

# MOSBACHER INSTITUTE WHITE PAPER SERIES



## WORKING WOMEN IN PAKISTAN DURING COVID 19

RESULTS FROM AN ON-LINE SURVEY

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## EXECUTIVE SUMMARY

To understand how Pakistani working women were affected by the COVID-19 (C19) pandemic, Texas A&M University, S&P Global, and the U.S. Chamber of Commerce's U.S.-Pakistan Business Council carried out a survey of Pakistani women entrepreneurs and employees (excluding students) in late 2021. The survey targeted Information and Communication Technology (ICT) companies in Pakistan, members of the U.S. Chamber of Commerce's U.S.-Pakistan Business Council, associate members of the U.S.-Pakistan Women's Council, and working women across Pakistan.

The study focuses on three critical dimensions of the impact of C19 on working Pakistani women: Employment and Earnings in the formal labor market, Care Work at home for self and family, and the Psychological Toll of the crisis. The main results illustrate the C19 disruption had important impacts on all three dimensions. Most studies from other countries focus on the first two dimensions, and the results from this study show that many of the impacts of C19 on women elsewhere were especially salient for Pakistan.

Entrepreneurs suffered from supply chain disruptions and employment shortages. Working women lost time at work and many lost income. Care Work increased significantly as a result of being laid off, getting C19, and children staying home from school. The survey also asks about six key areas of the potential Psychological Toll and finds that increased anxiety and domestic conflict — both expected results of the C19 disruption — were the most common responses. Regression results (accounting for a wide range of other variables) show that the main psychological toll came in the form of heightened anxiety, which was driven by getting C19 or increased care work at home.

The main result from this survey is that professional women, especially in the middle-income range, bear a disproportionate share of care responsibilities in times of crisis and the variable most strongly associated with reduced anxiety is having paid help within the home, which implies

that policy makers would be justified in providing support for working women both directly in the form of replacing lost income and indirectly by expanding child care options.

## OVERVIEW

The COVID-19 (C19) pandemic took a tremendous toll on countries around the world. As numerous studies suggest, women bore a larger burden during the C19 crisis than they usually do during economic recessions. Pakistan was no exception. To understand the impact of C19 in Pakistan, Texas A&M University, S&P Global, and the U.S. Chamber of Commerce's U.S.-Pakistan Business Council designed a survey of women entrepreneurs and women in the workforce Pakistan. The results show that women in the formal economy of Pakistan shouldered a significant burden during the C19 crisis, exacerbating existing challenges faced by women in the formal economy pre-pandemic.

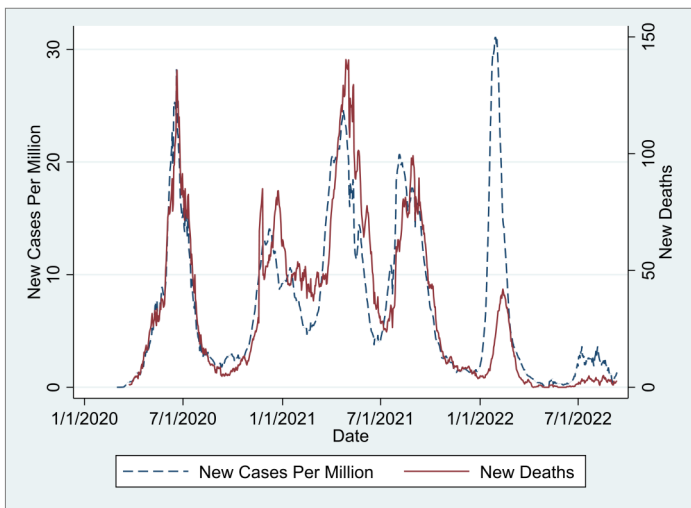
Entrepreneurs experienced supply chain disruptions when sourcing inputs and many reported difficulties finding access to finance. Many employees lost time at work and, as a result, experienced falling income. Both entrepreneurs and employees had direct and indirect health impacts that increased the burden of Home Care. In our survey, nearly half of the respondents fell ill, and, within the household, the burden of care for family members was taken up by women. The burden of Home Care was especially acute for single working women. Together, the disruption took a significant Psychological Toll as well. Women reported rising anxiety and rising conflict within the family as they tried to negotiate work, home care, and a pervasive health crisis. As the crisis comes to an end, the results from this survey suggest ways for policy makers and the private sector to support women in the labor force.

