
Addressing the detrimental impacts of COVID-19 on women in the workforce: Where do we go from here?

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Key words

COVID-19 impact, economics, health, women, workforce

Abstract

This paper analyzes national and global statistical data and reports to investigate the status of women in the workforce subsequent to the 2020-2021 COVID-19 pandemic in the United States, identify issues, and propose a path forward. The disproportionate adverse effects of the pandemic included higher unemployment rates among women and greater job losses within female dominated industries and women owned businesses as compared with men, and health challenges heightened by pandemic-related stresses. Further, the responsibility for compensating for the sudden removal of accessible childcare services which followed school and daycare disruptions and closings nationwide, overwhelmingly fell to women – whether they were single or married. Some analysts report that the pandemic served to reassert the unequal division of labor in the household between men and women. Researchers have posited that the pandemic's impact will retard women's progress in the workforce for decades if not generations. Strategies for counteracting these effects must entail targeted measures focused on promoting women's re-entry in the workforce including: the normalization of flexible work schedules to foster a more balanced home and work-life for women, increased family leave for mothers and fathers, more quality and affordable childcare as well as more onsite childcare facilities to meet employees' needs.

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First submission received: 12th September 2021

Revised submission received: 5th October 2021

Accepted: 18th October 2021

Introduction

The COVID-19 pandemic has had a tremendous impact on every aspect of human life worldwide. Detailed daily reports by the World Health Organization have documented the aggressive and pervasive spread of this virus to distant corners of the world. In the span of less than three months, following hundreds of confirmed cases in China, there were reported cases in a total of 150 countries including the United States (Figure 1). The health-related fears which ensued were exacerbated by economic concerns as the lockdowns implemented to prevent the spread of infection, led to widespread job losses across every sector of the economy. The U. S. Bureau of Labor Statistics reported that the unemployment rate jumped from 3.5% of the population in February 2020 to an astounding 14.7% by April 2020, representing a change of approximately 17 million more individuals unemployed in just 2 months. While some reversion

to normal routines has occurred, there are still concerns about new COVID-19 virus variants that have had devastating effects despite the increase in vaccination rates and implementation of facemask and social distancing mandates. Small businesses continue to be negatively impacted by government-mandated restrictions and people's hesitancy to be out in public spaces.

Figure 1.

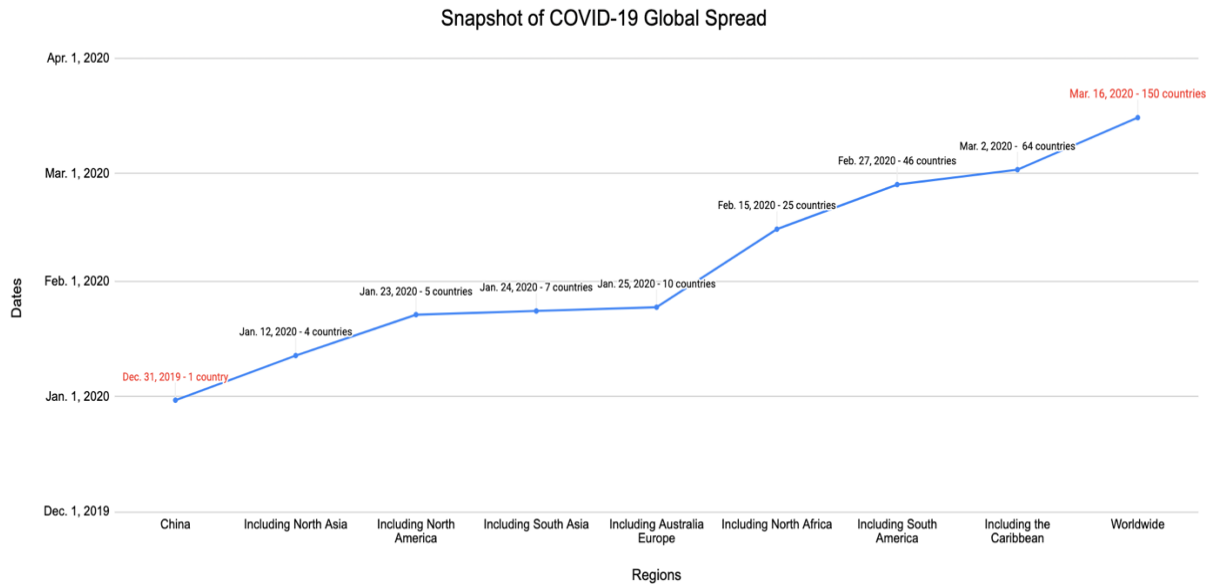


Figure 1 is based on statistical data compiled by the World Health Organization on the spread of the COVID-19 virus. On December 31, 2019, cases of pneumonia were reported in Wuhan City, China but were not yet identified as COVID-19 cases. All other dates represent the total number of countries with one or more confirmed cases as the virus spread to additional regions across the globe.

Literature review

Various economic indicators have reported on the impact of the current pandemic on women in the workforce. According to data retrieved on gender representation from the United Nations Population Division's World Population Prospects report in 2020, women represent 49.6% of the world's population and 50.5% of the population in the United States (World Bank Open data, 2020). Hence, supporting this key demographic group is essential to ensuring the strength of national and global economic recovery and revitalization efforts. A report by the Pew Research Center in April 2021 (Figure 2) reported on pandemic-related unemployment and showed that rates in the U.S. were higher than in European Union (EU) countries. It is noted that the EU provided more safety nets to retain jobs and had more liberal existing policies regarding furloughs, family leave, and part-time employment options for working mothers than the U.S. The report highlights the disproportionate impact on women in the U.S. (Figure 3) over the key timeframe of the lockdown. The data are further supported by reports from the U.S. Bureau of Labor Statistics, which indicated that the unemployment rate in April 2020, at the height of the pandemic, was 15.5% for women as compared with 13% for men. Women were more likely to lose jobs than men and unemployment rates for women continue to remain higher than for men.

