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Women's Health in Times of Emergency: We Must Take Action

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Abstract

Women have historically faced gendered patterns of disadvantage during times of emergency. Evidence demonstrates differences in gendered exposures and inequities during acute crises such as natural disasters and pandemics, including Covid-19, and longer-term emergencies such as climate change. These patterns, without intervention, may be perpetuated in future crises. Threats to women's health in times of emergency can arise from restricted access to health care, economic disadvantages, and harmful social norms. During crises, women face additional barriers to accessing maternal, contraceptive, and abortion care, likely exacerbating existing inequities in reproductive health outcomes. Gendered inequalities in financial and economic stability can become even more stark. Globally, women perform the majority of health care and unpaid caregiving work, but face barriers to affording costs of living and obtaining health insurance due to over-representation in low-wage jobs. Finally, gendered expectations of social roles contribute to increased vulnerabilities, such as displacement and poverty. Violence against women rises in times of emergency and pathways to escaping trauma can be limited. In addition to directly addressing women's unique barriers and providing support in times of emergency through bolstering health care access, economic, and social support systems, thoughtful solutions such as trauma-informed care, increasing the number of women in leadership roles, educational initiatives, and advocacy from health professionals are needed to protect and advance women's health.

Keywords: climate change, women's health, reproductive health care, social norms, disaster medicine, trauma-informed care

Introduction

Acute emergencies, such as the current Covid-19 pandemic and natural disasters, and long-term crises, such as climate change, disrupt global and national societal structures on which many rely, influencing population health. Whether an emergency's effects are immediately visible or incrementally worsening, the disruptions they cause affect women's health in similar predictable ways.

Global emergencies and their consequences demonstrate the gendered patterns of disadvantage that women have historically faced and that, without intervention, may be perpetuated in the future. Some emergencies, such as Covid-19, are both urgent and acute. Others, such as climate change, are no less urgent but longer term. The need for effective prevention against and preparation for disasters of all kinds has become increasingly relevant. As biologist and activist Elizabeth Sawin, PhD[1] states, connecting Covid-19 and climate change and explaining the need for addressing emergencies regardless of the timeframe of impact, ''The virus has shown that if you wait until you can see the impact, it is too late to stop it.'' In addition, emergencies are complex and can have negative rippling effects on human health. Research has detailed broad consequences of climate change on health, from contributing to adverse outcomes in the present to increasing rates of future emergent scenarios.[2] In addition to outbreaks of infectious disease, climate change is associated with increasing rates of natural disasters, weather events, and extreme temperature changes, all severely impacting human health in the long term, and with predictable disproportionate adverse effects on the health of women.[3] More research on the long-term consequences of other crises is needed; lasting effects of other major disasters may continue to cause harm.

During crises, women are disproportionately exposed to adverse health, economic, and social outcomes. The disruptions to health, economic, and social systems that result from

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emergencies of this scale may expose all to risk; however, the most vulnerable and underserved populations experience the most harm. In this study, we focus on disproportionate harm that women experience affecting access to care: restricted reproductive health care, worsening gendered economic inequalities, and disadvantageous societal gender norms and expectations.[4] We then propose ways that health care professionals can influence effective policies and strategies to mitigate these specific gendered harms.

Impact on Reproductive Health Care

In times of emergency, reproductive health care, although both essential and time sensitive, is not always considered a priority. Access to maternal, contraceptive, and abortion care can be restricted by inadvertent circumstances and purposeful governmental actions, likely exacerbating existing inequities in reproductive health outcomes.

The United States has a high incidence of maternal mortality compared with other high-income countries.[5] The staggering morbidity and mortality among U.S. mothers and infants, especially among Black and Indigenous communities, is an urgent issue in and of itself and may be compounded by future crises. Adverse pregnancy and birth outcomes increase in times of disaster[6] and strain existing efforts to improve maternal outcomes. Rates of women with delayed or no prenatal care, preterm birth, intrauterine growth restriction, low birth weight, and small head circumference all increase during times of upheaval and crisis.[6]

During the 2014 Ebola epidemic, in the highly affected country Sierra Leone, women accessed fewer antenatal and postnatal health care services, and fewer delivered in health care settings. Facility maternal mortality ratios and rate of stillbirths both increased.[7] Research suggests that the deaths were not due to Ebola itself but rather to factors restricting access to care and thereby worsening maternal mortality.