## GLOBALLY, COVID-19 INCREASED THE BURDEN ON WOMEN

When compared to other countries, such as the United States, C19 incidence rates were lower in

Pakistan. Figure 1 shows that both cases and deaths from C19 came in several waves, starting in the middle of 2020. The latest surge of cases rose and fell in early 2022 and the latest wave was associated with fewer deaths. In earlier waves, however, cases and deaths moved closely together as the virus spread through the country. As C19 spread, pressure on women as caretakers increased. Women usually engage in more unpaid work at home than men. A survey of 31 developing countries showed that 40 percent of women bear the responsibility of childcare (Mlambo-Ngcuka, 2017). This situation becomes more complex because in the developing world 95 percent of employed women work in the informal economy, which creates an imbalance between the household and market roles affecting their performance at work (Mlambo-Ngcuka, 2017).

**Figure 1: COVID-19 Rates in Pakistan**



Notes: Author's elaboration using data from Our World in Data. <https://ourworldindata.org/coronavirus>

Additionally, low wages limit the ability of families to afford care work providers. As a result, women end up bearing the responsibility of care work, which reduces their participation in the labor market, their contribution to family income, and widens the gender earnings gap (WB, 2020).

It is not surprising, therefore, that recent studies show that the burden of the C19 crisis fell on women. Some authors have pointed out that recessions are usually associated with higher unemployment rates for men, but the C19 experience

was not typical. In the United States and other countries, the unemployment rates increased more for women than men (Alon et al. 2020). At the same time, the burden of care for children increased as schools and day-care centers closed (Alon et al. 2021, Doorley et al. 2021, Fairlie et al. 2021, Hansen et al. 2022). In Japan, the pandemic employment rate fell by 4 percentage points among married women with children, but only 1 percentage point for those without children (Fukai et al. 2021). These findings imply that an increase in care work may explain increase in unemployment among women.

Understanding the impact of C19 on female labor force participation rates in Pakistan is particularly important. Even pre-pandemic, Pakistan had some of the lowest female labor force participation rates in the world with women facing significant challenges in the formal labor force. To illuminate women's experience during the C19 crisis in Pakistan, the Mosbacher Institute for Trade, Economics, and Public Policy at Texas A&M University's Bush School of Government and Public Service partnered with S&P Global and the U.S. Chamber of Commerce's U.S.-Pakistan Business Council to identify the similarities and differences regarding how C19 affected the balance of work and care around Pakistan. We hope our results will inform public debate, government policy, and philanthropic and private sector investments to propel women's economic advancement forward in Pakistan.

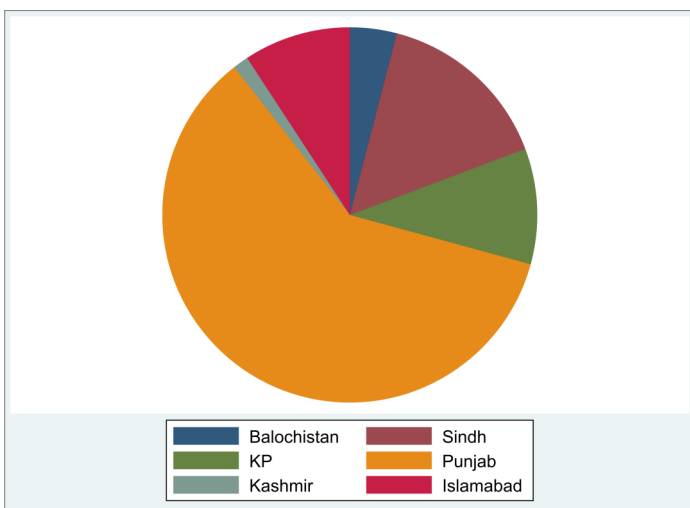
The study was conducted in collaboration with the U.S.-Pakistan Women's Council (USPWC), a public-private partnership between Texas A&M University and the U.S. Department of State committed to advancing women's entrepreneurship, employment, and access to career enhancing educational opportunities in Pakistan.

