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Medicine Is Not Gender-Neutral — She Is Male

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In 1849, Elizabeth Blackwell became the first woman to graduate from medical school in the United States. Today, women make up 35% of the U.S. physician workforce, and among physicians 35 years of age or younger, women actually outnumber men. Many European countries have had a female-majority medical workforce for some years.[1] With more women in medicine, one would expect that "physicianhood" will be reshaped and redefined by women, just as it was defined by men for centuries.

But discussions in academia and health care about women in medicine often seem to begin with the unspoken assumption that physicianhood — the construct of the medical professional, whose definition encompasses the ideals of the art and calling of medicine — is gender-neutral. These discussions focus on numbers of women in the pipeline, the glass ceiling, and the unique challenges women face in medicine, but not on physicianhood. The feminist novelist Virginia Woolf once observed, "Science, it would seem, is not sexless; she is a man."[2] In the same spirit, one could argue that medicine is not gender-neutral — she is male.

The changing demographics of the physician workforce have revealed an uncomfortable truth: physicianhood is conceived as masculine for the simple reason that the physician workforce has historically been predominantly male. This reality is of course discouraging for women who aspire to be physicians,[3-5] even as it is taken for granted by — and largely invisible to — many men. The struggles that most women in medicine encounter are intensified for women of color, women from low-income backgrounds, and LGBTQ women[6,7]; these underrepresented groups face the added complexity of intersectionality with minority race or ethnicity, gender identity, sexual orientation, or other visible or invisible aspects of identity.[6,8]

It is vital that we also look beyond gender inequity among physicians themselves to focus on an important consequence of the male-gendered construct of physicianhood: its failure to deliver for patients the highest standards of care and caring. A deeper understanding of gender issues in medicine may therefore enable the profession to improve not just the experiences of its constituents of female and other genders but also the care of our patients.

We should avoid construing this exploration of physicianhood as a battle of the sexes; every physician's best effort is needed to provide the best care. All physicians, like all people, have some qualities that would traditionally be viewed as "feminine" and others typically viewed as "masculine." Some of these qualities are advantageous in medicine, and others less so. Our concepts of feminine and masculine qualities do not rest on a bedrock of fact, but rather are "narratives of origin" that reflect how the world as we know it came into being.[9] Nevertheless, we describe traits here using this shorthand only because it is familiar and easily grasped.[10]

PHYSICIANHOOD AS A MASCULINE CONSTRUCT

Social sciences, in particular psychology and sociology, teach us that throughout the course of our lives we form our identities as individuals — our sense of self — by combining our personality, experiences, and narratives about our sociohistorical, familial, moral, and cultural contexts into a meaningful whole. Professional identities are no exception.[11] A physician's identity begins to be formed during medical education and training, when the entrenched values of the profession and prevalent beliefs about what it means to be a physician are transferred and assimilated. On completion of training, physicians' behaviors and performance reflect the values and beliefs they have internalized, including beliefs about

gender in medicine. Numerous empirical studies suggest that physicianhood today continues to valorize characteristics associated with masculinity.[12-14]

Agency, power, objectivity, and rationality — traditionally "masculine" endowments — still largely define how medicine is organized, practiced, and valued today. Protocolized medicine, measurement practices, systems-based thinking, efficiency, and authoritarian leadership reflect the ways in which modern medical practice has been shaped by a male orientation. In U.S. health care systems today, procedures, pathways, quality metrics, and technology are venerated, while compassion, communication, and humanism are frequently given lip service but less frequently operationalized or rewarded in meaningful ways. Authoritative leadership is associated with hierarchy and dispassion and is often opposed to emotive connectedness.[15] Gender-based harassment and microaggressions toward women — matters of power — remain commonplace.[3,13,14,16]

On the basis of his writings, the French philosopher Michel Foucault would argue that the discourse on physicianhood — the way physicians both talk about their professional role and perform it — has *produced* its male-gendered orientation, that this orientation never existed as an objective fact. In other words, the statements and frameworks that have defined, explained, praised, judged, assessed, and regulated physicianhood are what brought into existence a male-oriented construct of physicianhood as a truth; this construct then became codified and entrenched in institutionalized practice.[17]

The few female physicians who were practicing medicine by the turn of the 20th century critiqued the male ethos — but also found doing so to be self-defeating, as they strove to achieve an equal place in the profession.[18] In the second half of the 20th century, the scientific transformation of medical practice further entrenched the male orientation of physician identity, as scientific knowledge and technical competence came to be associated with men more than women.[7] Physicians' work that was once seen as the art of a "man of character" gave way to the practice of physicians as "men of method"; cognitive abilities and the scientific method came to define the character of physicianhood.[19]

Traditionally female-coded qualities such as nurturance, intuition, communality, and expressiveness were not seen as fundamental to the practice of medicine. Over time, the physician's bedside skills — including history taking, the physical examination, and the use of the clinical eye — began to seem less important than "objective" data.[7,20] Today, advances in artificial intelligence tend to further consolidate the culturally coded "objective" masculine view and threaten to marginalize the "soft skills" that are coded as feminine, just as other well-described unintended consequences of artificial intelligence tend to further disadvantage minority groups.[21]

