimpse into the manifest implications of undervaluing women and the ways in which gender inequities weaken the health sector and the economy. We then discuss why gender parity in leadership in medicine and other health professions is essential to evoking sector-wide improvements and develop recommendations on how to achieve this, including a proposal for an observatory and a monitoring framework.

## Inequities in medical leadership in Latin America

Despite the evidence on the importance of balancing the presence and participation of women, gender inequity prevails throughout Latin America in medical leadership, especially at the highest levels. Women in medicine continue to face both a glass ceiling and a sticky floor, yet the cracks of change are evident.

The first female Minister of Health was appointed in 1969 in Bolivia,<sup>7</sup> and a half-century later in 2021, less than one-quarter of Ministers of Health in Latin America are women. Notably, Michelle Bachelet served in Chile from 2000 to 2002 and went on to become President, but several countries have never had a female Minister of Health, including Brazil and Cuba.<sup>7</sup>

In most Latin American countries, national academies of medicine were founded by male physicians over a century ago. The Academies are an important meeting place for medical and health care professionals that

provide key career contacts through membership. They are also a symbol of status that can help propel professional achievement as Academies often have easier access to decision makers whose recommendations are considered more carefully than those of less prestigious members of the profession. Members also have opportunities to share their work and participate in projects and events that can define education and research agendas.

Throughout the region, women continue to be grossly underrepresented in these academies. The inclusion of women is recent – most academies had none or very few female members until late in the 20th century and even fewer have women in leadership positions. The National Academy of Medicine of Brazil, for example, was established in 1829. While the first woman was admitted around 1850, she was the only female Academician for the next half-century and to date, Brazil has had no female presidents in its academy. In Peru, just over 12% of active members are women, only 9% of all members are women and there has never been a female president. Public rosters of the academies for 12 countries show that a minority of members presented as women, ranging from 3% in Argentina and 5% in Brazil, to approximately 20% in Mexico, Venezuela and Costa Rica.<sup>7</sup>

Universities with medical schools have also failed to prioritize gender diversity in leadership. Given increased female enrollment across the region, the consistent failure to appoint women as presidents of these academic institutions or deans of their medical schools means that leadership is not representative of the student population. Furthermore, the lack of women in leadership positions severely limits junior professionals' opportunities to learn from female role models.

According to the World Directory of Medical Schools,<sup>8</sup> which includes information on the sitting presidents of 643 institutions of higher education in Latin America, less than one in five are led by a woman. The figures vary significantly across countries. In Venezuela and Panama, approximately two-thirds of presidents are women, however in Mexico and Colombia, less than one in four schools are female-led, and in Chile, Guatemala, Honduras, and Uruguay, all schools are led by men. In the 578 Latin American medical schools in the World Directory<sup>8</sup> on average only one in three deans are women. In Cuba 7 out of 10 of medical school deans are women, while in Brazil, Colombia and Chile it is less than half, and in Mexico, Argentina, and Peru it is only one in four. In Guatemala and Uruguay all sitting deans are male.

### Panel: Over-time and sub-national spotlight on Mexico

Mexico's ministry of health was established in 1943 and the first and only female minister, who was appointed in 2012, held office for three years. Also established in 1943, the Mexican Social Security Institute (*Instituto Mexicano del Seguro Social, IMSS*) – one of the largest entities in the region delivering health care to over 50 million people has never had a female director general. Established in 1959,<sup>2</sup> the social security institute for public sector employees (*Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado*), serves almost nine million people.<sup>9</sup> The only female director general was appointed from 1998 to 2000.<sup>10</sup>

In Mexico's decentralized health sector, each of the 32 states has an elected governor who appoints a minister of health. In 2019, the national reform '*Paridad en Todo*' (Parity in everything) established mandatory gender parity of candidates for all positions in every election at the local, state, or national level. The 2021 elections were the first to apply this rule where 15 state gubernatorial races were held, the number of female governors increased from two to six. Currently, only seven of the 32 states have female governors and seven have female ministers of health.

