

## Aliza Adler, BA 🗌 M. Antonia Biggs, PhD 🔲 Shelly Kaller, MPH 🔲 Rosalyn Schroeder, MPH, MSc 📃 Lauren Ralph, PhD, MPH

# Background

- Reproductive healthcare services are among one of the most common healthcare needs for women of reproductive age.<sup>1</sup>
- Delaying or forgoing reproductive healthcare can result in morbidity and, in situations such as untreated STIs, can also lead to an increased risk of more serious complications.<sup>2</sup>
- During the height of the COVID-19 pandemic, there were significant disruptions in the delivery of reproductive health services in the US, creating additional barriers to care that may have resulted in large increases in delayed or skipped appointments.<sup>3</sup>

Table 1. Select characteristics of study participants (n=12,351)			
	Weighted Percent <b>2017</b>	Weighted Percent <b>2021</b>	
Age			
18-24	12.7	11.8	
25-29	17.1	17.2	
30-39	35.6	36.9	
40-49	34.7	34.1	
Race and Ethnicity			
Non-Hispanic White	58.4	58.0	
Non-Hispanic Black	13.4	14.0	
Hispanic	19.5	18.5	
Asian/Asian-American	6.1	5.0	
Non-Hispanic multiracial or other race/ethnicities	2.6	4.5	
Education			
No high school or GED	9.4	7.3	
High school graduate	20.2	18.4	
Some college	32.1	29.7	
College degree	23.4	25.5	
Advanced degree	14.9	19.0	
Percent of Federal Poverty Level			
<100%	13.7	9.4	
100-199%	16.1	12.8	
>=200%	70.2	77.7	
Metropolitan Statistical Area			
Non-metro	12.6	11.1	
Metro	87.4	88.8	
Language Survey Taken In			
English	90.9	93.9	
Spanish	9.1	6.1	

# Barriers to reproductive health care prior to and during the COVID-19 pandemic

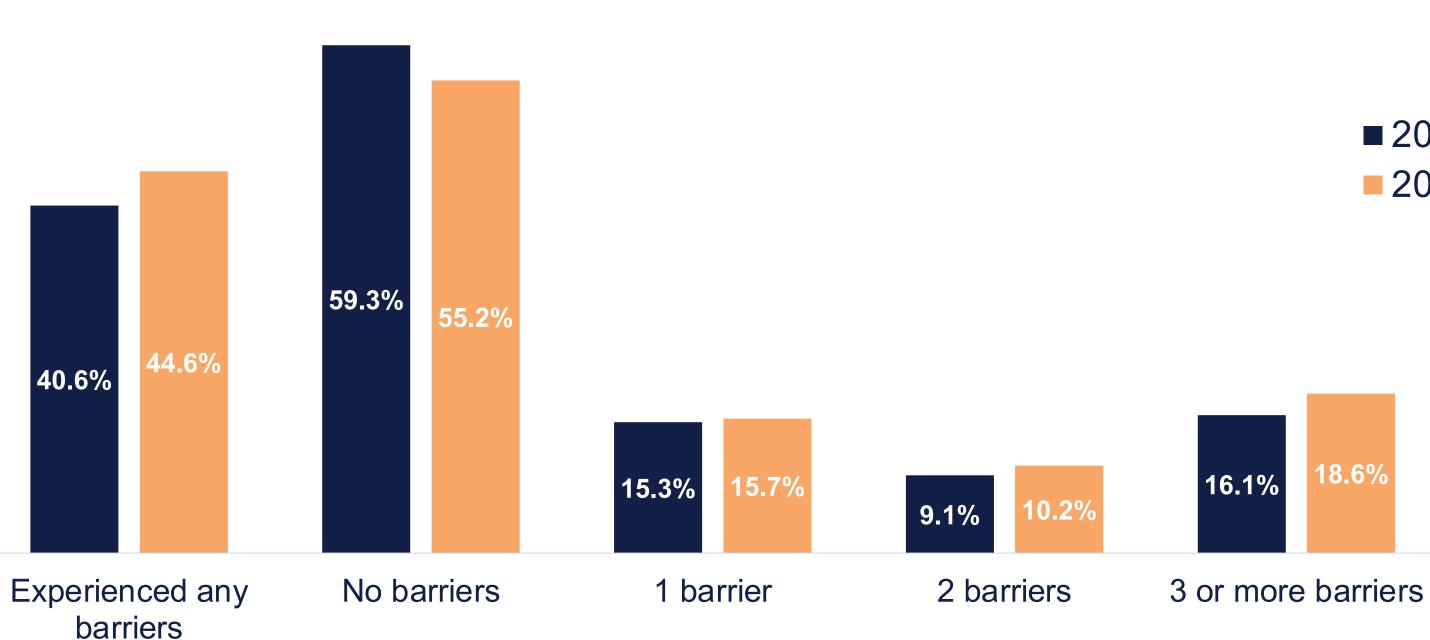
*Purpose:* To examine whether the COVID-19 pandemic impacted the number and type of barriers to reproductive healthcare services experienced by US women of reproductive age between August 2017 and December 2021.

Hypothesis: Barriers to reproductive health services would increase between these periods and that historically marginalized groups would experience the largest increases in barriers.