## SURVEY CHARACTERISTICS

Between September to November 2021, the survey was distributed to Information and Communication Technology (ICT) companies in Pakistan, members of the U.S. Chamber of Commerce's U.S.-Pakistan Business Council, associate members of USPWC, and working women across Paki-

stan (with the exception of students). We included females running businesses, working in organizations, or in between jobs. Men, respondents who did not report a geographic region, and women who replied “No” to three questions indicating having a work history were dropped from the sample, leaving a sample of 1,334 respondents between the ages of 18 and 65 (inclusive). A regional breakdown is shown in Figure 2. About 11% of the sample is from Lahore and another 9% list Islamabad as their city of residence. The remaining 80% are from a wide range of smaller municipalities. About 83% of the women work and live in the same city.

**Figure 2: Where Respondents Live**



Notes: Author's elaboration using original survey data as described in the text.

The average age of sample respondents is 34.8 years, which is significantly higher than the median age in Pakistan of 22.78 years in 2022 (Knowma.com). About 33% of the sample are married and the rest are either single (26.5%), widowed (20.5%) or separated (19.9%). In terms of education, about 30% have graduate education and another 30% have university education. About 23% have secondary education and the remaining 17% reported having elementary education.

Our survey focuses on working women in Pakistan by design, but about a quarter of the women who responded were not working. Those who reported working were just about evenly split be-

tween those who run their own business (38%) and those who work for another business or organization (37%). In 40% of cases women reported having more than one job. In terms of usual monthly earnings, 90% of the sample earns between 10,000 and 100,000 Pakistan Rupees (Rs).<sup>1</sup> The average earnings in this range is Rs57,605 (about US\$267). The median earnings in this range is Rs53,450 (US\$247). Women who own their own business have a slightly higher median (Rs55,621) than those who work for a business or organization (Rs50,000).

## LABOR MARKET EFFECTS OF COVID-19

The circumstances under which women lost their job during the pandemic vary. 44% of respondents reported losing their jobs involuntarily for at least some period. Just over 70% of the sample lost some work time due to C19 (either falling ill themselves or due to caring for others affected by the sickness). About 58% of the sample lost less than 32 days total, but the average was closer to 83 days because about a third of the sample missed 84 or more days (with the maximum being 730 days). Older workers tended to miss more time. On average married women lost the fewest days and widows lost the most. Single and separated people also, on average, lost 78.47 and 91.81 days.

In our sample, the burden of lost time generally fell on the less educated workers. Workers with University education lost 72.62 days on average while workers with just an elementary education lost an average of 96 days. In addition, older workers also lost more days than younger workers, with an estimated additional day lost for each additional year of age.

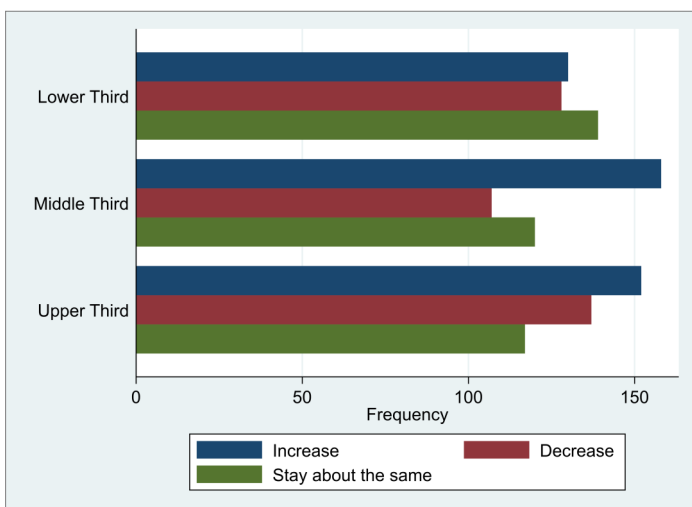
Women running their own business lost an average of 45 days because they had to care for others, while women who worked for an organization lost, on average, 47 days (this difference is not statistically significant). The direct effects of losing time due to illness was similar across women who owned their own businesses and those

<sup>1</sup> In December 2021, 1 US dollar was worth about 178.25 Pakistan Rupees.

who worked for others at around 15.7 days and 16 days, respectively.

