

Mexico: COVID-19 Knowledge, Attitudes & Practices

Responses from the first round of data collection among adults, adolescents, and community leaders in indigenous municipalities of Chiapas and Yucatan June 1–30, 2020

Highlights

- As of July 15, 2020, there were 317,635 confirmed cases and 36,906 deaths due to COVID-19 in Mexico. In Yucatan, by this same date, there were 6,674 cases (2.1% of all total cases) and 612 deaths (1.6% of the total). In Chiapas, there were 5,308 confirmed cases of COVID-19 (1.6% of the total) and 786 deaths (2.1% of the total).
- In Chiapas and Yucatan, respondents reported that they thought people over 60 years of age (74.3% and 71.2%, respectively) and/or with pre-existing conditions (71.1% and 56.5%, respectively) were most at risk for experiencing complications or/and death due to COVID-19. The most common symptoms identified by participants in Chiapas and Yucatan were fever (84.1% and 89.2%, respectively), a shortage of breath (60.2% and 64.4%, respectively) and headache (62.5% and 60.3%, respectively). Less awareness exists about other atrisk groups (pregnant women, under-5s and people living with HIV) and about minor COVID-19 symptoms. In Chiapas, the adolescent population, as compared to the adult population, showed less knowledge of COVID-19 symptoms (e.g. 66% of adults and 36.3% of adolescents identified dry cough as one of the symptoms) and preventative measures (e.g. 75% of adults and 44% of adolescents identified maintaining social distancing as a preventive measure).
- There is a lack of knowledge and intention to wear a face mask and of maintaining social distancing measures, as compared to other preventative measures (e.g. hand washing and social distancing amongst others).
- Adults (>80%) and adolescents (60%) in Yucatan were more likely to be significantly worried about the pandemic, compared to those in Chiapas (53.7% of adults and 9% of adolescents).
- In both states, food insecurity, low employment opportunity, and loss of work have been identified as the principal worries. A greater percentage of women identified feeling worried over their children's educational lag, as compared to men (50% vs. 25% in Chiapas and 28% vs. 17.5% in Yucatan).
- The networks that respondents reported trusting the most for accurate information about COVID-19 varied by state, age and gender. In both states, a low percentage of participants trusted social media as a source of accurate COVID-19 information.
- Over 50% of adults surveyed in Yucatan reported losing their employment or their primary source of income since the start of the pandemic, as compared to 31.2% of adults in Chiapas.
- Approximately 25% of adolescents in Chiapas and Yucatan have discontinued their education since the start of
 the pandemic. Adolescent boys in Chiapas represent the group with the highest drop-out rate (37.5%). In both
 states, 75% of adolescents do not have internet access in their homes. In Chiapas, 30.7% of adolescent girls
 identified having access to internet in their homes compared with 22.2% of adolescent boys. In Yucatan, 26.6%
 of adolescent girls identified having access to Internet in comparison to 24% of adolescent boys.

Sample Characteristics

In total, 295 people originating from 17 municipalities were surveyed in Yucatan: 168 adults (65.2% women), 100 adolescents between 14 and 17 years (75% girls), and 27 community leaders (55.5% women). The median age of the adult population was 32.5 years (range: 18–81) and 34 years for community leaders (range: 21–51). The average age of the adolescent population was 15.2 years (range: 14–17 years). 88.4% of adults and 74% of community authorities spoke an indigenous language compared to 64.8% of adolescents.

Mexico 317,635 cases 36,906 deaths

As of July 15, 2020. Source: Dirección General de Epidemiología, Secretaría de Salud, México.

In Chiapas, 83 people were surveyed, originating from 15 municipalities: 56 adults (71.4% women), 22 adolescents between 14 and 17 years (59.1% girls), and five community leaders (all of them were men). The median age of the adult population was 28 years of age (range: 19–48) and the average age of the adolescent population was 16.3 years (SD \pm 0.7). 87.5% of adults spoke an indigenous language compared to 86.3% of adolescents.

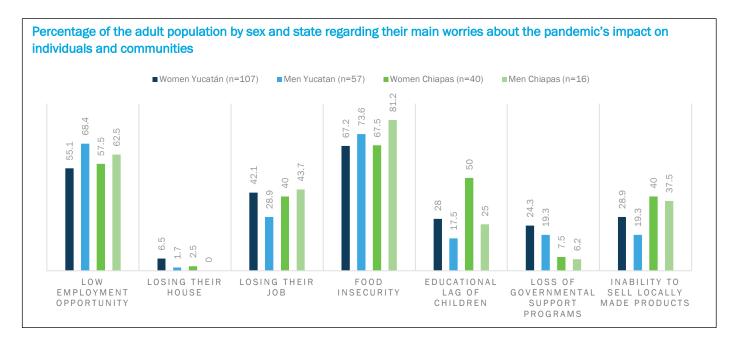
Knowledge on Infection, Symptoms and Prevention

Adults and adolescents in both states identified the most at risk-groups of suffering complications from COVID-19 as well as the most common symptoms of the infection (fever, shortness of breath, and headache). Some participants believed misinformation around COVID-19: approximately 4 in every 10 participants believed in measures not supported by empirical evidence (such as spraying bleach on the skin, eating garlic to boost the immune system, and hot weather or hot beverages as means to kill the virus). Adoption of preventative behaviors were mixed: a low percentage identified the intention to wear a mask when leaving their homes. Governmental institutions should reinforce COVID-19 communication strategies and make them culturally appropriate for indigenous populations, so that there is a better understanding in the population of who is at risk, who can be infected, and how to prevent new infections.

