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Economic and Social Impacts of the COVID-19 Pandemic on the Middle East and North Africa

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About the Middle East Initiative

The Middle East Initiative at Harvard Kennedy School is dedicated to advancing public policy in the Middle East by convening the world's foremost academic and policy experts, developing the next generation of leaders, and promoting community engagement on campus and in the region.

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Executive Summary

Between October 2020 and May 2021, the Middle East Initiative conducted a series of nationally representative surveys to measure the economic, social, and public health impacts of the COVID-19 pandemic in the Middle East and North Africa (MENA) region. Designed and supervised by Tarek Masoud, Faculty Director of the Middle East Initiative, and Yuree Noh, Research Fellow, the surveys collected responses from 8,500 residents of seven countries in the region—Algeria, Egypt, Kuwait, Morocco, Saudi Arabia, Tunisia, and the United Arab Emirates. Our goal is to provide the data and insights needed to develop effective policy responses to current and future public health crises.

This report summarizes our findings on how COVID-19 has disrupted employment, mental health, food security, education, and childcare in the region during its first year. We also show that the consequences of the pandemic were felt most acutely by some of the region's most vulnerable populations: the poor, women, youth, and children.

We find that:

- Economic consequences of the COVID-19 pandemic were
 widespread across the MENA region. On average, more than a third
 of the survey respondents suffered job losses since the outbreak of
 the pandemic. Compared to private sector employees, government
 or public sector employees had more job security during the
 pandemic. Relatedly, respondents in the Arabian Gulf region, where
 more people work in the government sector, were associated with
 fewer employment losses. On average, experiencing unemployment
 was more common for low-income respondents, reinforcing the
 disproportionate burden of the pandemic on the poor.
- The economic burdens of COVID-19 produced other social and public health consequences. Residents across all seven countries we surveyed—even in the affluent Gulf region—were experiencing

¹ This project was made possible by the Harvard Kennedy School's Kuwait Program, Emirates Leadership Initiative, and the Hamida Ben-Gacem Tunisia Graduate Fellowship.

- increased food insecurity compared to before the pandemic. Moreover, a quarter of the respondents reported experiencing depressive symptoms. Women, those with less educational attainment, and those with lower income levels were more likely to be affected by depression. The symptoms were also associated with losing employment during the pandemic.
- The COVID-19 pandemic also disrupted education, an important measure of both current socioeconomic status and future potential. Classes were able to move online for almost half of children from high-income households compared to only a third of children from low-income families. Poorer children's classes were more likely to be outright cancelled. There also existed cross-country variations. Rates of class cancellation were lower in Morocco, Saudi Arabia, Kuwait, and the UAE, where the vast majority of schools transitioned to online platforms.
- Women across the MENA region suffered additional challenges as a result of COVID-19, including higher burden for housework and childcare. Working mothers as well as housewives reported that they were spending more time on teaching activities with children compared to before the pandemic. The survey results also suggested that many previously working mothers might have left their jobs to take care of their children because of pandemic-induced school closures and lockdowns. The pandemic also disproportionately hurt the youth as it exacerbated the existing youth unemployment problem. The younger population in our sample suffered more job losses on average, and this was a common challenge for the youth across the region.
- Governments had implemented policy responses to contain the spread of COVID-19 via imposing lockdowns, curfews, and mosque/school closures. On average, most MENA residents supported such government measures. However, we observed a significant variation across countries. The support was substantially higher among Gulf residents. While previous studies suggested that citizen support for the pandemic response policies might be linked to fewer confirmed cases and deaths, we did not have this finding in our study. Relatedly, citizens in the Gulf were more likely to trust information from their health ministries compared to citizens in the Maghreb.

Introduction

In a region beleaguered by myriad economic and social challenges, the COVID-19 pandemic has not only aggravated them but also created new ones. The MENA COVID-19 Economic Impact Survey is a multi-country study to assess the economic and social impacts of the pandemic in the Middle East and North Africa (MENA). It aims to provide policymakers and other stakeholders in the region with the data needed to develop effective policy responses.

While the economic, social, and public health consequences of the pandemic are global, the unique challenges facing the MENA region—weak healthcare systems, proximity to conflict zones, decline in tourism and remittances, high dependency on the informal sector, existing gender inequalities, and turbulent oil prices—have exacerbated pandemic-related problems and made recovery efforts difficult.

This report begins with an overview of the issues and key takeaways from the survey. It summarizes the survey's findings on the impact of COVID-19 on unemployment, mental and physical health, food insecurity, education, and childcare. The report also explores the heterogeneous effects of the pandemic on the youth and women. Moreover, it describes the public's attitudes toward government responses to the pandemic. Since most COVID-19 measures require people's cooperation, understanding public opinion will help facilitate the region's recovery efforts. The report concludes with a discussion of current and future policy implications and recommendations for future research.

The Impacts Of The Covid-19 Pandemic In The Middle East And North Africa: Overview

The ramifications of the COVID-19 pandemic are widespread and devastating. In addition to its immediate and direct consequences, morbidity and mortality, the pandemic has imposed various indirect, long-term costs on people and communities. Accordingly, a quarter of the survey respondents expressed experiencing increased mental distress and depressive symptoms due to the pandemic. The survey also highlighted challenges faced by women and the youth, in particular. For example, pandemic-related school closures led to women spending substantially more time at home and on childcare. Across the region, younger people were much more likely to be unemployed or experience a loss of income resulting from the pandemic.

Economic Conditions

Consistent with the rest of the world, supply chains and consumer demands in the MENA region were disrupted due to public health containment measures.² The United Nations (UN) estimates that the overall economic loss due to the pandemic would be equivalent to USD 152 billion in the Arab region.³ According to the International Monetary Fund (IMF), the estimated contraction of real GDP for the region was 3.4% in 2020.⁴ The hardest-hit economies, Libya and Lebanon, experienced a 66.6% and 25% decline in growth, respectively.⁵ The collapse of oil markets also contributed to the economic downturn. In 2020, economic growth in oil exporting countries fell 6.6% versus a 1% decline for oil importing countries. Although the demand for oil has improved since then, the decline in oil prices in January–March 2020 was expected to have enduring consequences.⁶ Additionally,

² Organisation for Economic Co-operation and Development [OECD]. (2020). COVID-19 crisis response in MENA countries. OECD. https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-mena-countries-4b366396/

³ United Nations Sustainable Development Group. (2020, July). Policy Brief: The impact of COVID-19 on the Arab region an opportunity to build back better. https://unsdg.un.org/resources/policy-brief-impact-covid-19-arab-region-opportunity-build-back-better

⁴ International Monetary Fund [IMF]. (2020). Regional economic outlook: Middle East and Central Asia (World Economic and Financial Surveys). https://www.imf.org/en/Publications/REO/MECA/Issues/2020/10/14/regional-economic-outlook menap-cca

⁵ Duran, D., and Menon R. (2020, July 28). *Mitigating the impact of COVID-19 and strengthening health systems in the Middle East and North Africa*. World Bank. https://openknowledge.worldbank.org/handle/10986/34238

⁶ IMF. (2020). Regional economic outlook: Middle East and Central Asia.

remittances declined significantly in oil-poor Arab countries. Tunisia and Morocco, for instance, estimated a 17–18% decline in remittances from Europe and the Gulf Cooperation Council (GCC) region in 2020.⁷

The economic shocks from the pandemic have changed the nature of social spending in the MENA region. According to the World Bank, governments in the region responded to the pandemic with a combination of social policies, including increased social assistance and insurance (59% and 23% of all social protection responses, respectively). The IMF reported that 11% of the population in the MENA region participated in new government cash transfer programs since the beginning of the pandemic. Research by the Organisation for Economic Co-operation and Development (OECD) suggests that public debt and budgetary deficits will increase in all MENA countries as a result of expanded social policies implemented during the pandemic. In addition, government responses were accompanied by reprioritization of social spending throughout the region, which are likely to be associated with not only short-term consequences on poverty and education but also long-term implications across the region. For example, the World Bank forecasts that the MENA region will spend 2% less on education after the pandemic.

Healthcare Services

The pandemic has resulted in major disruptions to essential health services. Prior to the pandemic, the region grappled with a weak healthcare infrastructure, including inadequate availability of healthcare workers per capita, low healthcare expenditure by governments, and high out-of-pocket healthcare spending by citizens. ¹² A reprioritization of limited available resources led to further strains on the availability of essential healthcare. According to surveys conducted by the World Health Organization (WHO) from May to September 2020, 76% of the countries in the WHO Regional Office for the Eastern Mediterranean reported limited availability

⁷ World Bank. (2020, April). COVID-19 crisis through a migration lens. World Bank Group and KNOMAD. https://openknowledge.worldbank.org/bitstream/handle/10986/33634/COVID-19-Crisis-Through-a-Migration-Lens.pdf

⁸ Gentilini, U., Almenfi, M., Orton, I., and Dale, P. (2021). Social protection and jobs responses to COVID-19: a real-time review of country measures. World Bank. https://openknowledge.worldbank.org/handle/10986/33635

⁹ Davidovic, S., et al., (2020, September 25). Beyond the COVID-19 crisis: A framework for sustainable government-toperson mobile money transfers. International Monetary Fund. https://doi.org/10.5089/9781513557670.001

¹⁰ OECD. (2020). COVID-19 crisis response in MENA countries. https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-mena-countries-4b366396/

¹¹ Al-Samarrai, S., Gangwar, M., Gala, P. (2020, May). The impact of the COVID-19 pandemic on education financing. World Bank. https://openknowledge.worldbank.org/handle/10986/33739

¹² Duran, D., and Menon R. (2020, July 28). *Mitigating the impact of COVID-19 and strengthening health systems in the Middle East and North Africa*. World Bank. https://openknowledge.worldbank.org/handle/10986/34238

of reproductive, maternal, newborn, child, and adolescent healthcare. Additionally, about three-quarters of countries reported disruptions in immunization and communicable diseases treatment. Although these indicators improved in a second round of WHO surveys (January–March 2021), approximately half of countries still reported ongoing disruptions in these services. The surveys also showed that other important service areas, such as treatment for non-communicable diseases (e.g., maternal- and childbirth-related and cardiovascular diseases), decreased in 28% of the countries.