Family earnings also fell significantly during the crisis. About 40% of respondents asserted that their spouse’s income decreased during this period, while only 25% said that spousal earnings increased. When surveyed about the reasons behind variation in their spouse’s incomes, 28% of women declared it was due to the number of hours they worked, 31% referred to changes in the payment per hour, while 40% of the sample considered both reasons were the cause. Specifically, 38% worked fewer hours. Interestingly, 32% of the sample reported an increase in weekly hours, which may indicate an increase in responsibilities at work. Figure 3 shows that women in the middle and upper third of the earnings distribution were most likely to report more responsibilities at work. About 37% of women who were interviewed reported an increase in their job responsibilities during the pandemic, another 31% said that workload decreased, and 32% responded that it stayed about the same as before C19. Training received is evenly distributed in the sample, almost half of the respondents did receive training in their jobs and the rest did not.

**Figure 3: Change in Job Responsibilities by Income Group**

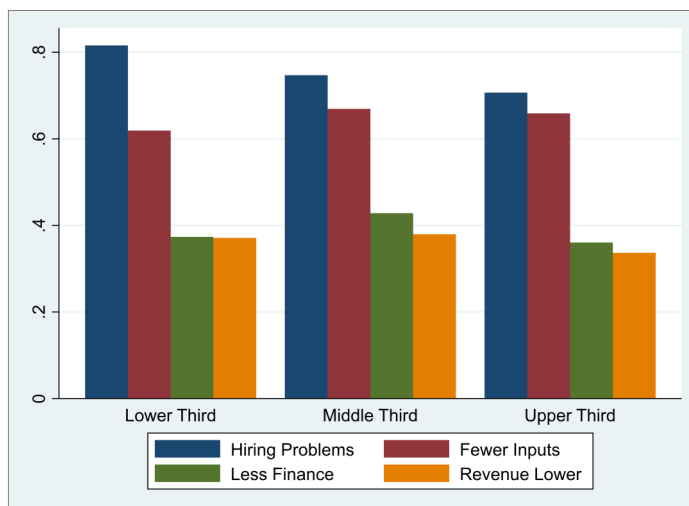


Notes: Author's elaboration using survey data as described in the text.

## CHALLENGES FOR ENTREPRENEURS

C19 created several challenges for entrepreneurs. Women in Pakistan were not immune to the C19-related supply chain issues that have persisted in news headlines, with procuring inputs being a key challenge. Women entrepreneurs faced challenges in hiring and a decline in income compared to pre-pandemic levels. Additionally, demand in financing declined and to some extent access. Revenue levels were mixed—with an even number of women increasing their overall revenue as those whose annual revenue declined. Figure 4 illustrates survey responses to questions about challenges for entrepreneurs.

**Figure 4: Challenges for Entrepreneurs by Income Group**



Notes: Author's elaboration using survey data as described in the text. Income groups evenly divide the sample into three groups based on earnings.

In terms of economic activity between enterprises, 50% of the women in the sample sold products to other companies. Women entrepreneurs encountered many of the same problems that C19 generated in other countries for all genders, including issues related to staffing, supply chains, finance, and falling revenue. Most respondents experienced difficulties hiring staff during the pandemic. At least 38% of respondents reported that hiring was difficult due to the pandemic and another 38% of the sample were not able to hire new personnel at all.

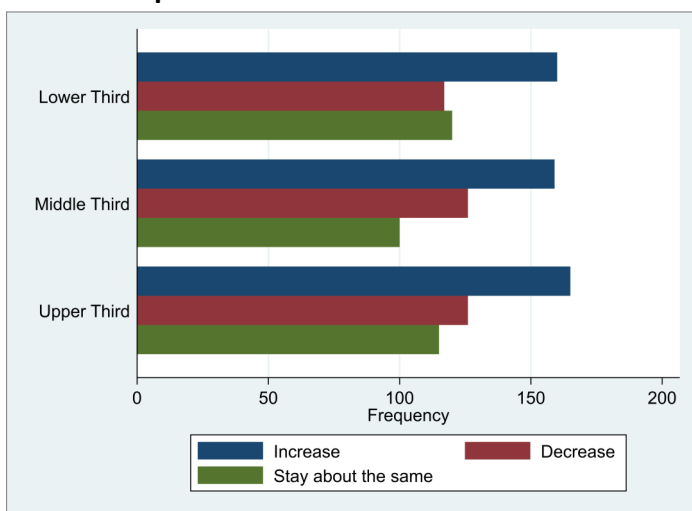
When interviewed about their annual income, 39% of women replied that it was lower than before C19. A significant portion of women entrepreneurs faced problems when getting inputs for their businesses. Results show that 32% of respondents had significant problems and 37% had minor problems. Access to financing during the pandemic was lower for 42% of the women interviewed. Contrarily, 26% had more access than before C19, and 32% were in the same situation as before the pandemic. About 39% reported lower revenue, but nearly a third (28%) experienced higher revenue.