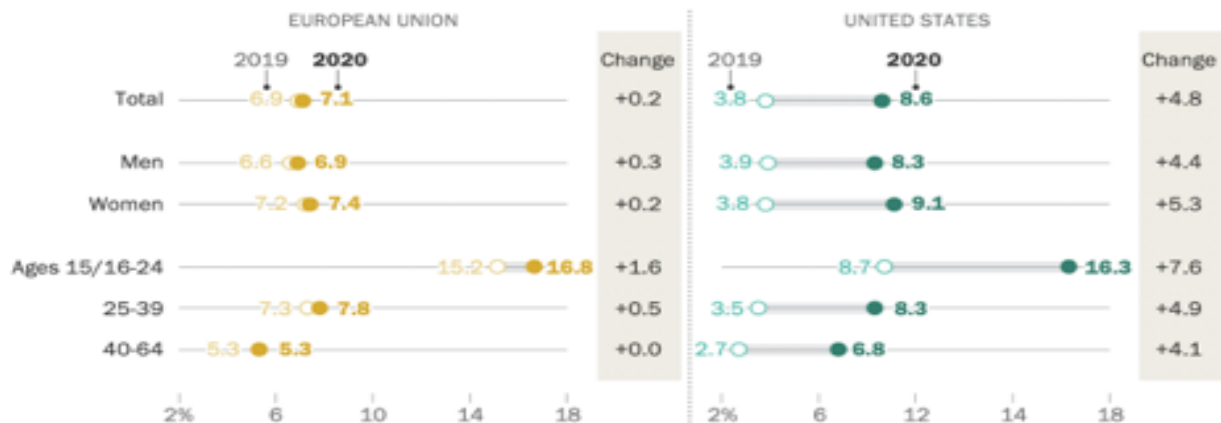
Furthermore, it must be acknowledged that the poverty rate for children under the age of 18 is closely related to women's income. As per the 2019 U.S. Census, 14.4% or 10.46 million children lived in poverty.

This number is closely tied with the number of households headed by single women who are more likely to live in poverty (24.9%) and the fact that women, on average, earn only 82% of what men earn, despite all efforts to close the wage gap (AAUW Fast Facts, 2021).

Figure 2.

The increase in unemployment was more pronounced in the U.S. than in the EU, particularly among women and young adults

Unemployment rate (%), by gender and age groups in 2019 and 2020



Note: Estimates refer to workers ages 16 to 64 in the U.S. and ages 15 to 64 in the EU, and they reflect the average of the first three quarters of each calendar year. Figures may not add up to change shown due to rounding.

Source: Pew Research Center analysis of Eurostat data and 2019 and 2020 Current Population Survey monthly files (IPUMS).