Mental Health

The real and perceived threat of COVID-19 has negatively impacted MENA residents' mental health. Studies, including our survey, report that the pandemic created worrisome lifestyle changes and psychological impacts. One survey of 6,000 adults across eighteen MENA countries found that more than half of the respondents experienced "horrified" or "helpless" feelings during the pandemic. Psychological effects were more significant for women, for people with lower education levels, for those aged 26–35 years, and for those living in North Africa. A survey in Lebanon reported that fears of infection and of poverty were independently associated with increased stress and anxiety. According to another survey of 6,000 MENA residents, COVID-19 confinement measures resulted in increased food intake and sedentary behaviors, which can have both mental and physical health implications. 16

¹³ World Health Organization. (2020). Tracking continuity of essential health services during the COVID-19 pandemic. https://www.who.int/teams/integrated-health-services/monitoring-health-services/national-pulse-survey-on-continuity-of-essential-health-services-during-the-covid-19-pandemic/dashboard

¹⁴ Al Dhaheri, A., et al. (2021). Impact of COVID-19 on mental health and quality of life: Is there any effect? A cross-sectional study of the MENA region. *PLoS ONE*, 16(3), e0249107. https://doi.org/10.1371/journal.pone.0249107. The survey was conducted in Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Yemen, Saudi Arabia, Sudan, Syria, Tunisia, and UAE.

¹⁵ Salameh, P., et al. (2020, December). Mental health outcomes of the COVID-19 pandemic and a collapsing economy: Perspectives from a developing country. Psychiatry Research, 294(113520). https://doi.org/10.1016/j. psychres.2020.113520

¹⁶ Abouzid M, et al. (2021). Influence of COVID-19 on lifestyle behaviors in the Middle East and North Africa Region: a survey of 5896 individuals. *Journal of Translational Medicine*, 19(129). https://doi.org/10.1186/s12967-021-02767-9

Populations Most Affected

Our research shows that the consequences of the COVID-19 pandemic were felt most acutely by some of the region's most vulnerable populations: the poor, women, youth, children, and refugees.

The Poor

The pandemic has exacerbated class disparities and pushed people deeper into poverty. Low-income households were more likely to lose sources of income, compounded by pandemic-induced market disruptions that harmed their recovery prospects. Low-income workers in the MENA region were twice as likely to leave their jobs due to lockdown measures compared to high-income workers.¹⁷ Blue-collar workers were less likely to be able to shelter in place or transition to working from home.¹⁸

The poor were also more likely to suffer higher rates of infectious disease transmission, including COVID-19, due to preexisting health conditions, crowded, multigenerational living arrangements, and less access to soap and clean water. Social distancing and good hygiene, combined, are more difficult to sustain in this demographic.¹⁹ If infected with COVID-19, the poor suffer significantly because of limited access to proper healthcare and treatment.²⁰

The pandemic further exploited informal workers and labor migrants who lacked job security or social protections due to unclear residency status and limited legal rights. The pandemic harmed middle-class citizens as well. According to the UN, 115 million people—a quarter of the MENA region's population—who were formerly considered middle class are now classified as poor because of factors related to the pandemic.²¹

¹⁷ Arezki, R. et al. (2020, October 19). *Trading together: reviving Middle East and North Africa regional integration in the post-COVID era.* World Bank, 23. https://openknowledge.worldbank.org/handle/10986/34516

¹⁸ Woertz, E. (2020). COVID-19 in the Middle East and North Africa: Reactions, vulnerabilities, prospects [Working Paper]. GIGA German Institute of Global and Area Studies, Social Science Open Access Repository. https://www.ssoar.info/ssoar/handle/document/67334

¹⁹ Arezki, R. et al. (2020, October 19). Trading together: reviving Middle East and North Africa regional integration in the post-COVID era. World Bank, 23. https://openknowledge.worldbank.org/handle/10986/34516

²⁰ Woertz, E. (2020). COVID-19 in the Middle East and North Africa: Reactions, vulnerabilities, prospects. [Working Paper]. GIGA German Institute of Global and Area Studies, Social Science Open Access Repository.

²¹ United Nations. (2020, July). *The impact of COVID-19 on the Arab region*. https://unsdg.un.org/sites/default/files/2020-07/sg_policy_brief_covid-19_and_arab_states_english_version_july_2020.pdf

Women

The gendered effects of the pandemic have had wide-ranging consequences in the MENA region. According to the Economic and Social Commission for Western Asia and UN Women, more women in the region are expected to fall into poverty due to the pandemic.²² Prior to the pandemic, women's labor force participation was significantly lower than men: only 21% of women were employed compared to 70% of men. Similarly, women's earnings were 80% less than men before the pandemic.²³ The pandemic is expected to worsen this problem by removing approximately 700,000 jobs held by women, thereby making the prospect of job loss higher for women than men.²⁴

The pandemic has especially hurt job sectors that traditionally employ high numbers of women, such as manufacturing, service, and tourism, which were most affected by lockdown measures.²⁵ Additionally, the pandemic's destructive impact on the informal economy has been more harmful for women, as they constitute 61.8% of informal workers in the Arab region.²⁶ For example, informal employment in the agriculture sector and domestic workforce—considered among the most vulnerable for informal workers—mostly consists of women.²⁷ In addition to removing income revenue for these women, informal workers are generally ineligible for government welfare or assistance.

Home and childcare responsibility and access to resources are other pandemic-related stressors that disproportionally affected women and girls, resulting in significant short- and long-term effects. Women bear a disproportionate amount of responsibility for home and childcare duties, which increased during the pandemic due to school closures, among other reasons. Before the COVID-19 crisis, women in the MENA region shouldered the highest global rate of household responsibilities, spending 4.7

²² United Nations Economic and Social Commission for Western Asia. (2020). *The impact of COVID-19 on gender equality in the Arab Region* [Policy Brief 4]. United Nations Entity for Gender Equality and the Empowerment of Women. https://archive.unescwa.org/sites/www.unescwa.org/files/impact_of_covid_on_gender_equality_-_policy_brief.pdf

²³ OECD. (2020). COVID-19 crisis in the MENA region: Impact on gender equality and policy responses. https://read.oecd-ilibrary.org/view/?ref=134_134470-w95kmv8khl&title=COVID-19-crisis-in-the-MENA-region-impact-on-gender-equality-and-policy-responses

²⁴ United Nations. (2020, July). The impact of COVID-19 on the Arab region.

²⁵ United Nations Economic and Social Commission for Western Asia. (2020). *The impact of COVID-19 on gender equality in the Arab Region* [Policy Brief 4]. United Nations Entity for Gender Equality and the Empowerment of Women.

²⁶ United Nations Economic and Social Commission for Western Asia. (2020). *The Impact of COVID-19 on Gender Equality in the Arab Region* [Policy Brief 4]. United Nations Entity for Gender Equality and the Empowerment of Women.

²⁷ OECD. (2020). COVID-19 crisis in the MENA region: Impact on gender equality and policy responses.

times more hours than men on unpaid household work.²⁸ The gender differential in childcare responsibilities forces women out of the paid labor force,²⁹ which before the pandemic widened the income gap and paid versus unpaid working hours between men and women.³⁰ In addition, women have less access to critical resources like the internet that could enable them and their children to work and learn remotely. According to the International Telecommunication Union (ITU), 44.2% of women compared to 58.5% of men have access to the internet in the MENA region.³¹

Pandemic-induced quarantine measures combined with economic slowdown and psychological stress increased women's economic and social disadvantages, as well as their exposure to gender-based violence.³² According to a cross-national survey carried out by the Arab Barometer, 70% of Tunisians and 46% of Algerians reported having perceived an increase in gender-based violence during the pandemic.³³ Amnesty International reported an increase in cases of domestic violence in the MENA region during the pandemic.³⁴ Not only have lockdown measures increased the risk of domestic violence for women and girls remain confined with their abusers, but these meaures also closed many avenues for receiving help.

Youth

COVID-19 has exacerbated youth unemployment in the MENA region. Pre-pandemic, the region's youth unemployment rate (of the total labor force aged 15–24 years) was staggering. In 2019, the MENA region's average youth

²⁸ United Nations Economic and Social Commission for Western Asia. (2020). *The impact of COVID-19 on gender equality in the Arab Region* [Policy Brief 4]. United Nations Entity for Gender Equality and the Empowerment of Women.

²⁹ Kristal, T., and Yaish, M. (2020). Does the coronavirus pandemic level the gender inequality curve? (It doesn't). *Research in Social Stratification and Mobility*, 68(100520), 1–5. https://doi.org/10.1016/j.rssm.2020.100520

³⁰ 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). https://doi.org/10.1016/j.ioubeco.2020.104245

³¹ OECD. (2020). COVID-19 crisis in the MENA region: Impact on gender equality and policy responses.