## THE BURDEN OF CARE

One of the main consequences of the C19 pandemic was that the burden of care increased significantly for women surveyed, aligned with global trends. The increase in home responsibilities fell to women across the income range (see Figure 5).

Women in the lowest third of the income range were least likely to report a decrease in home responsibilities. Across the income distribution, however, women were most likely to report an increase in home responsibilities. One of the key components of home responsibilities was child-care, which fell heaviest on married women with

**Figure 5: Change in Home Responsibilities by Income Group**



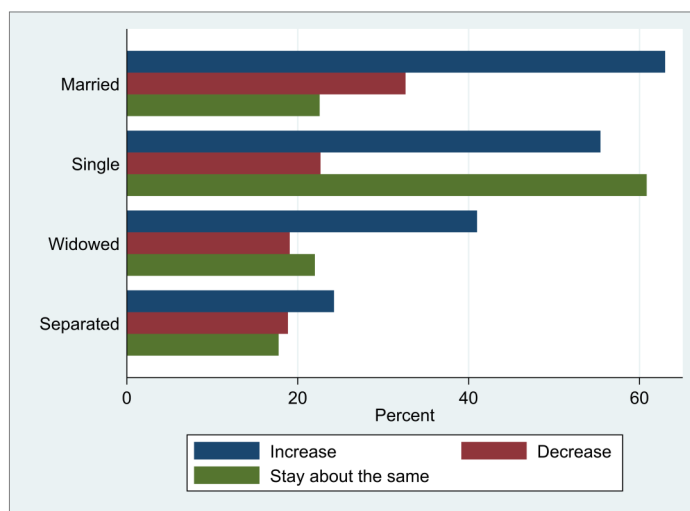
Notes: Author's elaboration using survey data as described in text. Income groups evenly divide the sample into three groups based on earnings.

children. 56% of the sample respondents replied that they had children who had to stay home from school during the pandemic. About 50% reported getting C19 and about 50% reported that one of their immediate family members got C19. Not surprisingly, about 43% reported having to leave work to care for family members. During the C19 crisis, most married women reported having to provide more care for the family.

When asked about the impact of care work on their paid job during C19, married women were most likely to report an increase in home care responsibilities. Figure 6 shows the variation in home care responsibilities by marital status. For all groups, care increased, but widows were least likely to report more care than the other groups. Married women were the least likely to report that their burden remained the same, but were also more likely to report a decrease, which may indicate some burden-sharing within the households.

Figure 7 shows the result of a regression analysis that estimates the contribution of various factors on rising home care responsibilities. The dots are the point estimates of the effect of each factor, and the horizontal lines indicate the confidence intervals. The main point of Figure 7 is that the most significant factor in increased home care for Pakistani women was having kids home from

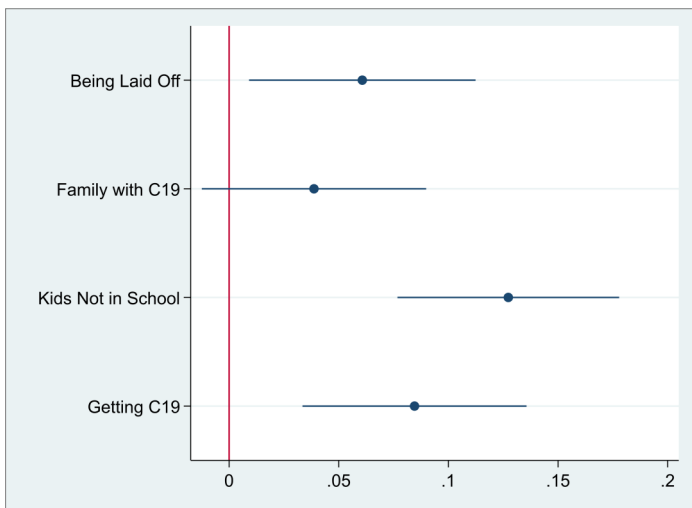
**Figure 6: Change in Home Responsibilities by Marital Status**