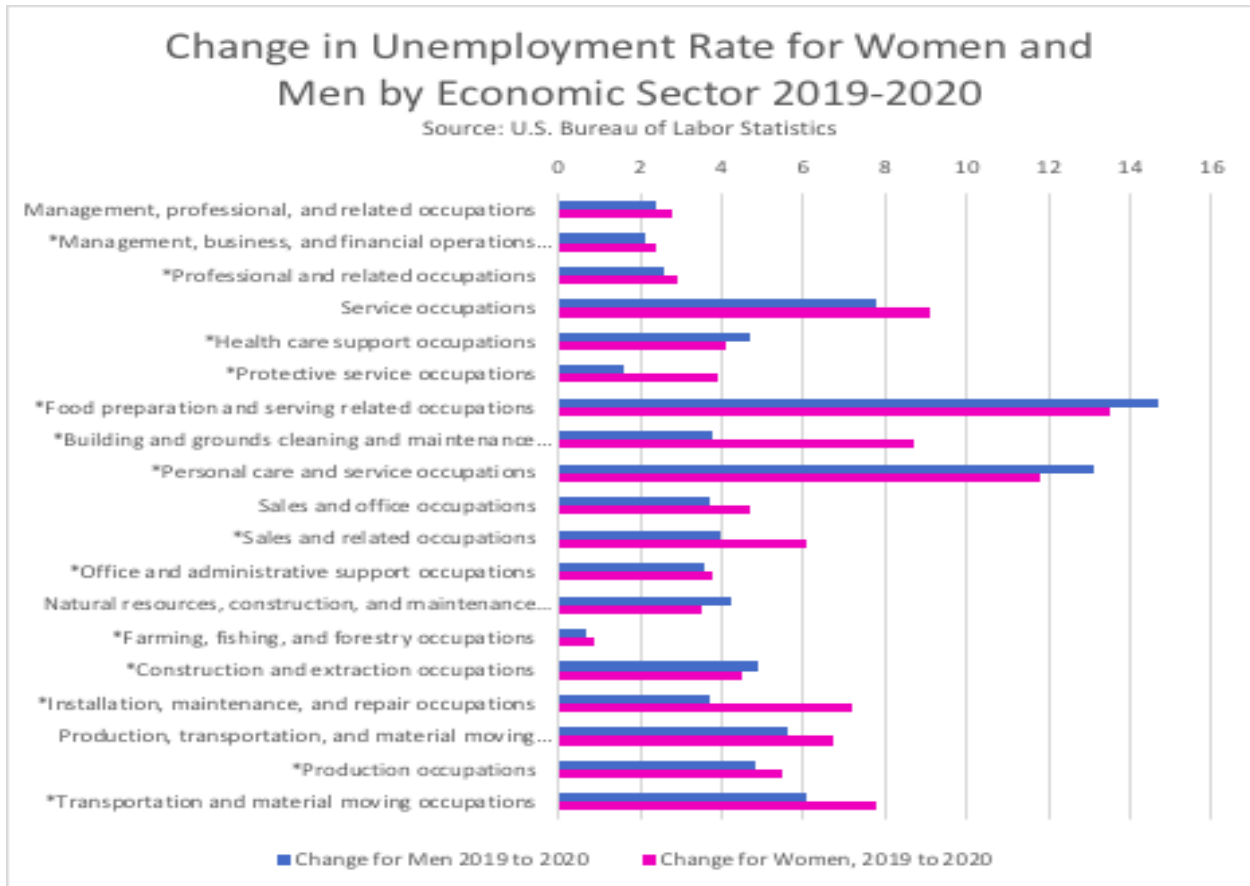
PEW RESEARCH CENTER

Source: Pew Research Center https://www.pewresearch.org/wp-content/uploads/2021/04/ft_2021.04.15_USandEUjobs_02.png?w=640

Representation of women in the US labor force

In the United States women are present at every level of the workforce, from blue-collar professionals to board room representatives. The US Bureau of Labor Statistics reported the employment participation of women to be 57.4% in 2019 in comparison to 69.2% for men. However, women have not reached parity as wage earners. In 1979, full-time employed women earned only 62% of the wages earned by their male counterparts; as of 2019 they only earned 82%. There are some sectors of the economy that have a larger representation of women than men including personal care and service, food preparation, and sales. One of the consequential results of the pandemic has been the further erosion of women's representation in the labor force. The U.S. Bureau of Labor Statistics reported that job losses were greater for women than men (Figure 3) in sectors related to management, sales, service, and production. Those figures were even more dismal among Black and Latina women.

Figure 3.



Research methodology

National and global statistical data trends and reports from surveys served as the primary sources of information for this review. The reports provided gender-based comparisons of employment participation and unemployment rates in the United States. Data detailing the impact of the COVID-19 pandemic on women in women-dominated industries were particularly relevant. Also significant were research works examining the effects of the pandemic on women's home and work lives, in addition to the emotional and physical stresses they faced. Accessing sources on policies or strategies for promoting women's re-entry in the workforce was scarce given that worldwide, the U.S. and other nations are still combating the spread and the deleterious effects of the pandemic.

Findings/results

Why this recession disproportionately affected employed women

During recessions in past years, such as 2008-2009, men in the workforce were more adversely impacted than women (Alon, Doepke, Olmstead-Rumsey & Tertilt, 2020) because men's participation in the labor force included employment in sectors with greater cyclical volatility than women's employment (Doepke & Tertilt, 2016) such as manufacturing and construction. These sectors are different from the government sectors of education and health services industries where workers' participation is countercyclical and subsequently results in less volatility for employees. Consgun and Dalgic (2020)

posited that while the latter sectors reflected a workforce participation which was 40% women and 20% men, the manufacturing, construction, and “Trade, Transportation, Utilities” had employment participation which was 46% male and 24% female. Doepke and Tertilt (2016) noted that from 1989-2014 men represented three fourths of cyclical volatility and women less than a fourth. Hence, “past downturns have affected men’s employment much more severely than that of women” (Alon et al., 2020, p. 7). A reversal of this pattern was presented in subsequent analyses by Alon, Coskun, Doepke, Koll, and Tertilt (2021), which reported greater impact on women as compared to men a year into the current pandemic, labeled by the authors as a “shecession” (p. 3) and related to both employment sectors as well as childcare issues.

Employment sector

Differences in employment sector representation of men and women negatively impacted the latter in two ways. First, in contrast to previous recessions, the COVID-19 pandemic particularly impacted employment in the restaurant, travel, and hotel and leisure industries, as well as education and health services, where the participation of women in the workforce is substantially higher than the participation of men. According to the U.S. Bureau of Labor Statistics for 2019, women’s employment participation in the Hospitality and Leisure industry was 51.2%, Kindergarten through Middle School Education was 80.5%, and women also represented the preponderance of employees who were Hospital Nurses (89%) and Home Health Care Workers (87%). Additionally, DataUSA – established through a collaboration between Deloitte, Datawheel, and MIT Professor Cesar Hidalgo – found that in 2019 women accounted for 92.4% of childcare workers nationwide and earned an average wage of \$16,421. These industries were particularly hard hit with mandated business closures. Second, women employees in the direct service sectors often did not have the option to work remotely and concurrently had no means of accessing childcare due to mandated lockdowns of care and educational facilities intended to arrest the spread of the virus. Subsequently, women in blue collar jobs suffered the loss of jobs at a considerably higher rate than those in white collar jobs.

Family structure and childcare

Single mothers particularly suffered the brunt of the pandemic’s negative impact on childcare services. According to the U.S. Census Bureau, data from 2020 show that of the almost 11 million households headed by single parents with children under the age of 18 years, over 80% were headed by single mothers. Specifically, 21% of children came from single mother households while 4% came from single father homes. Single mothers were almost 10 times more likely to be living in poverty as compared with single fathers.

Lack of childcare, coupled with the responsibility of remote learning of children, made single mothers more susceptible to the adverse effects of the pandemic on employment than any other demographic. Childcare needs and challenges were exacerbated by the fact that grandparents or extended family could not be depended upon to assist due to fears of the spread of the virus and the mortality concerns for the elderly (Alon et al., 2020). Subsequently, millions of women opted to either reduce their working hours or leave the workforce due to an inability to secure childcare.

