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The Only Way Around Is Through the Co-Vital Impacts of the Shadow Pandemic of COVID-19



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silent pandemic of disparities within the COVID-19 health crisis is ravaging the foundation of our societies. Although men and women are infected by SARS-CoV-2 at comparable rates, hospitalization (1.1 times), intensive care unit admissions (1.8 times), and case-fatality rates (1.5 times) are higher in men than in women according to the Global Health 50/50 data tracker.1 Gender-based differences in host genetics, immunologic responses, and hormonal mechanisms may underlie the substantially higher fatality rates reported in male patients with COVID-19.2 Beyond these biologic factors, women have shown higher rates of compliance with mask wearing and hand hygiene and, of late, higher acceptance and uptake of COVID-19 vaccines, which in addition puts them at lower risk, both for infection and for adverse outcomes from COVID-19. Although scoring higher on these biologic fronts in early COVID outcomes, women may not be riding the same luck in the nonbiologic domains. The "higher risk/sicker male" COVID narrative³ has given heightened attention to men in the pandemic while diverting our focus away from the effects of COVID-19 on women, who may in a global sense indeed be bearing the greater brunt of the pandemic.

The first step to addressing a problem is to recognize that it does indeed exist. COVID-19 has disproportionately affected women in diverse nonbiologic aspects of life, which is termed, in part, the silent and shadow pandemic amid the COVID-19 crisis. We have lagged in and, at times, ignored looking into these nonbiologic effects of COVID-19. Robert Frost's poem *The Road Not Taken* is a great analogy for the current state of gender-based disparities around COVID-19 that may be a

commentary on the self-deception⁵ we may happen to practice when we construct the story of our lives, which is especially true around a pandemic.

This past year has widened and amplified these gender-based disparities, with our focus being driven by daily COVID case rates and mortality statistics. These daily caseloads are also aggregated information with limited sex- and gender-based segregated information.

In this issue of Mayo Clinic Proceedings, Nordhues et al⁶ present to us a narrative review on COVID-19-associated genderbased disparities and provide avenues and recommendations for mitigation. In this era of systematic reviews and meta-analysis, it may be considered less than rigorous to write a narrative review, but in fact it is a reflection of the current state of scarce evidence relating to gender-based disparities around COVID-19. These gender-based disparities are multidimensional, involving occupational, economic, domestic violence, mental health, and sexual/reproductive rights.

COVID-19 has sent women's workforce progress backward, with collapses in childcare sector and reduction in school supervision hours, driving millions of mothers out of the workforce. It is believed that the current COVID-19 crisis may set women back by a generation. The low wages associated with "pink collar" occupations, many of which require face-to-face contact, have long contributed to the feminization of poverty, and the chronic shortage of affordable, high-quality childcare reflects outdated notions of women's societal roles. It has only been through the participation of women in the workforce that the middle-class household income has

grown, which otherwise had been stagnant. It is critical that women are supported to rejoin and to continue to be part of the workforce.

Beyond the economic and professional front, the pandemic and its associated lockdowns have had a significant impact on sexual, social, and mental health of families. The rates of marital discord and divorces have increased along with emotional stressors, with increasing anxiety and depression. In addition, the increase in "working from home" during the pandemic has altered the domestic division of labor, adding greater childcare and housework responsibilities for women, harboring the "shadow pandemic" of domestic and gender-based violence against women. These gender-based struggles during this pandemic not only may have long-term adverse implications for the individual but also create dysfunctional families and fragile social structures.

We need a paradigm shift in our outlook and approach to COVID-19. The nonaggregated data should be sex-segregated information, which should be available and accessible to inform policy frameworks and allow appropriate resource allocations. Any crisis has the potential to expose the raw underbelly of a society, with COVID-19 being no exception. As the pandemic rages for more than a year across the globe, it is time to have bifocal vision, with short/near-term focus on decreasing hospitalization and mortality, which are considered hard end points, but also longer term focus on addressing and improving outcomes around the soft end point of quality of life of the patients and families. Our COVID-19-related efforts have fallen short of the longer term/soft outcomes domain. As a society, so far, we have focused on hard end points/short-term goals: looking at multiple prognostic factors and interventions for risk stratification to lower disease severity, hospitalization, and mortality. We have made significant strides in this domain with newer therapies licensed for use, but it is beyond time that we also target our focus on a growing shadow pandemic of nonbiologic disparities underneath the biologic impact of COVID-19.

We should systematically assess and address these disparities and create an equitable infrastructure that ensures that access to opportunities is neither dependent on nor constrained by sex. How do we create equality in all spheres? To do so, we first need to understand the difference between equality and equity. Equality assumes that everyone starts at the same level and hence is given the same resources or opportunities. Equity, on the other hand, recognizes that each person has different circumstances and allocates the exact resources and opportunities needed to reach an equal outcome, which may be more for some and less for others. There needs to be a greater safety net for families, and we need to rethink how the safety net is delivered equitably, with safe and affordable childcare, childcare credit, access to reproductive health, mental health and domestic violence helpline, and family leave/work requirements. A single parent should not need to choose between work and taking care of children. Expanding childcare subsidies to low- and middle-income parents would help vulnerable families to remain in the workforce and worry less about their children's safety and quality of care. This would also increase and stabilize women's labor participation and improve gender disparity in the workplace and at home.

"A pandemic within a pandemic" exposes the struggle to find not only the "vaccine/cure" for the latter but also immunity against the former. The time has come that we accept and address the pandemic of gender-based disparities in our policies and its implementation to create gender equity and an inclusive and a just society, which in Robert Frost's words is likely "the one less traveled by," and that may make all the difference.

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