³² Phelps, C. (2020). Rapid gender analysis – COVID-19 Middle East and North Africa region. CARE International. https://reliefweb.int/sites/reliefweb.int/files/resources/CARE-MENA-COVID-19-RGA-200720201.pdf; OECD/ILO/CAWTAR. (2020). Changing laws and breaking barriers for women's economic empowerment in Egypt, Jordan, Morocco and Tunisia. Competitiveness and Private Sector Development, OECD Publishing. https://www.oecd.org/countries/tunisia/changing-laws-and-breaking-barriers-for-women-s-economic-empowerment-in-egypt-jordan-morocco-and-tunisia-ac780735-en.htm

³³ Caramazza, G. (2020, December 17). Why the Middle East cannot ignore the "shadow pandemic" of violence against women. Arab Barometer. https://www.arabbarometer.org/media-news/why-the-middle-east-cannot-ignore-the-shadow-pandemic-of-violence-against-women/

³⁴ Amnesty International. (2021). MENA: Gender-based violence continues to devastate lives of women across region. https://www.amnesty.org/en/latest/press-release/2021/03/mena-gender-based-violence-continues-to-devastate-lives-of-women-across-region/

unemployment rate was 26% compared to the global average of 15.3%.³⁵ This was especially worrisome considering the low median age in MENA countries (27 compared to 42.5 in Europe).³⁶

A multi-country survey of six MENA countries reported that 72% of youth (defined as 18–24 years) experienced greater difficulty finding a job since the start of the outbreak.³⁷ In Lebanon and Jordan, about 90% responded that they faced increased difficulty finding jobs, followed by Egypt and Saudi Arabia (69%), Algeria (67%), and the UAE (41%). While youth unemployment rates are highest in conflict-affected areas (e.g., 49.5% in Libya and 40.0% in the West Bank and Gaza), rates remain high outside of conflict zones as well: Jordan (37.3%), Tunisia (35.8%), Algeria (29.7%), Saudi Arabia (29.6%), and Egypt (26.5%). Cushioned by petroleum wealth, small and wealthy Gulf countries such as Qatar and the UAE have largely avoided high youth unemployment by providing jobs in the public sector.³⁸ Nonetheless, for both oil-exporting and oil-importing countries in the MENA region, the pandemic has worsened the labor market prospects for youth.

Children

The pandemic has devastated conditions for children in the region, nearly half of whom were already living in a condition of "multidimensional poverty," signified by a lack of access to healthcare, education, proper nutrition, and adequate housing.³⁹ In particular, the COVID-19 pandemic has led to unprecedented disruptions in children's education. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the pandemic at its peak disrupted the education of over 1.4 billion MENA children.⁴⁰ Furthermore, widespread school closures put 1.3 million vulnerable and hard-to-reach children at risk of dropping out of school

³⁵ International Labor Organization. (2022, February 8). *Unemployment, youth total (% of total labor force ages 15-24) – MENA*. World Bank Group.

³⁶ Woertz, E. (2020). COVID-19 in the Middle East and North Africa: Reactions, vulnerabilities, prospects [Working Paper]. GIGA German Institute of Global and Area Studies, Social Science Open Access Repository.

³⁷ Puri-Mirza, A. (2021, November 26). Share of Arab youth with increased difficulty in finding jobs after the COVID-19 outbreak in the Middle East and North Africa in 2020, by country. Statista. https://www.statista.com/statistics/1191819/mena-share-with-increased-job-finding-difficulty-post-covid-19-by-country/

³⁸ Kabbani, N. (2021). How will digitalization affect youth employment in MENA? *Brookings Institution*. https://www.brookings.edu/opinions/how-will-digitalization-affect-youth-employment-in-mena/

³⁹ Save the Children, and UNICEF. (2020). COVID 19: Number of children living in household poverty to soar by up to 86 million by end of year [Press Release]. https://www.savethechildren.org/us/about-us/media-and-news/2020-press-releases/children-living-in-poverty-after-covid-19-outbreak-soars-to-86-million-by-years-end

⁴⁰ UNESCO. (2020). Education: From disruption to recovery. https://en.unesco.org/covid19/educationresponse

altogether. These disruptions also affected children's overall well-being, nutrition, and mental health. 42

Distance learning also poses its own challenges. According to surveys conducted by the United Nations Children's Fund (UNICEF) in the MENA region, half of parents and caregivers found distance learning ineffective due to a lack of resources, limited internet access, and difficulties connecting with teachers. The World Bank estimated that COVID-19-related school closures could result in a loss of 0.6 years of schooling and a \$872 reduction of future yearly earnings for each student. The lack of access to remote learning resources likely widened the achievement gap between children from wealthy and poor households.

Refugees and People in Conflict Areas

Countries already mired in armed insurgencies, terrorist attacks, and civil wars were most affected by the grave economic, social, and health-related consequences of the pandemic. Pre-pandemic, Yemen was suffering the world's worst humanitarian crisis with almost 80% of the population in need of assistance⁴⁶ and only 45% of healthcare facilities at functional capacity.⁴⁷ Among other consequences inherent to widespread violence, healthcare facilities have been destroyed and healthcare providers have fled.⁴⁸ Violent conflict also prevents cooperation and transparency, which hinders rapid responses to COVID-19.⁴⁹ Furthermore, conflict-induced migration and displacement have accelerated the spread of the virus in places like

⁴¹ Farley, A., and Sherman, B. (2021, April 21). Economic fragility and COVID-19 in the Middle East: Will more civil unrest follow the pandemic? *Wilson Center*. https://www.wilsoncenter.org/article/economic-fragility-and-covid-19-middle-east-will-more-civil-unrest-follow-pandemic

⁴² UNICEF. (2020, November 20). COVID-19 leaves profound impact on children in the Middle East and North Africa [Press Release]. https://www.unicef.org/mena/press-releases/covid-19-leaves-profound-impact-children-middle-east-and-north-africa

⁴³ UNICEF. (2020, November 20). COVID-19 leaves profound impact on children in the Middle East and North Africa [Press Release].

⁴⁴ Azevedo, J. P., et al. (2020, June). Simulating the potential impacts of the COVID-19 school closures on schooling and learning outcomes: A set of global estimates. World Bank Group. https://www.worldbank.org/en/topic/education/publication/simulating-potential-impacts-of-covid-19-school-closures-learning-outcomes-a-set-of-global-estimates

⁴⁵ Goudeau, S., et al. (2021). Why lockdown and distance learning during the COVID-19 pandemic are likely to increase the social class achievement gap. *Nature Human Behavior*, 5, 1273–1281. https://doi.org/10.1038/s41562-021-01212-7

⁴⁶ UN Office for the Coordination of Humanitarian Affairs [OCHA]. (2019, December). Global Humanitarian Overview 2020. https://reliefweb.int/report/world/global-humanitarian-overview-2020-enarfrzh

⁴⁷ Baloch, Z., et al. (2020). Unique challenges to control the spread of COVID-19 in the Middle East. *Journal of Infection and Public Health*, 13(9), 1247-1250. https://doi.org/10.1016/j.jiph.2020.06.034

⁴⁸ Karamouzian, M., and Madani, N. (2020). COVID-19 response in the Middle East and north Africa: Challenges and paths forward. *Lancet Global Health*, 8(7), E886–E887. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30233-3/fulltext

⁴⁹ Baloch, Z., et al. (2020). Unique challenges to control the spread of COVID-19 in the Middle East. *Journal of Infection and Public Health*, 13(9), 1247–1250.

Yemen, Iraq, and Syria. Securing clean water and hygiene products is especially difficult for refugees and internally displaced persons in a region that was already water-scarce. Crowded refugee camps have become epicenters for transmission and infection, further challenging the management of the COVID-19 crisis.

Vaccination Response

Despite the essential role of vaccines in combating COVID-19, vaccination rates vary immensely across the MENA region. As of October 18, 2021, the UAE tops global rankings for vaccination rates with 87% its population fully vaccinated against COVID-19 (with over 97% receiving at least one dose). Other rich, small countries such as Qatar and Bahrain have also seen high vaccination rates at 78% and 69%, respectively. In contrast, less than 10% of people in Algeria, Egypt, and Iraq have been fully vaccinated. In conflict zones such as Libya, Syria, and Yemen, vaccination rates remain under 5%.

While low vaccination rates can be attributed to low vaccine availability, vaccine hesitancy is another important factor impeding widespread immunity efforts against COVID-19. Attitudes toward the vaccine vary significantly across countries. A 2021 survey in Qatar showed that only 12–20% of respondents were unwilling to be vaccinated.⁵¹ A survey in Oman found that 53% of respondents planned to receive the vaccination.⁵² One study showed that the vaccine acceptance rate in Jordan and Kuwait was less than 30%,⁵³ a finding consistent with another study in Jordan (37%).⁵⁴ This latter study attributed widespread misinformation about the vaccines, notably conspiracy theories, as a possible factor behind the low acceptance rate.