O’Reilly (2021) compiled emails from mothers across the globe from many different professions who discussed changes to their lives during the pandemic. Many working mothers reported attending to professional responsibilities late at night or on weekends, as childcare and education of their children occupied large parts of their day. Exhaustion and frustration from the multiple demands were common themes, added to observations about the lesser impacts on their spouses, especially if spouses worked outside the home. Some reported quitting or losing their jobs, which was often linked to loss of health insurance, adding to the life stressors.

As of April 2021, the U.S. Administration reported a reduction of 3.7 million women from participation in the labor workforce as compared with February 2020 numbers. The U.S. government also asserted that “the resulting gender and racial income and wealth gaps have only been magnified and exacerbated by the impact of COVID-19” (Fact Sheet: The American Jobs Plan Will Support Women’s Employment, 2021).

Impacts beyond unemployment and low wages

The Center for Global Development, the United Nations and International Labor Organizations have all reported that low wage earners, and women in particular, were most devastated by the mandated stay-at-home orders related to controlling the spread of the pandemic. The business closures also led to a higher rate of poverty rates among women than men. While much of the discussion has centered on the pandemic’s impact on women’s employment and wages, focus must also be placed on the toll it has taken on women’s mental and physical well-being.

Women who had work-at-home options reported being overworked both as employees and parents with the triple responsibility of maintaining jobs while meeting childcare needs as well as assisting their children with remote schooling in the role of teacher-aides. Deloitte’s Annual Women at Work Survey (2021) examined the effects of the pandemic on 5,000 women from 10 different countries, including the U.S. The study findings indicated that an overwhelming 77% reported increased workloads at their jobs due to the pandemic; 66% relayed that they were bearing the greater share of increased responsibilities in the home including caregiving and 79% said they were shouldering the responsibility of caring for elderly family members as well as most of the housework. The report also revealed that one in four women had left the workforce in the prior year, citing the lack of work and life balance as a key issue, while 57% intended to leave within two years for the same reason.

One of the sectors that employs women at very disproportionately high rates is healthcare. Individuals in this sector were most vulnerable to infections due to their proximity to infected patients. In April 2020 the Centers for Disease Control and Prevention reported that 73% of infected healthcare workers were women (CDC, 2020). In addition to the stressors caused by concerns about their own health and that of their families, healthcare workers were faced with longer hours at work, difficulties obtaining their own maternal and personal health care, hardships in finding childcare as centers were closed, and social distancing guidelines that closed off contact with family members, over and above challenges in managing day-to-day responsibilities related to providing meals and other necessities for their families.

Discussions and conclusions

The economic downturn caused by the COVID-19 pandemic disproportionately impacted women in the workforce because women-dominated industries in the education, health services, childcare services as well as the hospitality and leisure sectors were more heavily affected by the business disruptions, closures and economic lockdowns that followed. The pandemic reduced key resources and support networks for childcare including family members, grandparents, childcare centers, in-person schooling, and after-school programs which normally would have allowed parents to participate in the labor force while children attended school and other activities daily for a set number of hours.

The research findings also showed that women in blue collar jobs were disproportionately impacted compared to those in white collar jobs because they had less flexibility with work schedules including remote work. Societal gendered expectations and norms which persist even today led women to be overburdened and overworked with meeting the responsibilities of childcare, remote schooling, care for elderly family members, especially among women who also maintained full-time employment. The pandemic highlighted the continued unbalanced division of labor at home as well as the lack of home and

work-life balance for women. Further, these issues negatively affected their health through increased physical and emotional stresses.

At the time of this review, over 3.7 million women had exited the workforce during the pandemic and many more intended to do so, in the near future, in response to their pandemic experiences. While the United States government has expressed a commitment to promoting women's re-entry in the workforce, we do not yet know what the long-term and possibly irreversible impacts of the pandemic on women's participation in the workforce will be as well as future gender equality and equity.

Health initiatives

Building herd immunity

According to the Centers for Disease Control and Prevention as of October 2021, 55.8% of the US population had already been fully vaccinated including over 67.1% of the adult population, 83.5% of adults 65 years and older, and 65.2% of youths over the age of 12 and under the age of 18. While 77.5% of all adults have received at least one dose (CDC, 2021) as of this report, the country's effort towards herd immunity through the full vaccination of 70% of the US population has been stalled. The U.S. continues to face vaccination hesitancy from a large segment of its population, fueled in part by fears, distrust, misinformation, and political posturing. It must be acknowledged that anti-vaccination attitudes disproportionately affect women who are over-represented in industries that involve direct services to consumers. First, they are exposed to personal health risks that can affect them and their families. Second, full reopening of small businesses remains restricted in areas where virus cases are high, affecting the sectors where women are employed such as government services, education, childcare, health and beauty services, and hospitality. This increases poverty and economic hardships including food insecurity for women and their families. Third, cut-backs implemented in the white-collar sector are slower to recover if full restoration of services cannot be quickly implemented, which can result in continued lay-offs of women employees with accompanying negative economic effects. Fourth, continued closures or limited openings of schools and childcare limit women's ability to re-enter the workforce and increase their burden as caregivers. Fifth, the fears and stress that women experience regarding the effects of stay-at-home orders on their children and extended families are exacerbated and adversely contribute to their own health and ability to effectively manage their responsibilities. Clearly it is imperative that vaccinations be increased for full economic recovery to be realized.