- 71.4% of adults, 81.4% of community authorities, and 77.2% of adolescents in Yucatan and 71.4% of adults and 77.2% of adolescents in Chiapas identified those over the age of 60 as most-at-risk of suffering complications from COVID-19. In both states, less than 50% of participants in all surveyed groups identified pregnant women, children under the age of 5, and people living with HIV as at-risk.
- 80.3% of adults, 88.8% of community authorities, and 80% of adolescents in Yucatan identified hand washing as a preventative measure for COVID-19, in comparison to 87.5% of adults and 90.9% of adolescents in Chiapas.
- Most common symptoms of COVID-19 identified among the surveyed population were fever, shortage of air, and headache. On average, slightly more than 40% identified minor symptoms of COVID-19 (runny nose, anosmia, dry cough, sneezing, skin conditions, and myalgia).
- In almost all groups, between 37.0%–40.4% of the population believed that spraying alcohol or bleach on the skin can eliminate SARS-CoV-2 from the body surface.
- 82.7% and 53.5% of adults and 64.6% and 9.0% of adolescents in Yucatan and Chiapas, respectively, identified feeling very worried about the pandemic. This could be due to a greater lack of trust in governmental institutions and governmental media communications in indigenous communities in Chiapas, compared to indigenous communities in Yucatan. 29.6% of community leaders in Yucatan said that the risk that someone within their community has or will contract COVID-19 is high.
- Mask-wearing intentions were low. Less than 40% of adults in both states, 40.7% of community authorities in Yucatan, and fewer than 5 out of 10 adolescents identified that, if they experienced symptoms of COVID-19, they would wear a mask.

¹ Since only five community authorities were surveyed in Chiapas, in this brief we only include the information from the adults surveyed, unless it is stated otherwise.

- Adult participants in both states were most worried about the pandemic's impacts on food insecurity, employment opportunities, and job loss. 73.6% of men and 67.2% of women in Yucatan, and 81.2% of men and 67.5% of women in Chiapas indicated that they are worried about food insecurity.
- 47% of adults in Yucatan and 57% of adults in Chiapas identified not having a space to quarantine in their homes.
- Respondents had variable trust in different sources of COVID-19 information. Adult men in Yucatan and Chiapas have more trust in the daily morning conferences (36.6% and 40%, respectively). Women and adolescents in Yucatan reported having more trust in television programs and newscasts (29% and 36%, respectively), while women in Chiapas had more trust in radio programs (31.5%), adolescent boys in health centers (33.3%) and adolescent girls in radio programs (15.3%) and health centers (15.3%).
- As for preferred communication strategies to disseminate information about COVID-19 to indigenous communities, both adults and community authorities identified loudspeaker cars (33.9% and 62.9%, respectively) and primary care health centers (59.2% and 33.9%, respectively) as the preferred strategies. 25.9% of community authorities identified social media as the preferred community strategy in comparison to 11.9% of surveyed adults.
- In Yucatan, adults and adolescents identified being afraid of disclosing being sick with COVID-19 due to the prevalence of stigma and discrimination in the communities where they live.



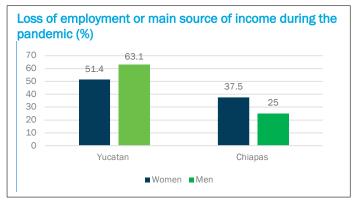
Food insecurity, livelihoods, and education

Food Insecurity

- Food insecurity may be a consequence of the pandemic. 10.2% and 5.2% of women and adult men, respectively, and 15.3% of adolescent girls and 22.2% of adolescent boys in Yucatan identified not having consumed breakfast, lunch and/or dinner in the last week due to a shortage of available food for their family, in comparison to 17.5% of women, 20.2% of adolescents girls and 8.0% of adolescent boys in Chiapas. No men in Chiapas described having been in this situation.
- Less than 50% of adults in both states identified that they harvest enough and/or have enough yard animals for personal consumption.

Livelihoods

- Regarding livelihoods, 51.4% of women and 63.1% of men in Yucatan identified having lost their work and/or their primary source of income since the start of the pandemic, in comparison with 37.5% of women and 25% of men in Chiapas.
- Few respondents have a personal safety net. 31.4% of women and 23.2% of men in Yucatan and 35.0% of women and 46.6% of men in Chiapas identified having household savings. In both states, a greater percentage of men in



comparison to women indicated that these savings would be sufficient to sustain their families for a period longer than a month (54.5% vs. 35.4% in Yucatan and 66.6% vs 8.3% in Chiapas).