⁵⁰ Hannah R., et al. Coronavirus (COVID-19) vaccinations. Our World in Data. https://ourworldindata.org/covid-vaccinations

⁵¹ Alabdulla M., et al., (2021). COVID-19 vaccine hesitancy and attitudes in Qatar: A national cross-sectional survey of a migrant-majority population. *Influenza and Other Respiratory Viruses*, 15(3), 361–370. https://doi.org/10.1111/irv.12847; Khaled, S. M., et al. (2021). Prevalence and potential determinants of COVID-19 vaccine hesitancy and resistance in qatar: Results from a nationally representative survey of Qatari nationals and migrants between December 2020 and January 2021. Vaccines, 9(5). https://doi.org/10.3390/vaccines9050471

⁵² Al-Marshoudi, S., et al. (2021). Knowledge, attitudes, and practices (KAP) toward the COVID-19 vaccine in Oman: A precampaign cross-sectional study. *Vaccines*, 9(6). https://doi.org/10.3390/vaccines9060602

⁵³ Sallam, M., et al., (2021). Acceptance and attitudes toward COVID-19 vaccines: A cross-sectional study from Jordan. *Vaccines*, 9(1). https://doi.org/10.3390/vaccines9010042

⁵⁴ El-Elimat, T., et al. (2021). Acceptance and attitudes toward COVID-19 vaccines: A cross-sectional study from Jordan. *PLoS ONE*, 16(4), e0250555. https://doi.org/10.1371/journal.pone.0250555

MENA COVID-19 Economic Impact Survey: Key Findings

Research Methodology

The MENA COVID-19 Economic Impact Survey comprised a standard set of demographics, economic, and social questions to enable cross-regional comparisons on issues of employment, household behavior, mental health, and education. This nationally representative study also included questions tailored to assess opinion and compliance pertaining to existing COVID-19 response policies.

The surveys were conducted between October 2020 and May 2021 by experienced partners based in the region. We used random-digit dialing (RDD) and computer-assisted telephone interviewing to minimize in-person contact and risks associated with COVID-19. The sample included seven countries: Algeria, Egypt, Kuwait, Morocco, Saudi Arabia, Tunisia, and the UAE. In Egypt and GCC countries (Kuwait, Saudi Arabia, UAE), we used a RDD probability sample of cell phone users sorted by mobile provider, including expatriates in the Gulf. In Maghreb countries (Algeria, Morocco, and Tunisia), we targeted landlines and mobile phones. We made up to ten phone calls to complete the interview with each selected respondent. The surveys took approximately 25 minutes. In the GCC, surveys were administered in Arabic or English; in all others, they were conducted strictly in Arabic. The target population was adult residents (age 18+).

In total, 8,589 respondents participated in the survey, or about 1200 from each country (see Table 1). To reduce sampling error and potential non-response bias, we post-stratified on age and gender for the data from Algeria and Morocco. Furthermore, all aggregate findings reported in this document were weighted by each country's population.

Table 1. Number of Interviews and Field Dates

	Field Dates	Interviews
Morocco	04/14/2021-05/16/2021	1204
Algeria	04/14/2021-05/15/2021	1203
Tunisia	10/21/2020-10/29/2020	1202
Egypt	11/08/2020-12/09/2020	1373
Saudi Arabia	11/04/2020-12/16/2020	1200
Kuwait	11/08/2020-01/15/2021	1202
United Arab Emirates	11/05/2020-12/15/2020	1205

Economic Well-Being

The survey included a series of questions to assess the economic impact of the pandemic on households, including employment status and income, spending needs, and food security.

Employment

To assess the impact of COVID-19 on employment in the region, we asked whether respondents had experienced a loss of employment or income since the start of the outbreak. Unsurprisingly, the pandemic had been more costly for those with low educational attainment and low income compared to those with high income and college degrees. A clear pattern was also observed with respect to sectors: both private sector and self-/family-employed workers were four times more likely to have lost jobs compared to those working in the public sector.

Have you experienced a loss of employment or income since the outbreak of the coronavirus pandemic?

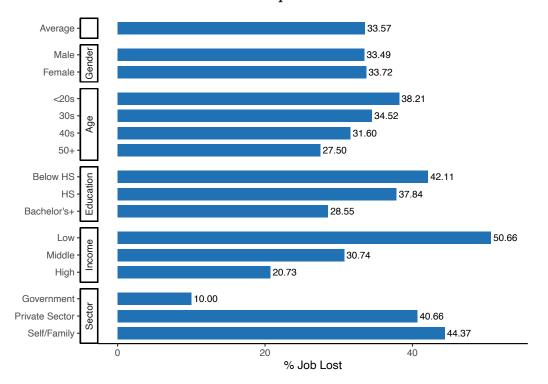


Figure 1. Loss of Employment

When asked if anyone in their household had lost employment or income since the outbreak of the coronavirus pandemic, 30% of respondents reported that another member of the household had lost employment (Figure 2). This was more likely to be the case in low-income households (40%) compared to middle- (29%) and high-income (24%) households, reinforcing the disproportionate burden of COVID-19 on the region's poor.

Has anyone in your household experienced a loss of employment or income since the outbreak of the coronavirus pandemic?

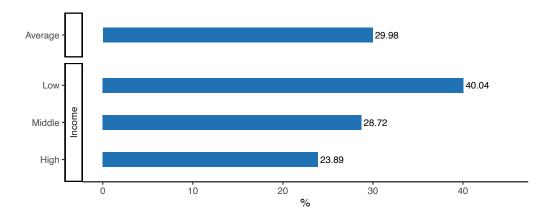


Figure 2. Loss of Employment, Other Household Members

Our analysis reveals that pandemic-related job loss has been heterogeneous across countries. For example, Egyptians (38%) and Tunisians (36%) suffered much higher job loss rates (Figure 3). This is likely due to greater dependence on the manufacturing, tourism, and services sectors, all of which were severely impacted by pandemic-related lockdowns and travel disruptions.

That said, we observed several common trends across the region. Lower income levels were associated with more employment loss (Figure 4), which is consistent with the aggregate findings in Figure 1. Also, government employees enjoyed significantly more job security (Figure 5). This may also explain the lower rates of job losses in places like Kuwait, where 46% of the respondents work in the public sector or in government.

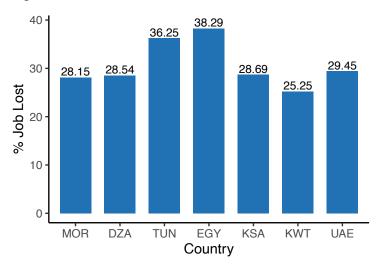


Figure 3. Loss of Employment by Country

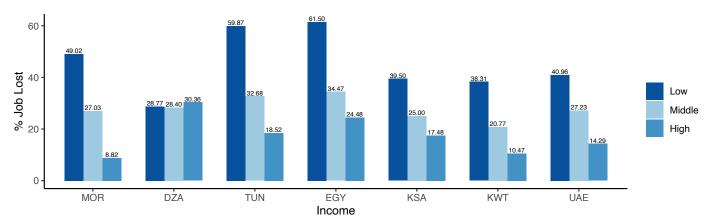


Figure 4. Loss of Employment by Country and Income

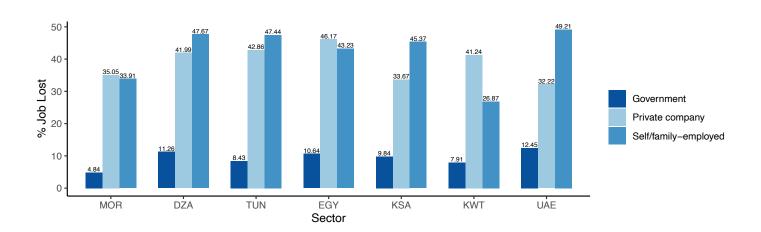


Figure 5. Loss of Employment by Country and Sector

Fulfilling Spending Needs

We asked respondents how they were fulfilling their spending needs since the outbreak of the pandemic. As shown in Figure 6, the majority (64%) reported that they were still using regular income sources, followed by borrowings from friends and family (27%), money from savings or selling assets (21%), and credit cards or loans (17%).

Since the outbreak of the pandemic, which of the following did you use, or do you expect to use, to meet your family's spending needs? (Multiple answers allowed)

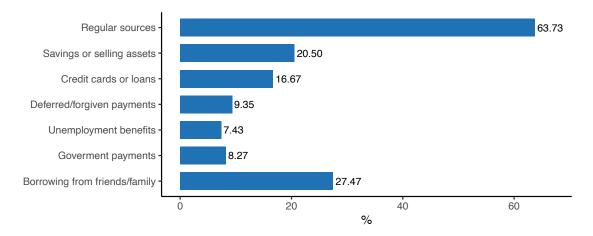


Figure 6. Fulfilling Spending Needs

Figure 7 shows answers broken down by respondents' income. We saw a clear pattern that higher-income respondents relied on a variety of avenues to fulfill their spending needs in addition to their regular income sources. Poorer respondents, who have less access to formal resources, instead borrowed from family or friends (39%) at almost twice the rate as high-income respondents (21%).

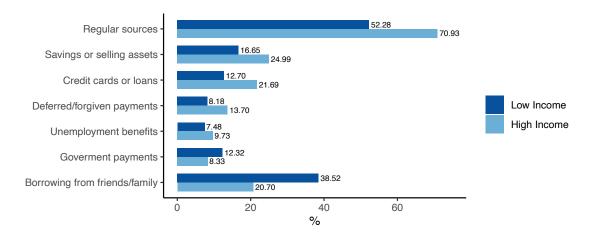


Figure 7. Fulfilling Spending Needs by Income

Respondents in Tunisia (36%) and Egypt (37%), the two hardest hit countries for unemployment (Figure 3), were twice as likely to report borrowing from friends or family as Moroccans (17%) and Algerians (15%). The relatively high rates of responses in the UAE (26%) were driven by expatriates, who constitute 82% of our sample in the country.