Access to birth control and emergency contraceptives, which is suboptimal at baseline, is further hindered during disasters due to supply chain issues, disruption of funds to family planning programs, and disparities in insurance coverage. As a result of the Covid-19 pandemic, for example, a supply shortage of contraceptive medications may occur due to the temporary closure of drug factories in affected areas.[8] Although almost one-half of pregnancies in the United States are unintended,[9] federal funds have been systematically diverted from national family planning clinics, compounding the difficulty of emergency preparedness for these clinics. It is possible that other funding mechanisms will be diverted as well.[8] Although major governmental organizations such as the Centers for Disease Control recommended stocking up on prescription medications because of Covid-19, this is not an option available to all. Some insurance policies limit birth control medications to 1 month at a time. Furthermore, crisis-related economic downturns and layoffs may result in women losing insurance coverage. Cost can be a major barrier to contraception usage; an out-of-pocket cost of just $6 is enough to deter women with private insurance from continuing contraception.[10] Without insurance, the monthly cost of contraception without insurance, excluding the cost of physician counseling, can be up to $50 per month for the pill and $500–$800 for an intrauterine device. Further threats to contraceptive access will only exacerbate existing disparities in reproductive health outcomes.[11]

A joint statement issued by the American College of Obstetrics and Gynecology, the Society for Family Planning, and other respected medical organizations classifies abortion as essential, time-sensitive care during emergencies, specifically referencing Covid-19.[12] However, eight states have attempted to ban either medical or surgical abortion in orders pertaining to Covid-19.[13,14] Hundreds of appointments for essential reproductive health care have been canceled, forcing women to travel farther for abortion care, possibly crossing state lines, and increasing exposure risk during the pandemic.[15]

As natural disasters increase with climate change, we expect that disruptions to medical supplies and physical care will continue if there are no preparations in place to prevent them.[16] To mitigate barriers to care in the future, we must advocate for legal protections on funding for and access to reproductive health care.

Economic Impact

Women are disproportionately affected by economic downturns during crises. In 2016, women comprised slightly less than half of the U.S. workforce, but held two-thirds of low-wage jobs (paying $11.50/hour or less).[17] Women of color are especially over-represented in low-wage jobs that are projected to have the highest workforce growth in the next decade (i.e., home health aides and food serving workers); their representation in these jobs is nearly three times higher than representation in the workforce.[17] Low-wage jobs are less likely to offer health insurance, leaving those ineligible for Medicaid but unable to afford state marketplace insurance without coverage.[17] Accordingly, women face disproportionate challenges in times of upheaval. In the Covid-19 pandemic, more women than men report worrying that they will lose income due to workplace closure or reduced hours, that they will not be able to afford testing or treatment if needed, and they risk exposure because they cannot afford to stay home from work.[18] During economic crises, men's labor force participation remains largely unchanged, whereas women's labor force participation rises in the poorest households and falls in richer households.[19] Furthermore, although women's and men's salaries both dropped during the Ebola epidemic, it took more time for women's salaries to return to precrisis levels than for men's.[20]

During a pandemic, it is important to note women's paid and unpaid contributions to health care labor and the health economy. Women comprise 70% of global health care workers and 78% of United States health care workers.[21,22] The Covid-19 pandemic has demonstrated that health care workers face increased exposure to pathogens and thus are at increased risk of infection. Beyond exposure risk, caregiving and household work can add to the mental and emotional health burdens that women face during crises. Before the pandemic, women spent $\sim$4 hours per day on unpaid household labor, and men $\sim$2.5 hours.[23] Women contribute one and a half trillion dollars each year in the form of unpaid caregiving work, including to children, partners, elders, and others.[21]