Almost all physicians who hold or have held public sector, executive or educational leadership positions are or have been members of Mexico's prestigious, male-dominated National Academy of Medicine, where the inclusion of women has been slow and arduous. Officially established in 1864, the Academy took 93 years to accept its first female member and another 100 for the second.<sup>10</sup> More than a century and a half passed for the first woman to be elected as vice-president in 2017, passing on to serve as president from 2019 to 2020. And, although Mexico has one of the highest proportions of female academicians in the region, 80% of members are males.<sup>10</sup>

Mexico's 13 national institutes of health exemplify both excellence in medical research, teaching, training, and specialty patient care. They also exemplify gender imbalances and wage gaps in executive positions.<sup>11</sup> The first national institute was the *Hospital Infantil de México Federico Gomez*, established in 1943. To date, only two women have held the position of director of any of the institutes. Housed in the National Institute of Public Health, the School of Public Health (established in 1922 as the *Escuela de Salubridad*), has never had a female dean.<sup>10</sup>

Both university presidents and most faculties of medicine are led by men and almost always have been, yet women are increasingly present as department heads, chairs and in other mid-to-lower-level leadership positions. Only 10–15% of all institutions of higher education and about one out of every four medical schools are currently led by a woman. The first woman was appointed university president in 1982 at the Universidad México Americana del Norte. Originally the *Real y Pontificia Universidad de México* established in 1575, the now secular National Autonomous University of Mexico (UNAM) is the largest institution of higher education in Latin America. Since its inception, it has never had a female president. Similarly, the faculty of medicine of the UNAM, established in 1833, has always been led by a male, although roughly half of the other leadership positions, including department chairs, are currently held by women.<sup>10</sup>

The private sector plays a key role in the delivery of health care in Mexico and gender discrimination in leadership is also evident. Data are limited, but according to the web-sites of the 28 major pharmaceutical laboratories in Mexico, only two are led by women.

As in the rest of the region, most medical students and graduates are women. Yet, they face unfavorable labour market conditions and are less likely to practice their profession or work full time if trained as doctors. Unique detailed data on physician education and employment dating back several decades shows gradual improvement, but full employment among female physicians (as opposed to under- or un-employment) continues to be much lower than for men.<sup>12</sup> In 1990, 86% of male physicians reported working full-time, compared to only 57% of women who worked as a full-time physicians. After nearly 30 years, a higher proportion of male physicians (78%) still worked full-time compared to women (71%). Additionally, data from 2014 to 2017 show that while almost 60% of all professors working in health are women, only a third of health researchers recognized by the National Researcher System (*Sistema Nacional de Investigadores-SNI*) in Mexico are women. This highlights the gender gap for researchers since acceptance into the SNI provides both professional status and economic benefits in the form of a monthly stipend.<sup>13</sup>

### Amplifying and radiating cracks in the glass ceiling

A feminist, intersectional, inclusive health sector-wide approach spanning government, the private sector, and medical education is an essential ingredient for strengthening health systems. Economy-wide and health sector-specific evidence confirms the importance of gender-balanced leadership. For example, women in male-dominated medical specialties identify the lack of female role models and mentors in the workplace as key barriers to their advancement.<sup>14</sup>

Undervaluing female physicians is a devaluation of health care that ignites a self-perpetuating vicious cycle

of worsening gender inequity and debilitating health systems as the profession becomes increasingly feminized.<sup>1,15,16</sup> Gender pay gaps discourage the most capable women from studying medicine, practicing the profession and progressing to leadership roles.<sup>17,18</sup> To strengthen and increase the efficiency and effectiveness of health systems, investment in the conditions required to recruit, employ, and retain female physicians in the workforce over the long-term must be fortified. This will reverberate and balance other female-dominated health professions that receive lower pay and require fewer years of education, such as nursing and midwifery.<sup>1,2</sup> Recruiting women into health leadership positions will foster a

culture that prioritizes gender equity across and within health sector occupations. Policies that perpetuate gender discrimination and inequity must be dismantled to ensure women's time and labour market work are appropriately valued, including unpaid labour in the home. Fixing systems must be the approach and equal recognition demands equal value.<sup>19</sup>

Squandering the time and skills of the increasingly feminized physician workforce and health sector<sup>20</sup> is an irony and a travesty that is especially heinous in countries of low and middle income where there are physicians without work and vast numbers of people without medical care. In Latin America, before COVID-19, there was a projected need of 2.6 million doctors by 2030, largely driven by economic growth and population ageing.<sup>21</sup> Physician and health worker shortages have increased with COVID-19 as has the urgency of achieving gender equity in medicine.<sup>27</sup>