Percent using borrowing from friends or family to meet their spending needs

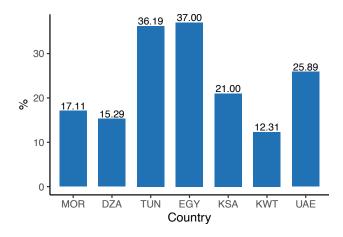


Figure 8. Fulfilling Spending Needs by Country

Food Insecurity

Prior to the COVID-19 crisis, many residents in the MENA region were suffering from food insecurity due to economic shocks, natural disasters, and armed conflicts. Though more food-secure than other MENA countries, GCC countries rely heavily on food imports.⁵⁵

To better understand the consequences of heightened food insecurity during the pandemic and changes in food availability, we asked respondents about food eaten in their household before and after the pandemic outbreak. As shown in Figure 9, respondents reported a 13%-point decrease in having "enough of the kinds of food they wanted to eat" compared to before the pandemic. In addition, 9%-point more respondents reported that they did not have enough to eat since the outbreak of the pandemic compared to before. Low household income was associated with increased food insecurity, once again highlighting the devastating impact of the pandemic on the poor.

⁵⁵ Ghazaly, S., Roger R., and Ahmed M. (2020, August). How GCC countries can ensure their food security. Strategy&, Middle East. https://www.strategyand.pwc.com/m1/en/articles/2020/how-gcc-countries-can-ensure-their-food-security. html

Which of these statements best describes the food eaten in your household?

Enough of the kinds of food we wanted to eat.

Enough but not always the kinds of food we wanted to eat.

Sometimes not enough to eat.

Often not enough to eat.

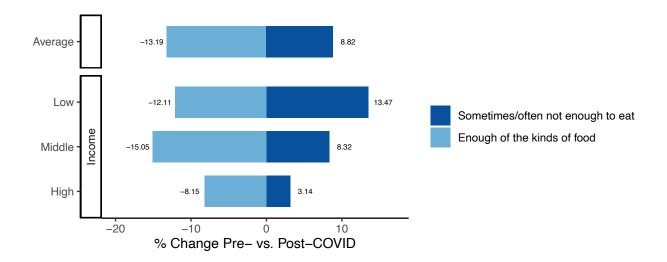


Figure 9. Fulfilling Spending Needs

When we disaggregated the results by country, we found a similar pattern showing that the pandemic has been especially taxing for Tunisians and Egyptians (Figure 10). A difference of 13%-point more respondents in Tunisia and Egypt reported sometimes/often not having enough to eat compared to a 4 to 8%-point increase in other countries. A difference of 15%-point more Tunisians and 14%-point more Egyptians responded that they did not have enough of the kinds of food they wanted to eat compared to availabilities before the outbreak of the pandemic.

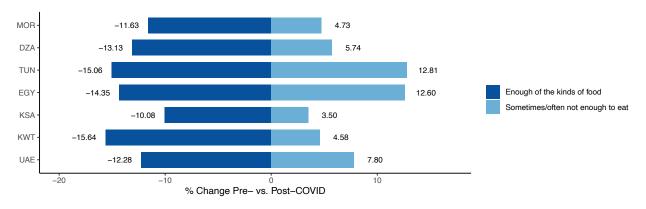


Figure 10. Percentage Point Change in Food Availability Pre- vs. Post-Outbreak of COVID-19 by Country

Psychological Well-Being

To assess the impact of the pandemic on people's psychological well-being, we asked respondents about the prevalence of depressive symptoms. Although symptoms may be temporary rather than an indicator of major clinical depression, analyzing the prevalence of such symptoms provides us with a unique opportunity to understand how the pandemic affected the mental health of MENA residents.

On average, almost a quarter of the respondents (24%) reported depressive symptoms nearly every day (16%) or more than half the days (8%) (Figure 11). Women were slightly more affected than men: most women (54%) reported depressive symptoms at least several days compared to men (47%). Those with less educational attainment and lower income levels were more likely to report feeling depressive symptoms nearly every day. One in four low-income respondents (25%) reported experiencing depressive symptoms nearly every day compared to 12% of high-income respondents. About 22% of the respondents without a high school education reported having such symptoms nearly every day compared to 12% of those with a college degree.

Over the last 7 days, how often have you been bothered by feeling down, depressed, or hopeless? Would you say not at all, a few days, most days, or nearly every day?

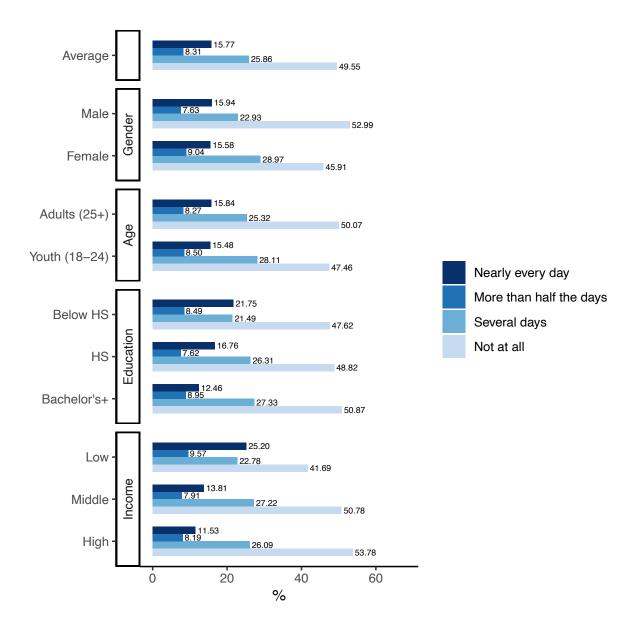


Figure 11. Mental Health

We also examined cross-country variations of the prevalence of depressive symptoms (Figure 12). In most countries (Morocco, Algeria, Kuwait, Saudi Arabia, and the UAE), 16–21% of the population reported experiencing depressive symptoms at least more than half the days. Once again, respondents in Tunisia and Egypt reported more than double those in other countries at 43% and 27%, respectively. In Tunisia, only a third of the population (33%) were not experiencing these symptoms at all compared to 44% of Egyptians. In the other five countries, the symptom-free rates were much higher, ranging from 54% to 61%.

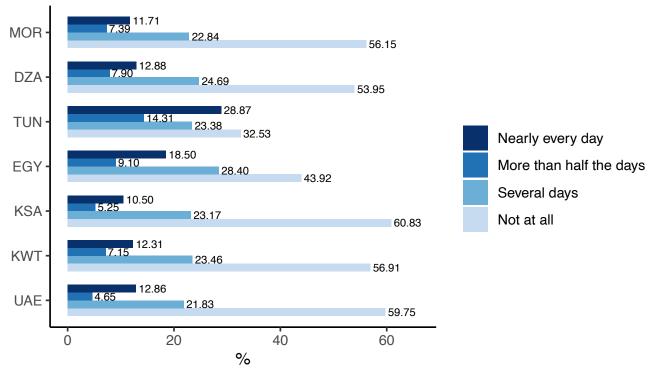


Figure 12. Mental Health by Country

Explaining the heterogeneity of depressive symptoms across MENA countries is not simple. One study from South Africa found that the perceived risk of COVID-19 infection is associated with the risk of depression. ⁵⁶ This result was supported by several other studies, which showed that, while COVID-19 itself was associated with a mild psychological impact, ⁵⁷ the fear of COVID-19 was independently associated with increased stress and anxiety. ⁵⁸ Our survey did not show that there were higher rates of depression in countries with more COVID-19 cases. As of June 30, 2021, the total reported cases per 100,000 population were the highest in Kuwait (8,435), followed by the UAE (6,460), Tunisia (3,542), Morocco (1,455), Saudi Arabia (1,419), Algeria (323), and Egypt (280) (see Figure 13). ⁵⁹ We did not find more prevalence of depressive symptoms in Kuwait or the UAE, countries with the most reported cases.

⁵⁶ Kim, A. W., Nyengerai, T., & Mendenhall, E. (2020). Evaluating the mental health impacts of the COVID-19 pandemic: perceived risk of COVID-19 infection and childhood trauma predict adult depressive symptoms in urban South Africa. Psychological Medicine, 1–13. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7520640/

⁵⁷ Al Dhaheri, A. S., et al. (2021). Impact of COVID-19 on mental health and quality of life: Is there any effect? A cross-sectional study of the MENA region. *PLoS ONE* 16(3): e0249107. https://doi.org/10.1371/journal.pone.0249107

⁵⁸ Salameh P., et al. (2020, December). Mental health outcomes of the COVID-19 pandemic and a collapsing economy: Perspectives from a developing country. *Psychiatry Research*, 294, 113520. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7577886/

⁵⁹ Coronavirus world map: Tracking the global outbreak. New York Times. https://www.nytimes.com/interactive/2021/ world/covid-cases.html

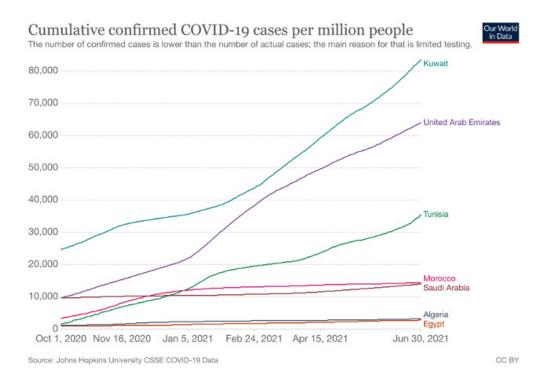


Figure 13. Cumulative Confirmed COVID-19 Cases per Million People (October 2020–June 2021)⁶⁰

One could argue that actual risks and perceived risks are different and, thus, the reported number of cases—a proxy for actual risks—does not sufficiently explain our findings or depressive symptoms. However, our own survey data shows that Tunisians and Egyptians were least likely to personally know someone who had been infected with COVID-19, a reasonable proxy for perceived risks: only 37% of Egyptian and Tunisian respondents knew someone who had contracted COVID-19 compared to 76% and 77% in Morocco and Algeria (Figure 14). Thus, depressive symptoms seem to be more closely linked to factors other than disease prevalence, such as socioeconomic factors.

