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### MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

#### For Clinicians to Do Less, Organizations Must Do More

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##### Abstract

Medicine is defined by doing; however, bias, error, and burnout are potential consequences of speed and constant activity. On an individual level, slowing down might reduce bias; resting might reduce error; mindfulness might reduce burnout. Despite its benefits, stillness can be an unattainable privilege for some due to systems of power, including gender, race, and capitalism. In response, institutions must confront these systems and support individual clinicians through radical acts of solidarity because, just as we have fought to make doing—speaking, learning, and working—equal opportunity, so must we ensure that “non-doing” belongs to everyone.

##### Constant Activity as an Ethical Problem

Medicine is often described as a *practice*. This word underscores 2 critical features of medicine: the lifelong learning that is inherent to the profession and the value of experience that is gained with repetition. As such, medical “practice” entails never-ending action on the part of the physician. But constant activity does not solely offer benefit without also posing an ethical problem. Primarily, time pressures encourage fast thinking and quick decision making—whether on boards or wards—which may generate bias, error, and burnout.

Psychologist Daniel Kahneman dichotomized thinking by speed into “fast” and “slow” in his widely read 2013 book, *Thinking Fast and Slow*.<sup>1</sup> System 1 is described as fast: an automatic way of thinking by intuition or prolonged practice. As a medical student, board examinations simply would not be surmountable without System 1. However, Kahneman reminds us that System 1’s pitfalls include impulsivity and bias. For example, board exams allow 90 seconds per question; thus, speed is an expression of knowledge. In one analysis of 2211 questions in a question bank for the United States Medical Licensing Examination® Step 1, race/ethnicity was mentioned in the stem of 20.6% of questions. However, the use of race/ethnicity was central to the case in only 9.5% of these questions; it was merely a general demographic descriptor in the other 90.5% of cases.<sup>2</sup> Moreover, in 51% of those cases for which race was considered central, genetics was mentioned in **relation to race**. In the setting of time-bound board exams during which students often rely on System 1 thinking, the routine though unhelpful use of race/ethnicity and the less frequent stereotypical association between race and

genetics both risk perpetuating race-based diagnostic bias that is already inherent in the preclinical curricula.<sup>3</sup>

On the wards, time constraints not only encourage fast thinking but also ceaseless activity. Residency is designed for trainees to learn by doing: see the patients, write the notes, present succinctly, answer all pages, put in the orders, admit a patient, run a code, discharge a patient, perform a procedure, transfer a patient, update family. The thought that activity breeds competence is widely accepted. For example, Malcolm Gladwell coined the “10,000-hour rule” in his book, *Outliers: The Story of Success*, suggesting that it takes 10 000 hours of intensive practice to achieve mastery of skills.<sup>4</sup> This same concept has been embraced in medicine, particularly by procedural specialties.<sup>5</sup> In fact, there was widespread concern that duty hour restrictions—that is, restricting resident workweeks to 80 hours and shifts to 28 hours in length—might unintentionally produce less competent physicians.<sup>6,7,8</sup> Surgical specialties were particularly concerned, given that operative competency has classically been measured by the number of cases performed.<sup>9</sup>

But hour restrictions were implemented for the purpose of reducing medical error after the case of Libby Zion in New York City in 1984. Zion died after a cardiac arrest in the emergency department, and a private investigation determined that her death was due to medical error. A grand jury met and issued 5 recommendations in 1986, one of which was to limit the consecutive working hours of interns and junior residents. These recommendations were transformed into legislation shortly thereafter.<sup>10</sup> While the impact of resident fatigue on patient safety has been debated in the literature, the relationship between sleep deprivation and impaired cognition has been demonstrated.<sup>11</sup> Thus, the association between fatigue resulting from overactivity and increased error is reasonable and has been noted by governing bodies in medicine, including the American College of Obstetricians and Gynecologists (ACOG).<sup>12</sup>