Strategies for addressing vaccination hesitancy should include efforts from the government to collaborate with community, faith-based as well as other organizations and leaders. The Rand Corporation published research on causes of vaccine hesitancy and related effective strategies (Schmitzberger et al., 2021). Religious and societal leaders can use their standing to appeal to community residents as a group or through door-to-door knocking to promote the benefits of vaccination through succinct talks and informational materials that provide up-to-date information about the effects of the vaccines. This will serve to counteract misinformation, fears, and distrust about the vaccine. The government should also partner with businesses to promote vaccination of employees as a means of keeping those sectors open for business and minimizing disruptions and closings that may otherwise follow.

Connecting global vaccination to national economic recovery

Global organizations concerned with economic and social development missions such as the United Nations, International Labor Organization, Center for Global Development, and the World Economic Forum stress that it is paramount for nations to promote a global recovery plan to ensure the effectiveness of national recovery efforts. To that end, it is crucial that vaccination plans include strategies to foster global vaccination by ensuring that nations with excessive access to vaccines share them with those

lacking accessibility. The United States has already exported approximately 160 million vaccines to more than 100 nations towards that effort (Zelle, 2021). This contribution, among others, will add to the 43% of the population worldwide that has been vaccinated with over 5.9 billion vaccine doses administered (Zelle, 2021). Smooth resumption of global trade and international businesses will directly impact women's economic status through increased employment and economic opportunity.

Societal initiatives

A major obstacle to women's re-entry in the workforce remains the pandemic's extensive adverse effects on the childcare industry and K-12 education systems. As infections spread, both sectors experienced massive disruptions and lockdown mandates which led to the inaccessibility of childcare services nationwide. This was exacerbated by the transition to remote schooling, which caused many women to leave the workforce in order to meet the childcare and remote learning needs of their families. Additionally, many lost jobs due to permanent business closures which ensued as the lockdown regulations continued.

Increasing gender equality in families

With respect to the division of labor in coupled households, it has been widely reported that the increased household responsibilities of child rearing and remote learning resulting from the pandemic's disruptions and closures of childcare centers, and schools predominantly fell to women, whether they were stay at home mothers or were employed outside the home. However, Alon et al. (2020) point to the American Time Use Survey of 2017-2018, which reported that the participation of men in childcare duties surpassed that of women among men who were unemployed when their spouses were telecommuting, non-telecommuting or who, as critical employees, worked outside the home as healthcare workers, pharmacy or grocery employees and in other related fields. Men's level of participation in childcare was also higher when they themselves were telecommuting and their wives were critical workers. Alon et al. suggest that for men whose participation in childcare increased in response to the childcare gaps created by the pandemic, this experience will have been a positive move towards a more balanced division of labor in the house and a step forward towards gender equality in that realm.

Increasing access to high quality childcare and education

The government also seeks to pass the American Families Plan and American Jobs Plan. Like the American Rescue Plan, the American Families Plan is committed to providing extensive funds to fostering affordable and quality childcare by ensuring that childcare costs do not exceed seven percent of wages among low to middle income earners (Fact Sheet: The American Families Plan, 2021). The American Families Plan also includes establishing a paid family and medical leave program nationwide and expanding health coverage. Further, the American Families Plan will establish Universal Pre-K programs nationwide for three to four-year-old children. These efforts will all serve to enhance parents' and, in particular, women's ability to re-enter the labor force by providing reliable childcare.

Upgrading school safety

Passage of the American Rescue Plan by the US government added \$40 billion dollars to stabilize the childcare services industry and counteract the pandemic's adverse impacts on that sector. \$123 billion was allocated for K-12 schools to help upgrade ventilation systems, reduce class sizes, purchase personal protective equipment, and hire additional staff (American Rescue Plan: Summary for Human Services Organizations, 2021). This helped reopen schools and thus lessened the effects school disruptions and closings have had on women's ability to remain employed.

Healthcare initiatives

O'Donnell, Buvinic, Bourgault, and Webster (2021) from the Center for Global Development constructed a conceptual framework that described the impacts of the COVID-19 pandemic on the health of women, delineating the initial as well as long-term effects, both of which affect their ability to work and grow professionally. In the immediate term there was a massive disruption of services including transportation, nutrition and childcare. More long-term were the closure of small businesses and farms, job loss, and possible homelessness and poverty. The authors note that the pandemic was not the root cause of the gendered inequalities but served to increase those that already existed.

Leveraging medical innovations to support women

As noted by Krubiner, O'Donnell, Kaufman, and Bourgault (2021) from the Center for Global Development, there have been a number of innovations in the health field that need to be scaled up so that women have quicker and easier access to health care going forward. These include home testing kits for common illnesses, self-care products, telehealth platforms, and community-based healthcare delivery. This would go a long way not only to support women's health, but also to enable their success in the economic sector by reducing the burden and anxiety surrounding their own care.

Implementing healthcare policies that address inequalities

It has been widely recognized in international comparisons that the U.S. has more individuals who lack access to basic health care than other countries in the developed world (Bambra, Lynch & Smith, 2021). A higher proportion of individuals with co-morbidities of obesity, diabetes, and hypertension has been attributed to higher mortality rates from COVID-19 in the country. A national healthcare policy that reduces discrepancies in insurance coverage and healthcare access for all is a key step in supporting women's economic recovery. It has been noted that overall health outcomes during the pandemic were better in social-democratic welfare states as compared with corporatist welfare states such as the U.S. (Bambra et al., 2021).