⁶⁰ Hannah R., et al. Coronavirus (COVID-19) vaccinations. Our World in Data. https://ourworldindata.org/covid-vaccinations

% of people personally knowing someone who has fallen ill with COVID-19

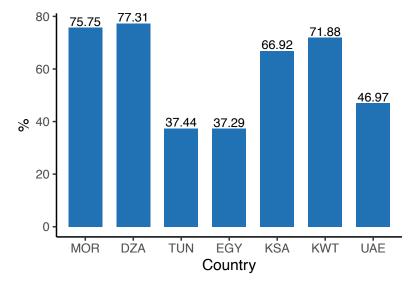


Figure 14. Perceived Risks of COVID-19

Job loss might be one such factor that explains the heterogeneity of depressive symptoms across the region. Existing research suggests that the fear of poverty is associated with stress and anxiety.⁶¹ Consistent with this research, we found that those who lost employment during the pandemic experienced depression much more frequently than those who did not (Figure 15). Survey data show that 42% of those who lost jobs also reported depressive symptoms at least half the days per week, compared to only 18% of those who did not lose jobs. Correlated, 56% of those who did not lose jobs reported that they did not experience any depressive symptoms at all, compared to 30% of those who did lose employment.

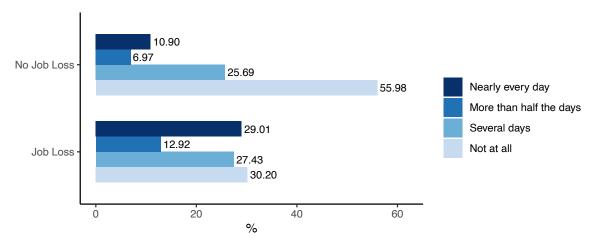


Figure 15. Depression and Loss of Employment

⁶¹ Salameh P., et al. (2020, December). December). Mental health outcomes of the COVID-19 pandemic and a collapsing economy: Perspectives from a developing country. *Psychiatry Research*, 294, 113520. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7577886/

Education

We also looked at how the pandemic affected education, an important measure of socioeconomic status and future potential. When asked how the pandemic had disrupted children's classes, 40% of respondents reported that their children's classes were moved online, whereas 21% reported that classes were cancelled altogether (Figure 16). Household income was again associated with changes in school format. Almost half (46%) of the classes moved online for children in high-income households compared to a third (32%) of low-income households. For low-income families, children's classes were more likely to be cancelled (24%) compared to high-income families (16%). This discrepancy is likely due to the lack of reliable internet connection and computers in low-income areas and households.

How has the coronavirus pandemic affected education of the children in your household?

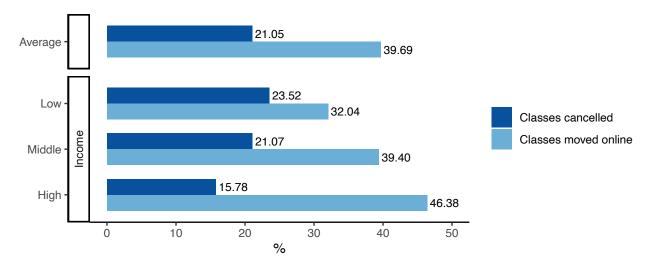


Figure 16. Changes in Class Format

We also found significant cross-country variations. Rates of school cancellation were lower in Morocco, Saudi Arabia, Kuwait, and the UAE, where a much higher percentage of schools (73%+) transitioned to online platforms. On the other hand, classes in Algeria (33%), Tunisia (30%), and Egypt (27%) were cancelled at higher rates (Figure 17), where only 10–21% of respondents' children's classes moved online. The rate of online transition was especially low in Tunisia (10%).

Examining open-ended answers, we found that quite a few parents chose not to send their children to school due to fears of COVID-19 transmission. These

answers were especially prevalent among Egyptian respondents. Due to the sustained intensity of the pandemic and lack of vaccination rollouts in Algeria, Tunisia, and Egypt (3%, 6%, and 1% fully vaccinated as of June 2021, respectively),⁶² many schools will not fully reopen for some time. Such disruptions in education will have significant future implications on the region's children, not only in a loss of years of schooling but also resultant impediments to future earnings and upward mobility.

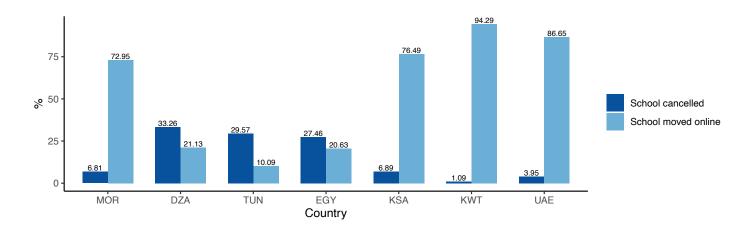


Figure 17. Changes in School Format by Country

Heterogenous Effects of the Pandemic

In this section, we analyze the heterogenous effects of the COVID-19 pandemic looking at various angles of the survey data.

Gendered Effects

Women across the region have suffered additional and different challenges than men because of the pandemic, including increased housework, childcare, and gender-based violence. First, we explore the burden of unemployment on women. While on average, men and women's employment were almost equally affected by the pandemic (Figure 1), the rates were different across countries. In Morocco, Saudi Arabia, and UAE, more women than men reported that they lost their job (Figure 18). In the UAE and Saudi Arabia, the results were driven by expatriates (82% and 31% of the sample, respectively) mostly employed in the private sector. In the UAE, for example, expat women (38%) were much more likely than expat men (29%) to lose jobs.

⁶² Hannah R., et al. Coronavirus (COVID-19) vaccinations. Our World in Data. https://ourworldindata.org/covid-vaccinations

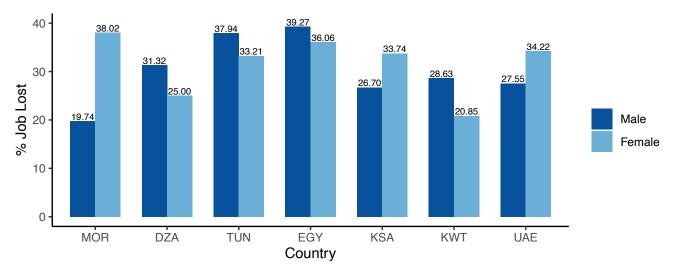


Figure 18. Loss of Employment by Country and by Gender

In Morocco, the proportion of women who lost jobs (38%) was approximately twice as high compared to men (20%). We further disaggregated the job loss data in Morocco by gender and sector (Figure 19) to better understand why women in Morocco were more heavily disadvantaged by the pandemic. We found that 63% of Moroccan women in our sample (in the pre-pandemic labor force) were employed by the private sector pre-pandemic. Among these women, 47% reported to have lost their job compared to men (24%) in the private sector. While we do not have more detailed data to make definitive conclusions, we posit that many of these women worked in the service or tourism sectors, which generally tend to employ more women. Tourism and service sectors in Morocco, particularly, were significantly disrupted by the pandemic, thereby disproportionately impacting Moroccan women. Moreover, many of these women may have been part-time employees and more vulnerable to job loss; in Morocco, about half the women in the workforce are part-time, which is much higher than the regional average of 33%.

⁶³ Ennaji, M. (2021, May 21). Unemployment and conflict: How COVID-19 has affected women in Morocco. *Conversation*. https://theconversation.com/unemployment-and-conflict-how-covid-19-has-affected-women-in-morocco-159144

⁶⁴ Ennaji, M. (2021). Women and gender relations during the Pandemic in Morocco. *Gender and Women's Studies*, 4(1), 3. http://riverapublications.com/assets/files/pdf_files/women-and-gender-relations-during-the-pandemic-in-morocco.pdf

⁶⁵ World Bank. (2022, February 8). Part time employment, female (% of total female employment) – Morocco. International Labour Organization, ILOSTAT Database. https://data.worldbank.org/indicator/SL.TLF.PART.FE.ZS?locations=MA&most_recent value desc=true

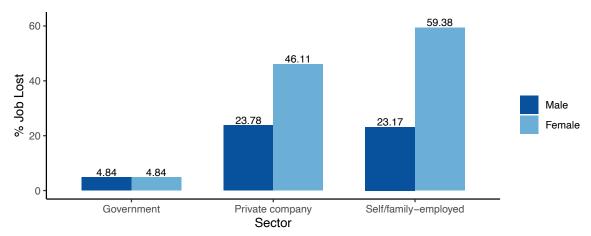


Figure 19. Loss of Employment and Gender in Morocco

In addition to creating insecurities in the job market, the pandemic also increased the burden of childcare responsibilities because of school closures and lockdowns. To assess household changes in childcare, we asked how many hours per week on average is spent on their children's educational activities since the outbreak of the pandemic. On average, respondents reported over 12 hours per week (Figure 20) with women generally spending more hours (13) than men (11). This is consistent with previous research showing that childcare responsibilities are not shared equally between parents during the pandemic with mothers spending considerably more time on childcare. Time spent with children was also associated with higher education and income levels.

Since the outbreak of the pandemic, how many hours on average do you spend on all teaching activities with the children in your household during a school week, including hours spent during weekdays and weekends?