Notes: Author's elaboration using survey data as described in text. The percentages add up to 100 for each marital status.

school. Being laid off or getting C19 also were important factors. These factors were especially important for married women. Increased home care is associated with a significant increase in feelings of anxiety. In the next section, we explore some measures of the psychological toll that C19 had on women.

**Figure 7: Factors Increasing Home Care**

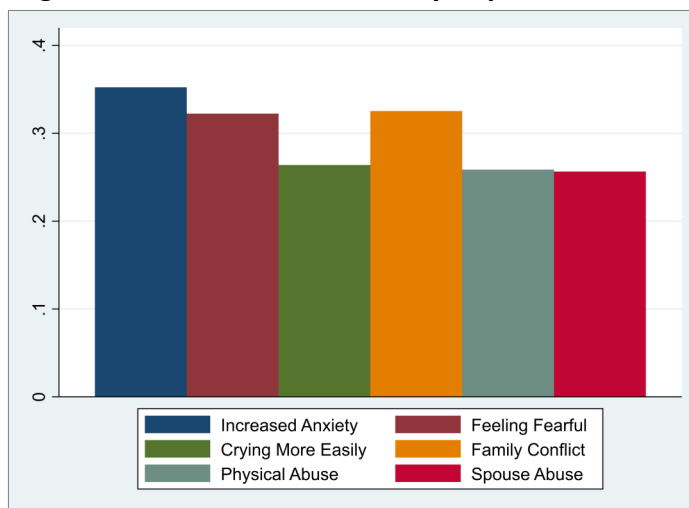


Notes: Author's elaboration using survey data as described in the text. Solid circle points represent the point estimates from an ordinary least squares regression that models increased home care as a function of being laid off, having family members with C19, having kids at home, and the respondent having C19. The horizontal lines through the points represent the 95% confidence interval around each point estimate. Points farther to the right are consistent with a more significant impact.

## PSYCHOLOGICAL TOLL

Although it is widely accepted that the C19 crisis imposed significant hardship around the world, few studies document the psychological toll of C19. Our survey captured some of the critical psychological impacts of the crisis. Figure 8 illustrates the main results and shows that there was a significant psychological toll of the C19 crisis. The crisis was associated with increased anxiety in about 35% of the sample. Just over 30% reported feeling fearful during the crisis. About a quarter reported crying more easily and experiencing more physical conflict and intimate partner violence and abuse. Family conflict was also a critical problem: about a third of the sample reported experiencing some conflict with either the spouse or other family members.

**Figure 8: Emotional and Security Impacts**



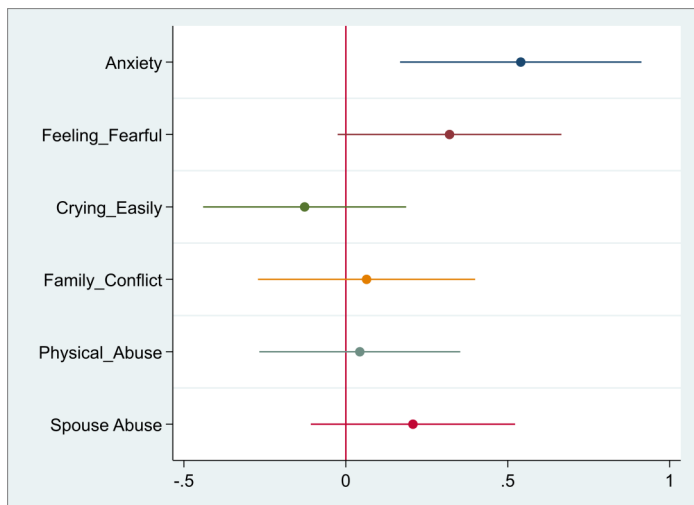
Notes: Author's elaboration using survey data as described in the text.