Gender-focused transformative policies will challenge and address the structural and systemic inequities and implicit biases that hinder opportunities for women health professionals to achieve their fullest potential, allowing health systems and economies to benefit from the myriad contributions of women to health. Enacting policies along the physician pipeline - from training to employment to career advancement and leadership opportunities - is essential in the public and private sectors and at the national and sub-national levels of government. Creating decent and safe workspaces is paramount as harassment and violence are common.<sup>2</sup> The gender lens must be applied to schedules and physical workspaces, but also to personal protective equipment that must fit different bodies and biology.<sup>22</sup> A key issue to address is the lack of family-friendly options for physicians of all genders. Caregiving, including for health-related activities, must be more equitably shared. This can be achieved through more appropriate incentives, that include but are not limited to the medical field, for all genders to participate in family life. Flexible work arrangements facilitate female labour force participation. The post-COVID-19 era offers opportunities for change by harnessing telemedicine and communication technologies to enable increased work flexibility for physicians.

While these recommendations are globally relevant, their application is nuanced in Latin America. Rigid workplace cultures, training requirements, and particularly, residency hours must be better streamlined to permit a work-life balance. While this has begun to permeate hospitals in high-income countries, it is yet to become general practice in most of Latin America.<sup>23,24</sup>

There is a dearth of knowledge on gender disparities in participation and leadership of the health sector in Latin America, yet some data are publicly available and can be readily collated as we have done in this paper. We call for and propose the creation and application of national, regional, and global observatories beginning

with medicine to monitor and evaluate progress toward gender parity. These can begin using existing data such as that referred to in this essay, but a country-specific scoping exercise is required to identify gaps and encourage the collection of better data. The indicators should cover and allow for comparison and evaluation of progress across: the public sector including sub-national units and social security as well as ministries; units that deliver care such as major hospitals both public and private; institutions of higher education and research; the private sector such as insurance and pharmaceutical companies; and professional institutions such as the national academies (general and specific) and associations that represent groups of doctors. These observatories can be spearheaded by government or civil society, but what is essential is transparency, accessibility, accountability, and advocacy. Linkages to existing observatories, focused on gender equity in health<sup>25,26</sup> can yield a sector-wide perspective that encompasses all other health professions and occupations including but not limited to nursing, social work, psychology and health care management. Observatories cannot be limited to documenting, rather they must be tools to catalyze and sustain gender-focused transformative policy changes that promote accountability, ranking, and recognition for the institutions that document significant change over time. As a key policy tool, they will support more effective health workforce planning, health system development and gender equity goals in the region and beyond.

The evidence we share in this paper confirms the urgency of dramatically increasing the number of women in executive and leadership roles, with special consideration to race and ethnicity, to achieve balance and drive meaningful change in Latin American health systems. Yet, what is not counted is not monitored and is too easily overlooked. To avoid this, an intersectional approach must be applied to expand the collection of gender disaggregated data to include measurement of racial and ethnic inequity. These data are scarce, yet essential for advancing gender equity across the health sector, especially for the occupations that are awarded lower status in the hierarchies of medical institutions and are often staffed by minority women.

Gender equity is a goal in and of itself. It is also essential for achieving meaningful change in the quality and quantity of medical care, as well as efficiency and equity in the health sector. A narrow focus on head counting those who study or practice medicine or work in the health sector, masks the debilitating, unequivocal inequity facing women that demands remedy through gender-focused transformative leadership, policy making, and action.

## Author contributions

FMK, BE, and HAO led the conceptualization of this viewpoint. FK and HAO led the data curation with

assistance from RSN, USAG, and ACV. The first draft was written by FK and BE. RSN, ACV, and PY conducted literature searches and background research. BE, PG, RD, and AL provided intellectual input that structured and defined the paper. All authors edited and reviewed the final draft of the manuscript.

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### Declaration of interests

FMK advises to the CEO of Merck KGaA, Darmstadt, Germany/EMD Serono advising the company's strategy related to the Healthy Women, Healthy Economies and Embracing Carers initiatives, as well as on sustainable development and women in leadership. No compensation was received from this consulting agreement for work on the current paper. BME and HAO report research grants from MerckKGaA/EMD Serono via the University of Miami Institute for the Advanced Studies of the Americas. All other authors declare no conflict of interest.

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