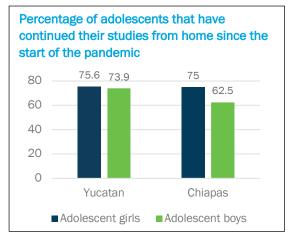
In both states, about 7 out of 10 families have women who are in charge of domestic work.

Violence against women and girls

• Less than 1% of women and girls in Yucatan and no woman or girl in Chiapas reported having experienced beatings, screams, shoves and/or mistreatment in their homes since the start of the pandemic.

Education

- Most adolescents are continuing their studies from home. 75.6% of adolescent girls and 73.9% of adolescent boys in Yucatan indicated that they have continued studying from home since the beginning of the pandemic and the closure of schools, in comparison to 75.0% of adolescent girls and 62.5% of adolescent boys in Chiapas. This may be complicated by a lack of internet access, experienced by 75% of adolescents in both states.
- In both states, adolescent girls reported receiving more support at home to solve school-related questions in comparison to adolescent boys (60.7% vs. 47.0% in Yucatan and 4 out of 9 girls vs. 1 out of 5 boys in Chiapas).



- In general, adolescent girls have reported learning more and
 expressed having had more positive experiences in comparison to adolescent boys. The main activities that
 they have learned are cooking, performing tasks associated with domestic work, taking care of others, and
 making crafts. Adolescent boys reported having learned to sow cornfields, take care of yard animals, and
 beekeeping.
- In Yucatan, adolescent girls shared their feelings about the pandemic more frequently than their male counterparts (37.3% and 33.3% respectively). In Chiapas, adolescent boys shared their feelings more often than adolescent girls (11.1% and 7.6% respectively). The main individuals with whom adolescent girls and boys share their feelings are female family members.

Recommendations

The World Health Organization has recently indicated its concern about the greater impact that the COVID-19 pandemic is having in the indigenous population of Latin America.² Even though the results of the present study are not representative of the entire indigenous populations living in Chiapas and Yucatan, these data can identify areas for further research and guide local organizations working in these communities by pointing out areas of opportunity with respect to knowledge, attitudes and practices, and strategies that reduce the medium and long-term impact of the pandemic in these communities.

The Government of Mexico should create public education campaigns with a focus on:

- Increasing the awareness of adults, adolescents, and community leaders in critical prevention areas such as: improving understanding of who is high-risk; identifying common symptoms of COVID-19 and preventative measures to reduce the possibility of contagion (e.g. adequate hand washing, correct use and importance of wearing face masks when leaving the house and when having respiratory symptoms that are associated to COVID-19, social distancing and how and when to clean surfaces, among others); increasing awareness of evidence-based prevention measures; and clarifying misinformation on measures that are not supported by empirical evidence and that could lead to a delay in medical care and health problems (e.g. spraying bleach on the skin or ingesting/drinking carbon dioxide products).
- Designing communication strategies tailored to the needs of subgroups (such as women and adolescents) and
 their preferred communication methods, in the local language. This includes integrating an intercultural
 perspective in all communications and analyzing strategies in accordance with age and sex of the campaign's
 intended audience.
- Increasing awareness of stigma and discrimination against people who have COVID-19, mainly in indigenous
 communities in Yucatan—since stigma could lead to individuals not disclosing symptoms and delaying required
 medical attention, subsequently leading to an increase in the incidence of active cases and deaths.
- Generating and disseminating self-isolation protocols of symptomatic cases that are simple and feasible to implement in homes that only have one bedroom or where several people share a bathroom.

Efforts for resource provision should focus on:

- Strengthening local protocols for medical attention and referral of symptomatic COVID-19 cases in communities—to avoid the duplication of efforts, delayed medical attention, and saturation of health facilities.
- Promoting collaboration between government and civil society organizations to implement family and community strategies that can reduce the pandemic's economic impact on communities. For example, financial education, barter trading, backyard farming, and strategies to implement fair trade commerce to sell local products.
- Ensuring internet access for all as it is a tool that enables opportunities, such as remote education, access to information about scholarships and government aids, and other resources.
- Emphasizing the differentiated impact of the pandemic between men and women, as well as the difference between resilience strategies implemented, and opportunities that can be accessed by women and men.
- Increasing knowledge about different types of violence against women and girls and implementing appropriate prevention, care, and referral protocols for violence cases in this population.

Acknowledgments

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Partnering with national health ministries and other government agencies in sub-Saharan Africa, South Asia, and Latin America, Population Council global and in-country scientists are conducting COVID-19 public health and social science research to produce relevant and timely evidence to support policymakers in controlling the spread of coronavirus, evaluating the effectiveness of prevention and mitigation measures, and assessing the longer-term health, social, and economic effects of the pandemic.

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