Increasing women's leadership in the medical sector

As per national reports, a disproportionate number of women are in the healthcare workforce; however, they comprise a minority of the leadership in the area, which has been proposed as a possible explanation for the lower attention to women's health care concerns. Linda Griffith of the Massachusetts Institute of Technology (as reported by Trafton, 2009), stated that gynepathology has been considered taboo and a topic to be avoided by male researchers. Subsequently, little is understood about the underlying causes and treatment approaches to common ailments such as endometriosis, which have often been dismissed as imaginary or subjected to crude treatment approaches with many dangerous side-effects. Many examples abound in health care, such as heart disease and auto-immune disorders, where women's health concerns have not been given the same priority as those of men, nor has their unique biology been acknowledged. This reality needs to be changed with access to more professional development for women to step into leadership roles, as well as a concerted effort to recruit and retain women leaders.

Employment initiatives

Implementing new workplace policies

In numerous reports compiled on women's experiences during the pandemic (for example, O'Reilly & Green, 2021), it has been documented that women, especially mothers of young children, experienced the effects of the pandemic more severely than men. Women often reported the need to discontinue working due to childcare and homeschooling demands. Those in middle-class families with white-collar

jobs were sometimes able to manage and continue working, though they faced extreme difficulties for which they compensated by working through night hours, multi-tasking, and trying to cooperate with friends and family to juggle time and responsibilities. Professional women expressed concerns regarding a disruption in their ability to take advantage of job advancement and leadership opportunities. Women frequently reported that while their male partners did not seem to have too much of a disruption in their work lives, other than being at a computer at home rather than the office, their own lives were turned upside down due to their multiple roles as professionals, mothers, homemakers and often caregivers for elderly family members (O'Reilly & Green, 2021). Research by Adams-Prassl, Boneva, Golin, and Rauh (2020) indicates that single mothers are even more likely to benefit from flexible work policies than women with spouses and single women without children due to their multiple roles and responsibilities.

It is time for employers to bring about changes in their overall views of workplace policy and practice. The pandemic related closures have demonstrated that change is possible while maintaining productivity and standards. Recognizing that any approach can result in both negative as well as positive impacts (Lyttleton, Zang, & Musik, 2020) on women's responsibilities and work-life balance, some practical changes that can be implemented are:

(a) Flexible time: When productivity expectations are made clear, it is evident that employees can fulfil their responsibilities while working on schedules that accommodate their many responsibilities.

(b) Family leave: Businesses have responsibilities toward their employees and larger society, not just their shareholders, and the greater good comes from this social consciousness.

(c) Telecommuting: When women are able to manage family care responsibilities, their productivity and job satisfaction are likely to improve, along with a reduction in stress.

Expanding health-care coverage

The American Rescue Plan also expanded individual health coverage and extended paid sick time and paid family leave credits such as time taken to receive or recuperate from a COVID-19 vaccine (American Rescue Plan: Summary for Human Services Organizations, 2021). As indicated by data from the Petersen KFF Health System Tracker (Kurani, McDermott, & Shanosky, 2020) in the EU, broader social safety nets for health coverage and family leave have contributed to better overall health and longevity in peer countries as compared to the U.S. This inequity was evidenced by the fact that the pandemic saw a further reduction in overall average life expectancy in the U.S. (Andrafsay & Goldman, 2021). It is clear that policies to provide access to high quality health care and family leave are necessary to promote women's economic independence.

Creating or restoring jobs

States have received funds under the Coronavirus, Aid, Relief and Economic Security (CARES) Act to be used by small businesses and nonprofits as well as the tourism, travel, and hospitality industries. The Small Business Administration must also make \$5 billion available for supplemental grants to help organizations with 10 employees or less who have had economic losses of 50% or higher. These grants will be tax exempt (American Rescue Plan: Summary for Human Services Organizations, 2021).

Passage of the American Jobs Plan will establish millions of jobs and build up the country's infrastructure nationwide. This Plan will also invest billions in upgrading schools and ensuring accessibility to high-speed broadband to families (Fact Sheet: The American Jobs Plan Will Support Women's Employment, 2021). The pandemic demonstrated how Latina/o and Black families' ability to effectively participate in remote schooling was severely impeded due to lack of internet access. Subsequently, many children fell academically behind throughout the pandemic. Black and Brown families were disproportionately negatively affected as compared to White families, and this was

exacerbated by the fact that 60% of single mothers tend to be from minority groups. The American Jobs Plan will also allot funds to modernize childcare centers and increase affordable and quality childcare.

Additionally, the American Jobs Plan is slated to invest billions in promoting opportunities for job training and entrepreneurship for women to help prepare them to re-enter the workforce and obtain new jobs, as well as ensure that workforce development programs promote gender equity. Ten billion dollars will be allotted to ensuring that these opportunities are enforced equitably. This will include up to two million apprenticeship positions for women as well as pre-apprenticeship opportunities. This plan will entail enhancing pipelines such as the Women in Apprenticeship and Non-Traditional Occupations, which strengthen access to apprenticeship opportunities for women and career pathways for leadership in diverse industries. A grant program accessible through the Minority Business Development Agency will enable small manufacturing business owners of color to obtain private capital. Further, over thirty billion dollars will be allotted to assist women-owned small businesses, and minority owned businesses access capital and scale up their capacity.

Study originality and implications

This study offers a holistic perspective to addressing the impacts of COVID-19 on women in the United States including its ramifications on a) women's rate of employment, b) socio-economic status, c) physical and mental health, d) the balance in the household division of labor between men and women, and e) women's increased responsibilities as caregivers to their nuclear and extended families and teachers to their children through remote schooling. One of the many consequences of this pandemic is that it has exacerbated some existing gendered inequalities. However, as previously mentioned, men who have taken on increased responsibilities in the home as a result of the pandemic may continue to do so post-pandemic (Alon et al., 2020); in the long run this will serve to enhance gender equality in the household division of labor.