# Methods

We conducted an analysis of serial cross-sectional weighted survey data collected in 2017 and 2021 from members of Ipsos's KnowledgePanel®. Our analytical sample was 12,351 individuals assigned female at birth who had ever tried accessing reproductive health services. Our primary outcome was barriers to reproductive health services experienced in the last 3 years. We created a continuous variable for number of barriers experienced and a categorical variable (0, 1, 2, or 3+ barriers), and groupings of barriers into domains. We ran descriptive statistics and bivariable and multivariable analyses to examine changes in barriers experienced between survey years.

Mean number of barriers experienced increased from 1.09 (95%) CI, 1.02-1.15) to 1.29 (95% CI, 1.22-1.37) from 2017 to 2021



## Figure 1. Number of Barriers Experienced

Multivariable analysis showed that the mean number of barriers experienced by participants in the past three years significantly increased from 1.09 (95% CI: 1.02-1.14) to 1.29 (95% CI: 1.22-1.37) (p<0.001). Participants from historically marginalized populations – including those identifying as Hispanic, with no high school diploma or equivalent, who took the survey in Spanish, and living at <100% of the Federal Poverty Level – experienced the

## Results

Of the 29,496 members invited, 7,022 and 6,841 completed the 2017 and 2021 surveys (50% and 45% response rates, respectively). In 2017, 40.6% (95% CI: 39.0%-42.4%) reported experiencing barriers to care in the past three years. This number increased to 44.6% (95% CI: 42.8%-46.3%) in 2021. We observed increases for seven out of the nine barriers listed (p < 0.05). Additionally, more people reported experiencing three or more barriers in 2021 (18.6% [95% CI: 17.3%-20.0%]) than in 2017 (16.1%, [95% CI: 14.9%-17.4%]). When examining weighted frequencies of domains of barriers, we also found significant increases between surveys for the following categories: access (p<0.001), logistical challenges (p<0.001), and interpersonal relationships (p=0.003) between 2017 and 2021.

the greatest increase in the mean number of barriers (p<0.05) between 2017 and 2021.

## Table 2. Mu

### Overall

Age 18-24 25-29 30-39 40-49

### Race and e

Non-F Hispa Asian Non-l other

### **Education**

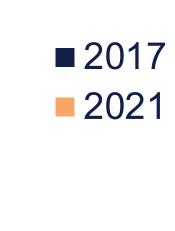
Not High Some Colle Advar

Percent of <100 100-1 >=200

Metropolit Non-Metro

Language

\*Differences across years found to be statistically significant



## Conclusions

- Barriers to reproductive health services increased between 2017 and 2021.
- are likely to persist.
- of barriers experienced, which may be due to factors such as structural and interpersonal racism.

## References

1. Long et al, KFF, 2021 2. Weigel et al, KFF, 2020 3. Mukherjee et al, Reprod Health, 2021





Itivariable linear regression of mean number of barriers experienced			
	Weighted Percent (95% CI) <b>2017</b>	Weighted Percent (95% CI) <b>2021</b>	
	1.09 (1.02-1.15)	1.29 (1.22-1.37)	
	1.36 (1.12-1.59) 1.32 (1.15-1.49) 1.13 (1.03-1.23) 0.83 (0.74-0.92)	1.50 (1.20-1.79) 1.74 (1.53-1.96) 1.22 (1.11-1.33) 1.08 (0.96-1.20)	
ethnicity ispanic White* ispanic Black* nic* Asian-American ispanic multiracial or ace/ethnicities	0.88 (0.81-0.94) 1.43 (1.21-1.65) 1.55 (1.36-1.73) 0.74 (0.51-0.97) 1.34 (0.99-1.68)	1.03 (0.95-1.11) 1.64 (1.38-1.91) 1.96 (1.75-2.18) 0.92 (0.62-1.23) 1.29 (0.98-1.60)	
h school or GED* chool graduate* college e degree* ced degree*	2.07 (1.70-2.44) 1.29 (1.13-1.45) 1.16 (1.06-1.25) 0.72 (0.65-0.79) 0.62 (0.53-0.72)	2.69 (2.23-3.16) 1.65 (1.43-1.86) 1.24 (1.11-1.37) 1.01 (0.89-1.12) 0.88 (0.78-0.99)	
Federal Poverty Level 6* 99%* %*	2.12 (1.89-2.36) 1.44 (1.29-1.59) 0.80 (0.74-0.87)	2.77 (2.44-3.09) 1.75 (1.53-1.98) 1.04 (0.96-1.12)	
an Statistical Area	1.12 (0.95-1.28) 1.08 (1.01-1.15)	1.30 (1.07-1.51) 1.29 (1.21-1.38)	
<b>Survey Taken In</b> n* sh*	1.02 (0.95-1.08) 1.77 (1.49-2.05)	1.21 (1.13-1.28) 2.64 (2.22-3.06)	

• The analysis provides evidence that COVID-19 may have worsened barriers to reproductive health services for women living in the US. However, it also illustrates that such barriers existed prior to the pandemic and

o Participants reporting historically marginalized identities experienced the greatest increase in mean number