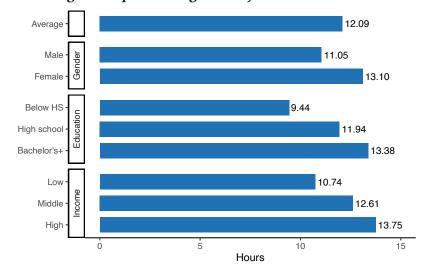


Figure 20. Childcare Burden by Hours

⁶⁶ 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.

We also surveyed to assess the delta of time spent on children's education in the household pre- versus post-pandemic outbreak. We asked whether the parents were spending "less," "more," or "about [the same]" hours on teaching activities with the children compared to before the pandemic. On average, 46% reported that they were spending more time since the pandemic, 29% spending about the same time, and 25% spending less time. When we break down the results by gender, we find that childcare responsibilities fell more on women (50%) than men (45%), as expected (Figure 21). Out of those surveyed, 11% of men did not answer the question because they either "didn't know" or "refused to answer" whereas only 4% of women indicated they "didn't know" or "refused to answer."

Is [the hours you're spending with children] same, less, or more than hours you used to spend on teaching activities with the children before the pandemic?

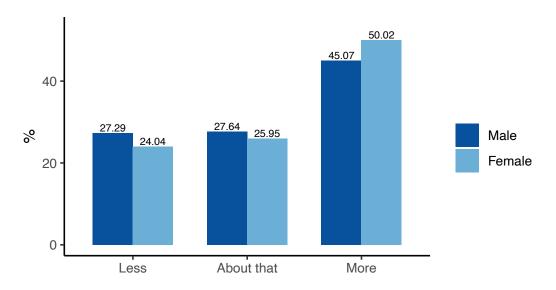


Figure 21. Childcare Burden Pre- vs. Post-Outbreak of COVID-19 by Gender

Breaking down the results by country, we found that residents across the region are spending more time on children's education after the onset of the pandemic (Figure 22). The gender gap in childcare responsibilities was evident in all countries except Tunisia (Figure 23). Though some studies suggest shifting gender norms in the division of household labor and childcare because of the pandemic,⁶⁷ it may take time for us to observe any substantial changes.

⁶⁷ Collins, C., Landivar, L. C., Ruppanner, L. and Scarborough, W. J. (2020). COVID-19 and the gender gap in work hours. Gender, Work, & Organization, 28(51), 1-12. https://doi.org/10.1111/gwao.12506.

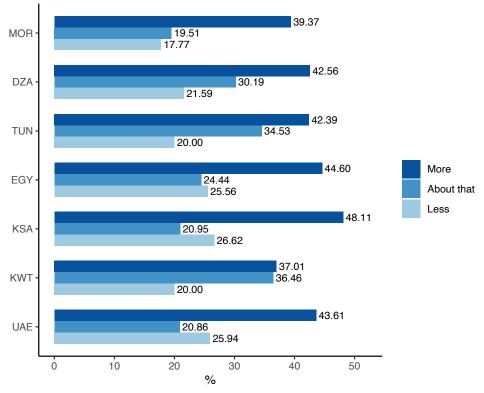


Figure 22. Childcare Burden Pre- vs. Post-Outbreak of COVID-19 by Country

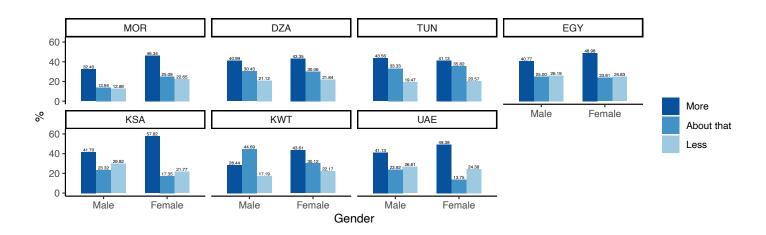


Figure 23. Childcare Burden Pre- vs. Post-Outbreak of COVID-19 by Country and Gender

We also investigated how childcare responsibilities are affecting working mothers as opposed to housewives and men who were either unemployed or working from home. Responses showed that 55% of women who lost employment and 51% of women currently working reported that they were spending more time on teaching activities with children compared to before the pandemic; 48% of housewives and 45% of men reported the same (Figure 24). The data also suggests that many previously working mothers may have left their jobs to take care of their children because of pandemic-induced school closures and lockdowns.

% Spending more hours with children post-COVID

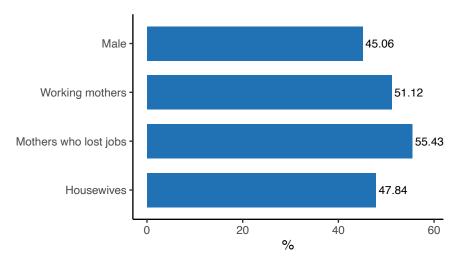


Figure 24. Childcare Burden Pre- vs. Post-Outbreak of COVID-19 by Women's Occupation

The COVID-19 crisis is further stalling women's labor participation in the region. If policymakers fail to address childcare issues, working mothers will be forced to leave the workforce at increasing rates and soon. As economies recover, public support for women's labor participation will contribute not only to women's empowerment, but also to families' economic security and to the region's economic recovery and growth.

Impacts on Youth

Youth unemployment in the MENA region has been particularly high for some time. Paired with the region's growing young population, it is important to accurately assess the pandemic's impacts on this demographic. As shown in Figure 1, the younger population in our sample on average suffered more job losses. When we look at the results by country, this was a consistent challenge for youth across the region (Figure 25).

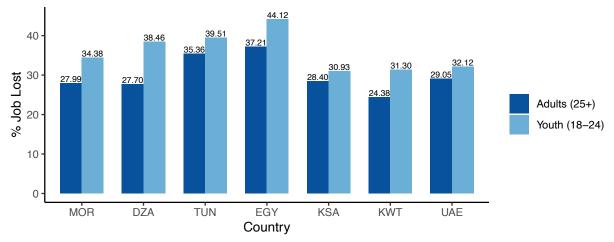


Figure 25. Youth and Loss of Employment

In Algeria, 38% of young workers reported job loss since the outbreak of the pandemic compared to 28% of adults. The labor market in Algeria, an oil-exporting country, is characterized by high employment in the public sector. In our sample, 47% of the pre-pandemic labor force was employed by the government. The high employment loss for youth may be explained by the fact that young Algerians were less likely to be employed by the government, which provides better job security than any other sector. According to our survey, only 13% of Algerian youth worked in the public sector pre-pandemic compared to 51% of adults. Data also shows that 62% of youth worked in the private sector compared to 33% adults, and 25% of youth worked in the informal sector. Algerian respondents over age 50 were overwhelmingly employed by the government (65%).

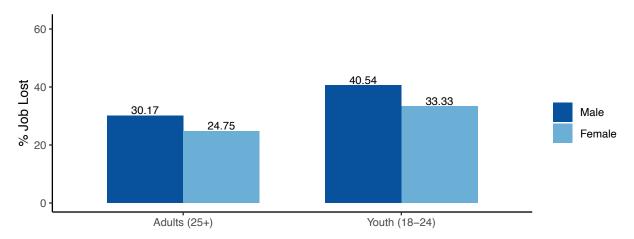


Figure 26. Youth and Loss of Employment in Algeria

In Tunisia, we report similar findings. Though the public sector in Tunisia is smaller than in Algeria, older adults were still more likely to work in the public sector (29%) compared to youth (6%), reflecting an ongoing hiring freeze in the Tunisian public sector. According to our survey, young Tunisians mostly worked in the private sector (66%) or were self- or family-employed (28%). Half of young men reported they were self-employed (54%) before the outbreak of the pandemic, which reflects the lack of jobs in the Tunisian formal sectors. The high rates of self-employment also explain why young men suffered a devastating blow in the job market after the outbreak of the pandemic, with 55% reporting job loss (Figure 27). The economic impacts on youth are likely to have also led to mental health consequences. Per our survey, only 23% of youth in Tunisia reported that they do not suffer from depressive symptoms.

⁶⁸ Boughzala, M. (2019, May 19). Unemployment in Tunisia: Why it's so high among women and youth. *theForum*. Economic Research Forum. https://theforum.erf.org.eg/2019/05/07/unemployment-tunisia-high-among-women-youth/

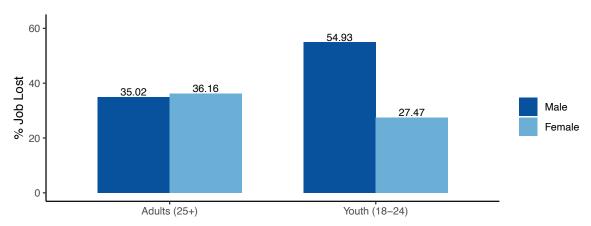


Figure 27. Youth Loss of Employment in Tunisia

Citizens' Attitudes Toward Government Responses To Covid-19

Governments have implemented myriad policy responses to contain the spread of COVID-19. As the success of public health policies largely depends on public cooperation, it is essential to understand the public's opinion of government policy responses.

We asked about citizens' attitudes toward the following measures to contain the spread of coronavirus: imposing lockdowns or curfews, closing mosques, and closing schools. On average, most MENA residents somewhat or strongly supported all three measures (Figure 28). However, we observed significant variation across countries. For instance, 74% of Saudi respondents supported lockdown and curfews versus 43% of Moroccans; 61% of Algerian respondents opposed school closures versus 14% of Emiratis. Figures 28, 29, and 30 summarize the findings by country. On average, GCC residents were much more likely to support these measures compared to those in the Maghreb region.