Social Impact

Gendered expectations of societal roles can additionally disadvantage women in times of crisis, especially those who are caregivers in both the workforce and the household. Many

are now facing a shift to remote work alongside daycare and school closures, potentially increasing time spent performing unpaid care work. Women's professional productivity may be affected more than men's; lay press interviews with academic journal editors reveal gendered changes in submission rates, including a stark decrease in articles with women as sole authors.[24,25] Furthermore, more women than men report feeling net negative mental health effects and that worrying about the coronavirus has had a major impact on their mental health.[18]

Gender-specific trauma deserves thorough consideration specifically, as across the globe, many women lack human rights protections and face increased vulnerability in the face of disasters.[26] Worryingly, violence against women increases during times of crisis.[26] Catastrophes that lead to travel restrictions can lead to an increase in intimate partner violence (IPV) due to increased time with perpetrators of violence.[27] A 53% rise in domestic and sexual violence against women was observed during Hurricane Katrina and its aftermath.[28] Indeed, climate change aggravates vulnerabilities such as displacement and poverty that can lead to increased trafficking and exploitation of women.[29] Trauma-informed care is a growing paradigm in women's health,[30] and a trauma-informed approach to emergency preparedness is needed to address the disruption of lifelines of safety and social support for women.

As disasters continue to expose the vulnerabilities in social supports on which many women rely, health care providers should re-examine methods of delivery of care. Use of telecommunication and videoconferencing can expand access to care for people experiencing or at risk for IPV.[31] A model of support providing cell phones to women at risk of IPV and utilizing text messaging saw increased engagement between providers and patients with 98% of patients engaging in follow-up communications (A. Lewis-O'Connor, pers. comm; founder and head of Women's CARE Clinic at Brigham and Women's Hospital). It is important to increase provider awareness of local resources that are still offering services during emergent times to people experiencing IPV. Especially when movement is restricted, a proactive virtual system of care for women experiencing trauma could be lifesaving.

Conclusions and Call to Action

Past disasters highlight predictable ways in which women will be disadvantaged in future crises. Indeed, these patterns are repeating during the Covid-19 pandemic, and without immediate action, will persist through the next emergency. Global and national emergencies reveal the vulnerabilities of health care, economic, and social systems as they pertain to women's health and well-being. They can shift policymakers' and the general public's focus away from pressing women's health concerns as well as lessen financial support from crucial health care institutions and social support systems that bolster health. These changes may exacerbate existing gendered dynamics that disadvantage women, leading to serious challenges in promoting women's well-being. If emergencies of this nature persist or are to become more frequent, as climate science predicts, we must create robust, resilient medical, economic, and social support structures for women and ensure that gender is considered in preparedness plans and rebuilding.

Creative solutions are needed to ensure access to reproductive health care, address women's paid and unpaid labor and economic security, and maintain social support and pathways to escaping violence. To best support women and envision these solutions, there must be more women in power making decisions in health care, economic, and social institutions, and more gender-informed considerations by existing leaders.

It is essential for health care providers to understand how crises disrupt essential systems that support women's ability to stay healthy and seek health care to improve emergency preparedness for future disasters. We must support educational initiatives about climate change at all levels of health education, including bolstering communication skills to educate the lay public. The United States is experiencing a political environment in which people are discouraged from believing scientific evidence about public health crises from Covid-19 precautions to climate change, sowing a distrust in scientists with ramifications for future disaster mitigation efforts. Political agendas can hamper public health efforts and endanger lives. It is important for health care providers, in conjunction with media, to widely disseminate evidence-based information and counter circulating mistruths.

Health care providers have a unique opportunity to mitigate the effects of emergency scenarios and intervene in the pattern of recurring adverse outcomes in women. Health care professionals, especially nurses, are a particularly trusted demographic in the United States[32] and have multiple venues in which to act. We can and must support women, especially women of color and transgender women who may face intersectional challenges, through individual and institutional actions: becoming educators, engaging in advocacy, participating in institutional action, and protesting.[33] Mitigating the effects of climate change, for example, is especially important to preventing predictable future emergencies. Health professionals can incorporate both sex/gender-informed research and climate health knowledge into each of the aforementioned actionable items, working to fix current disadvantages and prevent future inequities. As medical providers and researchers, we must target specific patterns of disadvantage that women face in times of crisis and increase our understanding of the dynamic evolving threats to our patients' well-being.

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