This review also details strategies for promoting women's re-entry in the workforce and counteracting some of the effects the pandemic has had on women's health, personal and professional lives. Prior research suggests that a long-term effect of the pandemic will be a reversal of some of the gains women have made in increasing their participation in the workforce not only in the United States but worldwide. This is evidenced by the fact that women have expressed their intention to exit the workforce as a direct result of the pandemic's impacts and the lack of balance they experienced in their home and work lives as well as the stresses which ensued (Deloitte, 2021). Some also conveyed that, moving forward, employers must establish flexible work schedules as a norm of their organizational culture, particularly, as a means of promoting more balanced home and work-life environments.

Lastly, this study highlights the need to focus more attention on the negative impacts the pandemic has had on women's physical and mental well-being including: a) higher rates of homelessness and poverty for women and their children, b) the need to recruit and retain more women leaders in healthcare fields as well as promote better provision of and access to healthcare for women, and c) the necessity for women to prioritize and engage in greater self-care to better maintain their mental and physical health.

Limitations and direction for future research

Globally, nations are currently continuing to battle the spread of COVID-19 as additional variants of the virus are emerging. The U.S. is witnessing an increase in the spread of the virus in numerous states, especially among its non-vaccinated population. September 2021 updates on the virus revealed that over 80% of hospitalized patients due to COVID-19 had not been vaccinated. Additionally, the virus continues to mutate and, while the highly contagious Delta variant remains the most prevalent of the mutations facing the U.S., other contagious mutations such as the Delta Plus, Lamda, Mu, and Omicron are now also present. COVID-19 restrictions have been eased, modified, or lifted throughout the country. However, we

do not know how the spread of new COVID-19 strains, coupled with continued vaccination hesitancy among over 44% of the US population, will again impact school openings, childcare accessibility, and employment.

Because the COVID-19 pandemic has not yet been eradicated, practitioners and policymakers will need to examine the long-term post-COVID-19 pandemic effects on women's participation in the labor force including their health, economic status, their representation in leadership in diverse industries, and how those factors have impacted trends towards gender equality and equity.

Lastly, scholarly works exploring how to address the pandemic's impacts on women in the workforce remain limited as many nations, like the U.S., continue to struggle to contain the spread of the virus and will not know the extent of damages caused by COVID-19 for decades to come. Future studies on this important topic can continue to highlight economic needs and inform development programs.

References

- Adams-Prassl, A., Boneva, T., Golin, M. and Rauh, C., 2020. Inequality in the Impact of the Coronavirus Shock: Evidence from Real Time Surveys. *Journal of Public Economics*, 189, 104245.
- Alliance for Strong Families and Communities, 2021. American Rescue Plan: Summary for Human Services Organizations. [online] Available at: https://alliance1.org/web/news/2021/March/american-rescue-plan-summary-human-services-organizations.aspx?utm_term=american%20rescue%20plan&utm_campaign=Alliance+Resources/Articles&utm_source=adwords&utm_medium=ppc&hsa_acc=8924800388&hsa_cam=9768459789&hsa_grp=119761602859&hsa_ad=507490031420&hsa_src=g&hsa_tgt=kwd-1149050676705&hsa_kw=american%20rescue%20plan&hsa_mt=b&hsa_net=adwords&hsa_ver=3&gclid=CjwKC-Ajwos-HBhB3EiwAe4xM917TL9jT4PVdOt3Fk6aXlI3tx-q8ZaPA8bEUheTVirfoR-bKq06mqRoCLCgQAvD_BwE [Accessed 19 July 2021].
- Alon, T., Doepke, M., Olmstead-Rumsey, J. and Tertilt, M., 2020. The Impact of COVID-19 on Gender Equality (No. w26947). *National Bureau of Economic Research*.
- Alon, T., Coskun, S., Doepke, M., Koll, D., and Tertilt, M., 2021. From Mancession to Shecession: Women's Employment in Regular and Pandemic Recessions. Unpublished manuscript, Northwestern University.
- American Association of University Women, 2021. Fast Facts: The Gender Pay Gap. [online] Available at: <https://www.aauw.org/resources/article/fast-facts-pay-gap/> [Accessed on 3 August 2021].
- Andrasfay, T. and Goldman, N., 2021. Reductions in 2020 US Life Expectancy Due to COVID-19 and the Disproportionate Impact on the Black and Latino Populations. *Proceedings of the National Academy of Sciences*, 118(5), e2014746118. [online] Available at: <https://www.pnas.org/content/118/5/e2014746118> [Accessed on 4 October, 2021].
- Bambra, C., Lynch, J. and Smith, K., 2021. *The Unequal Pandemic COVID-19 and Health Inequalities*. Bristol University Press, Policy Press.
- Center for Disease Control and Prevention, 2021. COVID Data Tracker. COVID-19 Vaccination in the United States. [online] Available at: https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-rate-total [Accessed on 2 October 2021].
- Coskun, S., and Husnu D., 2020. The Emergence of Procyclical Fertility: The Role of Gender Differences in Employment Risk. CRC TR 224 Discussion Paper Series No. 142.
- Data USA, 2019. Childcare Workers. [online] Available at: <https://datausa.io/profile/soc/childcare-workers#employment> [Accessed on 6 June 2021].
- Deloitte, 2021. Deloitte Global Report: Pandemic Takes Heavy Toll on Working Women; Majority Are Significantly Less Optimistic About Their Career Prospects Today. [online] Available at: <https://www2.deloitte.com/global/en/pages/about-deloitte/press-releases/deloitte-global-report-pandemic-takes-heavy-toll-on-working-women-majority-are-significantly-less-optimistic-about-their-career-prospects-today.html> [Accessed on 11 April 2021].
- Doepke, M., and Tertilt, M., 2016. Families in Macroeconomics. In: *Handbook of Macroeconomics*, Vol. 2. North Holland.