In addition to error, the constant activity of physicians has been thought to produce burnout. In one study, 604 residents in Japan were surveyed in 2018 to 2019, and, after controlling for individual factors, it was found that excessive paperwork and excessive working hours were independently associated with burnout.<sup>13</sup> Conversely, duty hour restrictions have been shown to have a positive impact on resident wellness in multiple studies.<sup>14,15</sup> However, burnout remains a critical issue. In one study of 4664 medical residents from multiple specialties, the overall prevalence of burnout was found to be 35.7% and as high as 40.8% in some specialties.<sup>16</sup> Most recently, when residents were called upon as first-line responders during the initial wave of the COVID-19 pandemic, workload increased in unprecedented fashion, resulting in a predictable increase in burnout.<sup>17</sup>

### **Stillness as a Solution**

To intentionally slow down challenges the constant, often unquestioned activity of medical training—and its consequences. For example, as described by Kahneman, System 2—or slow thinking—is more methodical and requires more effort than System 1 thinking but is also more resistant to bias.<sup>1</sup> Therefore, individual students and clinicians who both make themselves aware of and choose to engage in System 2 thinking might limit their own **unintentional bias**. With regard to error, given that duty hours in residency were restricted to reduce medical errors, it is reasonable that another way to reduce medical errors might be for residents and other clinicians to recognize their need for rest and limit their activity. Such self-induced stillness is also recommended by governing

bodies in medicine, such as ACOG.<sup>12</sup> Given the relationship between restricted weekly duty hours and improved wellness,<sup>14,15</sup> rest and reduced activity may also reduce burnout. Another proposed solution to burnout is mindfulness, which is the practice of being fully and nonjudgmentally present.<sup>18,19</sup> Such individual commitment to stillness provides meditative space for reflection and meaningful reinvigoration.

It is important to recognize that stillness in any of these forms is not the passive absence of doing but rather the active practice of “non-doing.” Thus, as a deliberate act, stillness is not actually simple. Moreover, individual acts of stillness are a privilege that is not available to everyone; the practice of stillness is limited by structures of power that include gender, race, and capitalism.

### **Stillness Is a Privilege**

*Gender.* A recent study of interruptive behavior at residency teaching conferences found that male attendees interrupted more frequently than female attendees, behavior that was amplified by the presence of a male faculty discussant.<sup>20</sup> Beyond medicine, one study showed that both men and women made more interruptions when speaking with a woman than when speaking with a man.<sup>21</sup> Even in one of the most esteemed professional spaces, the Supreme Court, where women are already underrepresented, female justices are interrupted at rates 3 times as high as male justices at times.<sup>22</sup> During a 2020 vice presidential debate in which Mike Pence interrupted Kamala Harris, Harris’ response—“Mister vice president, I’m speaking”—was echoed by women everywhere on platforms like Twitter.<sup>23</sup> All of this is to say that women lack the privilege to intentionally *not* speak because, even when they are in the authoritative position of speaker, they are more likely to be interrupted and therefore less likely to be heard. So, when a woman pauses and is still, she may in fact be conceding her sexist fate of being overlooked.

*Race.* Two 2017 studies have found that subjective evaluations of medical student achievement, such as Alpha Omega Alpha (ΑΩΑ) nominations and medical student performance evaluations (MSPE), are significantly influenced by the race of the student.<sup>24,25</sup> Black and Asian students were less likely to be nominated for ΑΩΑ than their White counterparts even after controlling for all objective data, including test scores and volunteer hours.<sup>24</sup> In MSPE letters, Black students were more likely to be described as “competent” than their White colleagues, who were described using “standout” or “ability” keywords even after controlling for USMLE Step 1 scores.<sup>25</sup> Thus, medical students of color are academically disadvantaged due to inherent racism and may need to do more to achieve an assessment equally favorable to that of White students. In this way, non-doing becomes a privilege aligned with race.

*Capital.* Within medicine, productivity as a priority is best exemplified by the high rates of presenteeism among residents.<sup>26</sup> Studies reveal that residents choose to work when ill for 2 reasons: (1) because of a sense of obligation to their patients and (2) out of concern that they cannot be easily replaced.<sup>27</sup> The former is certainly noble, and the latter is possible. But residents’ commitment to presenteeism is also a more sinister symptom of health care as a capitalistic structure. To put it plainly, residents have been exploited to make them the driving physician workforce of cost-conscious hospitals that employ them.<sup>28</sup> In response, some residencies have started to form unions.<sup>29</sup> During the COVID-19 pandemic, physicians’ sense of obligation was further exploited and often went uncompensated.<sup>30</sup> Thus, the act of non-doing—even as a mode of self-preservation

when sick—is a privilege that counters the expectations constructed by capitalism and internalized by resident physicians.