To understand the factors driving the psychological toll, we applied several regression techniques to estimate the correlation between various factors, including increased home care, on the different measures of psychological impacts. Rising anxiety was the main reported impact of C19. Our regression results show that there are two main factors—out of a set of dozens, including age, education, income, and geography—that are associated with rising anxiety. The first is getting C19. Getting C19 is strongly associated with rising anxiety and feeling fearful. The second is increased home care. Using an instrumental variable technique that models increased home care as the result of the variables shown in figure 7, Figure 9 shows the conditional correlation between increased home care and each of our measures of the psychological toll. As shown in Figure 9, increased home care is very strongly associated with increased anxiety and, to a lesser degree, feeling fearful. The regression results show that rising home care due to children staying home from school was the most significant psychological effect of C19.

Several factors have the potential to reduce the anxiety from increased home care, including help from a husband, other family members, siblings, and hired help. The only variable that is significantly associated with reduced anxiety in our sample is having hired help. The main policy implication, then, is that supporting families with

support for childcare is probably one of the most effective ways to support working women.

**Figure 9: Effect of More Home Care on...**



Notes: Author's elaboration using survey data as described in the text. Points represent the point estimates from six separate instrumental variables regression that models each measure of the psychological toll as a function of increased home care work, which, in turn, is modeled as a function of being laid off, having family members with C19, having kids at home, and the respondent having C19. The horizontal lines through the points represent the 95% confidence interval around each point estimate and points farther to the right are consistent with a more significant relationship.

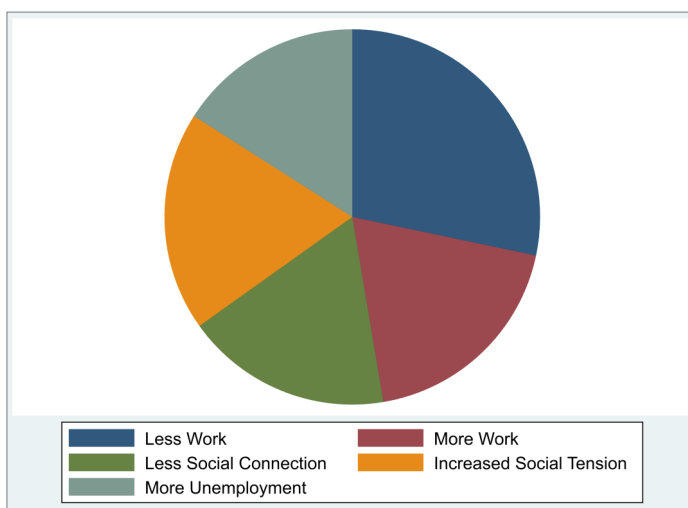
## OUTLOOK FOR A POST COVID-19 WORLD

While the world remains cautiously optimistic about the decline of C19, and patterns shown in Figure 1 offer hope for an end, we also asked about reflections regarding the expectations for life post pandemic. Respondent's perception about the return to normality once C19 is over is evenly distributed. About 25% of the sample believed that their lives had already returned to normality. The rest of the sample differs on the time they think it will take to return to normality. 25% consider that normal conditions will return within a period of three months once the pandemic is over, 20% believe it will take six months, and 30% are of the opinion that it will take twelve months or longer.

Looking back, when asked about the effects of the pandemic on different contexts, 29% of women responded that C19 reduced the demand in their businesses or the load of work. Contrarily,

19% reported an increase. With respect to family and friends, C19 had a negative impact on social or business connections according to 18% of women in the sample. Similarly, an increase in family tension was reported by 19% of the respondents. In terms of unemployment, 16% of women perceived an increase. The effects of C19 are expected to be lasting, and respondents had a range of views on what those lasting effects would be. Figure 10 shows the range of responses. The lasting impact of C19 suggests that there is still room for a policy response that would help those most affected by the crisis.

**Figure 10: Expected Lasting Effects of COVID-19**



Notes: Author's elaboration using survey data as described in the text.

Women working in Pakistan face several challenges. The C19 pandemic made work and care much more difficult for both employees and entrepreneurs. Moving forward, these results highlight the importance of empowering women in the labor force to find ways to mitigate the burden of care and to support women entrepreneurs.



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