- Krubiner, C., O'Donnell, M., Kaufman, J., and Bourgault, S., 2021. Center for Global Development. Addressing the COVID-19 Crisis's Indirect Health Impacts for Women and Girls. [online] Available at: https://www.jstor.org/stable/resrep30892?seq=1#metadata_info_tab_contents [Accessed on 7 August 2021].
- Kurani, N., McDermott, D., and Shanosky, N., 2020. How Does the Quality of the U.S. Healthcare System Compare to Other Countries? [online] Available at: <https://www.healthsystemtracker.org/chart-collection/quality-u-s-healthcare-system-compare-countries/> [Accessed on 27 June 2021].
- Lyttelton, T., Zang, E. and Musick, K., 2020. Gender Differences in Telecommuting and Implications for Inequality at Home and Work. [online] Available at: SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3645561 [Accessed on 4 October 2021].
- O'Donnell, M., Buvinic, M., Bourgault, S., and Webster, B., 2021. The Gendered Dimensions of Social Protection in the COVID-19 Context. Center for Global Development. [online] Available at: <https://www.cgdev.org/publication/gendered-dimensions-social-protection-covid-19-context> [Accessed on 7 July 2021].
- O'Reilly, A., 2021. Certainly Not an Equal-Opportunity Pandemic: COVID-19 and Its Impact on Mothers' Carework, Health, and Employment. In: *Mothers, Mothering, and COVID-19: Dispatches from the Pandemic*. Demeter Press.
- O'Reilly, A. and Green, F. J., eds., 2021. Certainly Not an Equal-Opportunity Pandemic: COVID-19 and Its Impact on Mothers' Carework, Health, and Employment. In: *Mothers, Mothering, and COVID-19: Dispatches from the Pandemic*. Demeter Press.
- Press Statement by White House Statements and Releases, 2021. Fact Sheet. The American Families Plan. [online] Available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/28/fact-sheet-the-american-families-plan/> [Accessed on 28 July 2021].
- Press Statement by White House Statements and Releases, 2021. Fact Sheet. The American Jobs Plan Will Support Women's Employment. [online] Available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/21/fact-sheet-the-american-jobs-plan-will-support-womens-employment/> [Accessed on 28 July 2021].
- Schmitzberger, F. F., Scott, K. W., Nham, W., Mathews, K., Schulson, L., Fouche, S., Berri, N., Shehab, A., Gupta, A., Salhi, R. A., 2021. Identifying Strategies to Boost COVID-19 Vaccine Acceptance in the United States. Rand Corporation Research Reports. [online] Available at: <https://doi.org/10.7249/RRA1446-1> [Accessed on 4 October 2021].
- Trafton, A., 2009. Engineering a Cure. MIT News. [online] Available at: <https://news.mit.edu/2009/profile-griffith-1203> [Accessed on 16 July 2021].
- U.S. Bureau of Labor Statistics, 2019. Women in the Labor Force: A Databook. [online] Available at: <https://www.bls.gov/opub/reports/womens-databook/2019/home.htm> [Accessed on 12 April 2021].
- U.S. Bureau of Labor Statistics, 2020. Employment Situation Summary News Release. [online] Available at: https://www.bls.gov/news.release/archives/empsit_05082020.htm [Accessed on 12 April 2021].
- U.S. Bureau of Labor Statistics, 2021. Employment Situation Summary. [online] Available at: <https://www.bls.gov/news.release/empsit.nr0.htm> [Access on 15 April 2021].
- U.S. Bureau of Labor Statistics, 2021. Women in the Labor Force: A Databook. [online] Available at: <https://www.bls.gov/opub/reports/womens-databook/2020/home.htm> [Accessed on 15 April 2021].
- U.S. Census Bureau, 2020. America's Families and Living Arrangements: 2020. [online] Available at: <https://www.census.gov/data/tables/2020/demo/families/cps-2020.html%20Tabfg5>. [Accessed on 6 September 2021].
- U.S. Census Bureau, 2020. Decennial Census, 1960, and Current Population Survey, Annual Social and Economic Supplements, 1968 to 2020. [online] Available at: <https://www.census.gov/content/dam/Census/library/visualizations/time-series/demo/families-and-households/ch-1.pdf> [Accessed on 4 July 2021].
- US Department of Health and Human Services, Centers for Disease Control and Prevention. Characteristics of Health Care Personnel with COVID-19 – United States, February 12 – April 9, 2020, MMWR Morb Mortal Weekly Report 2020. (Atlanta, GA: CDC, 2020), 477-481. [online] Available at:

https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e6.htm?s_cid=mm6915e6_w
[Accessed on 25 August 2021]

World Bank Open Data, 2020. Population, Female (% of Total Population). [online] Available at:
<https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS> [Accessed on 13 June 2021].

World Economic Forum, 2021. Global Gender Gap Report 2021. Insight Report March 2021. [online] Available at:
<https://www.weforum.org/reports/ab6795a1-960c-42b2-b3d5-587eccda6023> [Accessed on 22 April 2021].

World Health Organization, 2021. Coronavirus Disease (COVID-19) Weekly Epidemiological Update and Weekly Operational Update. [online] Available at:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports> [Accessed on 27 April 2021].

Zelle, M., 2021. Biden Doubles U.S. Global Donation of COVID-19 Shots. *Associated Press*. [online] Available at:
<https://apnews.com/article/united-nations-general-assembly-joe-biden-pandemics-business-united-nations-e7c09c1f896d83c0ed80513082787bd3> [Accessed on 2 October 2021].