### **Radical Solidarity**

Because stillness is a privilege, institutions must confront systems of power and support individual physicians through radical acts of solidarity.

*Gender and race.* It is perhaps unsurprising that physicians who are women and people of color experience higher rates of burnout,<sup>31,32</sup> given that non-doing is a privilege aligned with both gender and race and that excessive activity contributes to burnout. Burnout is also exacerbated by gender and racial bias in the training environment (such as unfair evaluations) and in the workplace (such as interruptive behavior). In one study, only 35% of women clinicians reported *never* encountering a negative experience due to gender or race compared with 70% of men.<sup>31</sup> With regard to race, in 2 other studies, 23% of physicians of color reported that a patient refused care due to their race/ethnicity,<sup>32</sup> and 35% of family medicine trainees experienced intimidation from patients based on race, gender, or culture.<sup>33</sup>

In response to inequitable opportunities for stillness, institutions have a responsibility to support trainees and physicians who are women and people of color. Foremost, expanded education on discrimination is a necessary foundation for reform; this training can start in medical school.<sup>34</sup> For example, in the classroom, rather than relying on System 1 recognition of associations between race and disease in question stems, educators can foster System 2 thinking to examine social and political determinants of health.<sup>3</sup> This type of curricular reform is an example of institutional solidarity that confronts racism and can shift the responsibility to slow down from individuals to institutions.

Additionally, hospitals must establish and expand clear nondiscrimination policies to support clinicians as well as patients.<sup>35,36</sup> For example, institutions must formalize, emphasize, and encourage non-retaliatory reporting of patient and staff discrimination. Such reporting might also transfer the need for action and activism from the individual to predetermined committees and institutional boards, relieving physicians of the need to react and instead permitting them space to cope with a sexist or racist experience.

Dedicated research is also required to make effective and evidence-based changes. However, institutions must be careful to avoid the “**minority tax**,” the phenomenon whereby those affected by bias are disproportionately called upon to address the problem of bias.<sup>37</sup> Therefore, schools and hospitals must invest in and compensate health equity work so that progress does not rely on the undervalued overactivity of marginalized groups. For example, scholarship in health equity can be rewarded through academic credit, stipends, and titles. This approach might attract more researchers to the field, permitting women and trainees of color to do less if they choose. At the same time, such institutional solidarity would honor health equity work done by trainees and physicians as an academic activity that can be included on professional resumes to be considered in recommendations (such as MSPE), promotions, or nominations (such as AQA).<sup>37</sup>

*Capital.* Duty hour restrictions are an example of institutional support to uniformly prevent residents from being overworked. However, such restrictions have in turn raised concerns about physician competency.<sup>6,7,8</sup> It can be countered that residents don't

always learn by doing, especially in a culture of ever-increasing productivity driven by the capitalistic structure of health care. In 2012, internal medicine interns spent 22% more time on indirect patient care (eg, charting) than in 1988.<sup>38</sup> Overall, 40% of interns' day is spent in front of a computer; only 12% of their time is spent providing direct patient care and 15% in educational activities, which include the seemingly integral task of participating in rounds.<sup>39</sup> Non-doing, by creating space for reflection and consolidation of knowledge, is critical to work-based learning, too.<sup>40</sup> Given the available data, residency programs and accrediting bodies, such as the Accreditation Council for Graduate Medical Education, have a responsibility to help residents do less. For example, administrative tasks can be re-delegated to clerical staff—which would require a financial commitment to hire such staff.<sup>38</sup> Additionally, reducing census caps on resident services would reduce service hours to create opportunities for pause, such as attending conferences.<sup>41</sup> Ultimately, institutional solidarity that supports non-doing can help balance learning and working.

Historically, it has been a battle to get women into medicine, to get people of color into medical schools, to get trainees paid. And the battle continues today to make sure that women are heard, people of color are embraced, and trainees are respected. But just as we have fought to make doing equal opportunity, so we must also ensure that non-doing belongs to everyone. Institutional acts of solidarity that confront systems of power can make stillness more accessible and equitable for those who are inherently expected always to do more.

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