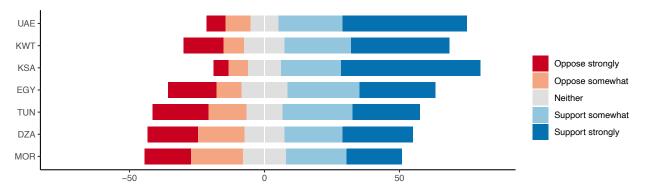


Figure 28. Support for Lockdown and Curfews

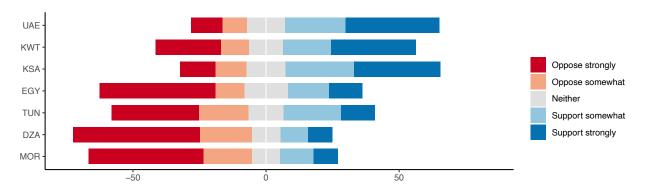


Figure 29. Support for Closing Mosques

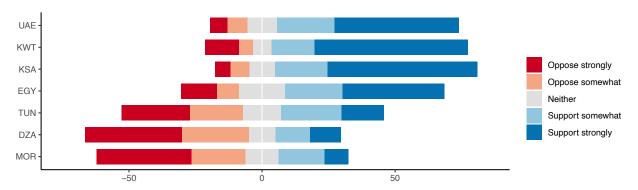


Figure 30. Support for Closing Schools

To gauge attitudes toward mask mandates, we asked respondents about their compliance level. On average, 78% of MENA residents were highly likely to wear masks "most of the time" or "always" when they were in public. GCC residents, who were more supportive of lockdowns and closures, were also more likely to wear face masks than those in the Maghreb region.

Wearing a face mask most of the time or always in public

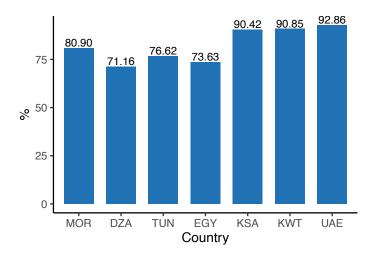


Figure 31. Mask Adherence

What are the determinants of public perception and compliance with government measures to contain COVID-19? Previous studies suggest that citizen support for COVID-19 response policies was linked to fewer confirmed cases and deaths per million.⁶⁹ However, this does not explain our results, as Kuwait and the UAE have had the highest numbers of confirmed cases (Figure 13). Other research shows that citizen perceptions of pandemic policy responses were closely associated with trust in government.⁷⁰ To understand this factor in the MENA region, we asked respondents whether they turned to their Ministry of Health for information about the pandemic. We found that citizens in Saudi Arabia, Kuwait, and the UAE were more likely to trust information from their Ministries of Health compared to citizens in the Maghreb (Figure 32). Our findings suggest that those who lacked trust in their government authorities were less likely to follow preventive and restrictive measures to contain the virus, which decreased the likelihood of success for public health policy measures. In future studies, we will further explore this important link to help increase the effectiveness of the pandemic-related interventions.

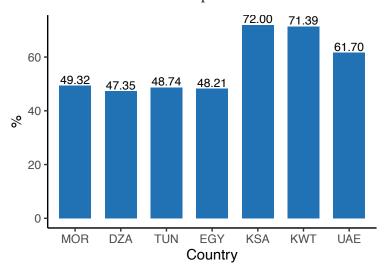


Figure 32. Trust in the Ministry of Health

⁶⁹ Chen, C. W. S., Lee, S., Cuong Dong, M., and Taniguchi, M.. (2021). What factors drive the satisfaction of citizens with governments' responses to COVID-19? *International Journal of Infectious Diseases*, 102, 327–331. https://www.sciencedirect.com/science/article/pii/S1201971220322542

⁷⁰ Lazarus, J. V., et al. (2021). COVID-SCORE: A global survey to assess public perceptions of government responses to COVID-19 (COVID-SCORE-10). *PLoS One*, 15(10), e0240011. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0240011

Vaccination Response

Vaccination is crucial for reaching herd immunity and ending, or at least containing, the pandemic. Vaccines have not been available equally to all countries and populations in the MENA region. While the IMF projects that the global economy will grow by 6% in 2021, the forecast is only at 4% in the Middle East due to lack of vaccine access.⁷¹ Moreover, vaccine hesitancy has impeded faster vaccine rollouts.

Our surveys in Morocco and Algeria specifically asked about vaccination and vaccine hesitancy. Consistent with publicly available data that demonstrate Morocco's robust vaccination drive, 26% of Moroccan respondents reported to have received at least one dose (Figure 33). On the other hand, only 2% of respondents in Algeria had received the vaccine at the time of the survey, suggesting low availability in the country.

Have you received a vaccine to prevent COVID-19 (either one or two doses)?

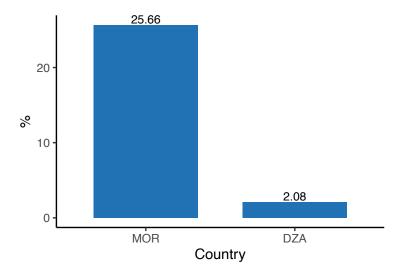


Figure 33. Vaccination

Moreover, we surveyed respondents in Morocco and Algeria to compare vaccine hesitancy: 85% of Moroccans versus 50% of Algerians reported that they would "probably" or "definitely" get the vaccine (Figure 34). The results suggest that a lack of vaccine availability in Algeria would not be the only roadblock to containing the virus, given such high rates of vaccine hesitancy.

⁷¹ IMF. (2020, October). Regional economic outlook update: Middle East and Central Asia (World Economic and Financial Surveys). https://www.imf.org/en/Publications/REO/MECA/Issues/2020/10/14/regional-economic-outlook menap-cca

Do you think you will get the coronavirus vaccine when it is available to you?

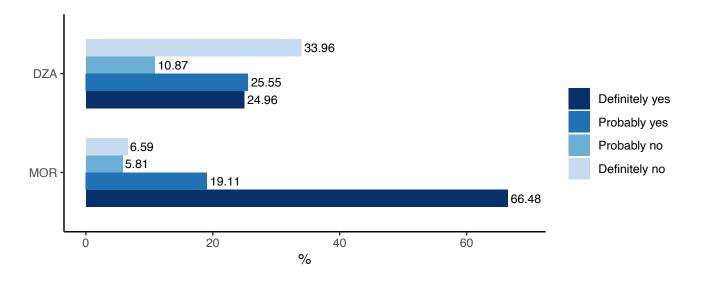


Figure 34. Vaccine Acceptancy⁷²

To better understand factors driving vaccine hesitancy, we asked respondents who answered "probably no" or "definitely not" to getting the vaccine, why was that the case. About four in ten respondents (39%) reported that they were concerned about side effects. Other common answers included lack of trust in the government (20%) and not seeing the necessity of the vaccine (15%). As shown in Figure 33, answer rates were similar in Morocco and Algeria. The results suggest that it is essential for governments, health workers, and the media to provide transparent and timely information regarding vaccination to increase the public's trust.

As vaccine rollouts and resulting herd immunity are hopeful solutions to curb the COVID-19 pandemic, future research should examine the specific causes of vaccine hesitancy to aid policymakers in designing more effective solutions based on those findings.

⁷² DZA refers to Algeria, and MOR refers to Morocco.

Please tell me why you would not get a COVID-19 vaccine.

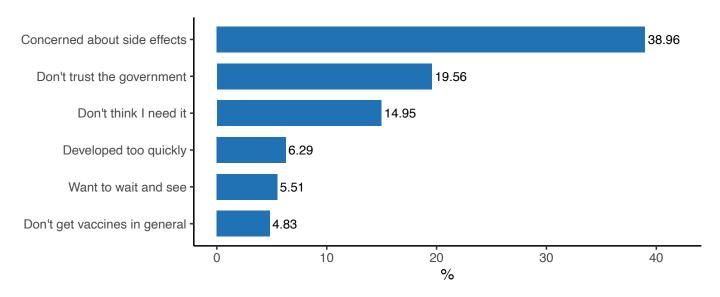


Figure 35. Vaccine Hesitancy

Please tell me why you would not get a COVID-19 vaccine.

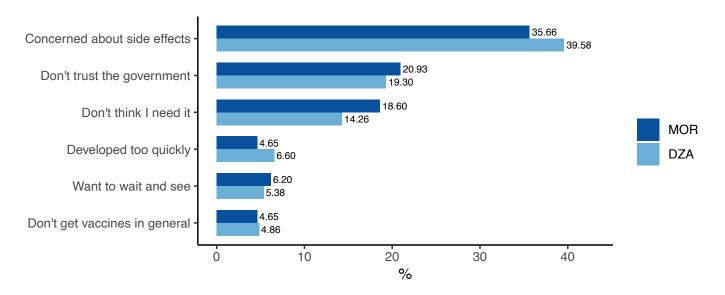


Figure 36. Vaccine Hesitancy in Algeria and Morocco

Conclusion

The social and economic challenges worsened or caused by the COVID-19 pandemic can be mitigated through effective policy design and implementation. To protect overall citizen well-being and prevent further spread, MENA policymakers must continue to collect data on the impact of COVID-19 and consult a wide variety of experts and citizens, including the youth and women. When crafting evidence-based interventions, policymakers should pay particular attention to vulnerable populations with an aim to lessen the heterogenous effects of COVID-19.

As countries rebuild, governments should consider providing social protections and rights for informal workers who make up a significant portion of the workforce in the region. Similarly, policymakers should encourage female labor force participation by committing to a wider range of labor and childcare policies as the economies recover.

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