FAILING OUR PATIENTS

The gendered construct of physicianhood affects patient care. Landmark publications in surgery,[22] internal medicine,[23] and cardiology[24] have shown that across procedures and illnesses, patients treated by female physicians have better clinical outcomes than those treated by male physicians, in terms of mortality, readmission rates, and postoperative complications. The differences are small but statistically significant. The exact mechanisms underlying these differences are unclear, but they suggest differing practice patterns between female and male physicians. Studies suggest that female physicians' gender-specific contributions might be found in patient-centered empathetic communication, psychosocial counseling, preventive care, and disease management.[25-28] Female physicians are also more likely than their male counterparts to care for underserved communities, be effective team players, and err on the side of caution rather than take risks.[22,29]

Such traits are beneficial not only for individual patients, but also for population health, health care effectiveness, and cost control. It's remarkable that these practice styles and outcomes that are more likely to be facilitated by women, and may be coded as feminine, managed to surface in male-oriented work environments. These desirable qualities and outcomes can be catalyzed and consolidated by designing environments that are inviting to — and not inhibiting for — physicians of all genders, allowing them to deploy and devote all their talents and experiences to serving patients.[30,31] Health care organizations whose environments inadvertently exclude parts of the physician workforce will compromise excellence in patient care, research, and education.[8]

The driving force for change must be the best interest of patients. We need more research on

physicians' performance according to gender in order to understand, validate, and value what a gender-diverse orientation might bring to patients and health care. Building on the scholarly work (often by women) that has elucidated the male gendering of medicine, we now need to be open to discussing and challenging the prevailing construct of physicianhood, and to welcome gender-diverse perspectives when thinking about medicine, health care, and the medical profession.

MARGINALIZING FEMALE PHYSICIANS, DEVALUING THE PROFESSION

Members of female-majority professions such as nursing and elementary and high school teaching may attest that when a profession is practiced mostly by women, its work becomes labeled as "women's work," which has historically meant "less worthy" and translated into lower pay, status, and influence. Similarly, despite the outstanding performance and contribution of female physicians to patient care, the role of women in the medical profession is often devalued. Recent analyses of data from the Association of American Medical Colleges show that specialties with higher representation of women tend to have lower compensation. For every increase of 10 percentage points in the percentage of women in a specialty, the median annual salary for male specialists decreased by $7,465, and the median salary for female specialists by $15,003.[32]

Salaries are not the only way in which women physicians are undervalued, underemployed, and underpaid as compared with men. When physician payment rates are based on relative weights per physician service unit, the male-dominated surgical specialties are better compensated than the medical specialties.[33] The Relative Value Scale Update Committee (RUC) that represents the entire medical profession could help address this problem by ensuring a more equitable distribution of physician payments that does justice to the nonprocedural and primary care specialties in which female physicians are well represented. It is noteworthy that of the 22 RUC members appointed by major national medical specialty societies, currently only 1 is a woman, representing pediatrics.[34]

There are also subtler ways to further undermine women's value. Analyses show that female surgeons perform less-complex, and thus less-lucrative, surgeries than their male peers, even with adjustment for differences in clinical subspecialty and years in practice. The beliefs of the referring physicians have been shown to drive such gender imbalances in surgical practice.[35]

Marginalization of any group in medicine is detrimental to the profession and to its purpose, which still aligns with the aphorism "to cure sometimes, to relieve often, to comfort always." A discourse that transcends genders and focuses on how best to serve patients might better uphold the values of the profession and the pay and power it commands. Indeed, as long as the construct of physicianhood remains male-gendered, it will disillusion and discourage women[36] and anyone whose identity falls outside the traditional male–female binary; it will keep them from entering the ranks and will present obstacles to those inside the ranks who attempt to bring about change.

Shifting to a more gender-diverse construct of physicianhood is an exciting prospect. It will affect discussions regarding professionalism, medical curricula, and practice. It will also require the development of new metrics for skills and orientations that are culturally coded as feminine, such as patient-centeredness, public health focus, communication, and empathy, while challenging metrics for traditionally masculine skills and orientations, such as positions of power, procedures, profit, and execution. The profession may need to acknowledge some more subjective and informal modes of knowing — those so-called soft skills.[37] Recent publications on human connection, presence, and compassion[20,38,39] suggest that such a shift would have salutary effects on both patients and physicians, for these "soft skills" contribute to both the science and the art of medicine.

Broadening awareness that the traditional construct of physician identity is male-gendered is the first step for any organization that aims to foster and improve the position and work experiences of women of all races, ethnic groups, and backgrounds, who will soon account for the majority of U.S. physicians. Lack of such awareness can undermine every task force, committee, or initiative that attempts to address the issue of gender inequity in (male-defined) specialties, leadership positions, or R01 grant funding. Understanding and embracing a definition of physicianhood that is shaped by women as well as

men can have benefits for individual physicians, their organizations, and most of all, their patients.

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