

COVID-19 Concerns Experienced by Pregnant and Postpartum Women and their Influence on HRQoL

Pallavi Aytha Swathi,³ Annette K Regan,^{1,3} Erin
Grinshteyn,¹ Marcianna Nosek,¹ Ning Yan Gu¹

*1 School of Nursing and Health Professions, University of San Francisco; 2
UCLA Fielding School of Public Health; 3 College of Arts and Sciences,
University of San Francisco*

Acknowledgements



This work was supported by a EuroQoL Research Foundation grant #:
260-2020A
(PI: Dr. Annette Regan)

Introduction

- Reports of pandemic induced anxiety among pregnant and postpartum persons.
- Potential concerns due to changes in maternal care, concerns for their own health and health of their baby.



COVID-19 Restrictions Linked with Elevated Stress in New Moms and Moms-to-Be

Pregnant women vulnerable to mental health problems during pandemic

HEALTH

Better mental health support needed for pregnant individuals during Covid-19 pandemic: Study

A new study finds that more mental health support is needed for pregnant people during the pandemic after it was found that nearly three-quarters of individuals who were pregnant during this time reported moderate to high levels of distress.



Research Aims

- ❖ Evaluate how pandemic-related concerns experienced by pregnant persons impacts health-related quality of life (HRQoL)
- ❖ Evaluate specific concerns related to:
 - COVID-19 as a severe disease
 - health of baby
 - health of self
 - health of family
 - being pregnant during the pandemic
 - giving birth during the pandemic

Survey

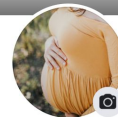
- National survey of pregnant and postpartum persons between May and July 2021
- Items:
 - EQ-5D-5L + EQ-VAS
 - Prenatal care & health information
 - Delivery experience
 - Social support
 - COVID-19 experiences
 - Sociodemographics



The COVID-19 Pregnancy Study

A health study for individuals experiencing pregnancy during the COVID-19 pandemic

Edit



The C19 Pregnancy Study

@cov2pregnancy · Scientist

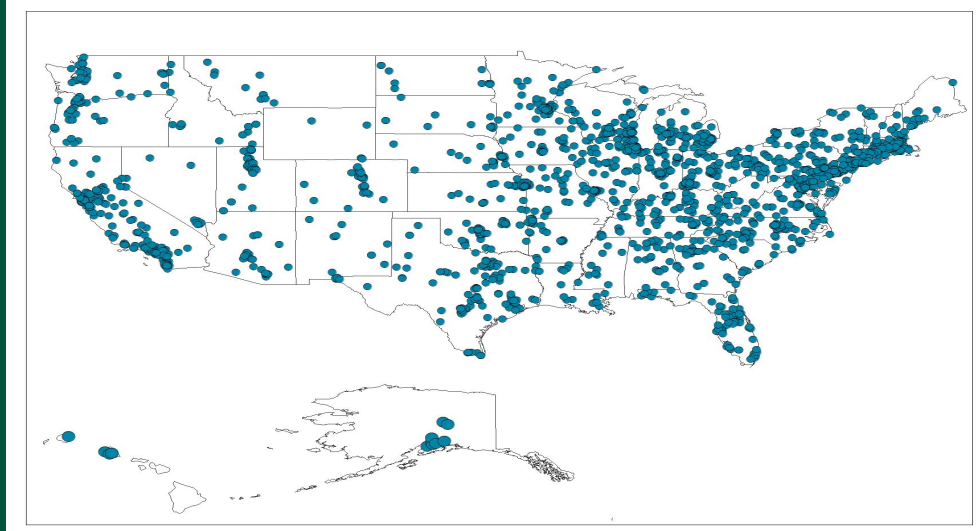
Edit Learn More

Survey

- Participants recruited through targeted social media advertisement (Facebook, Twitter)
- Eligibility criteria:
 - Adult 18 years and older
 - Resident in United States
 - Pregnant anytime since January 2020
- Survey implemented in English and Spanish



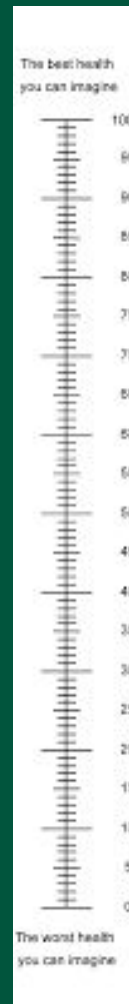
3,134 participants



- 3,134 participants across all US states and 2 US territories (Puerto Rico & US Virgin Islands)
- Post-stratification weights applied to ensure representativeness by maternal age, race/ethnicity and US region

EQ-5D-5L and EQ-VAS

- The EQ-5D-5L measures HRQoL
 - Descriptive system has 5 dimensions of health;
 - Mobility
 - Self-care
 - Usual Activities
 - Pain/discomfort
 - Anxiety/Depression
 - Each item has 5 responses range from no problems to extreme problems
 - Existing algorithm was used to calculate health state utility values
- EQ-VAS is a visual analog scale that records respondents self-reported health status ranging from 0 to 100



Methods

- EQ-5D-5L instrument

- Individual dimensions
- Utility values
- VAS score

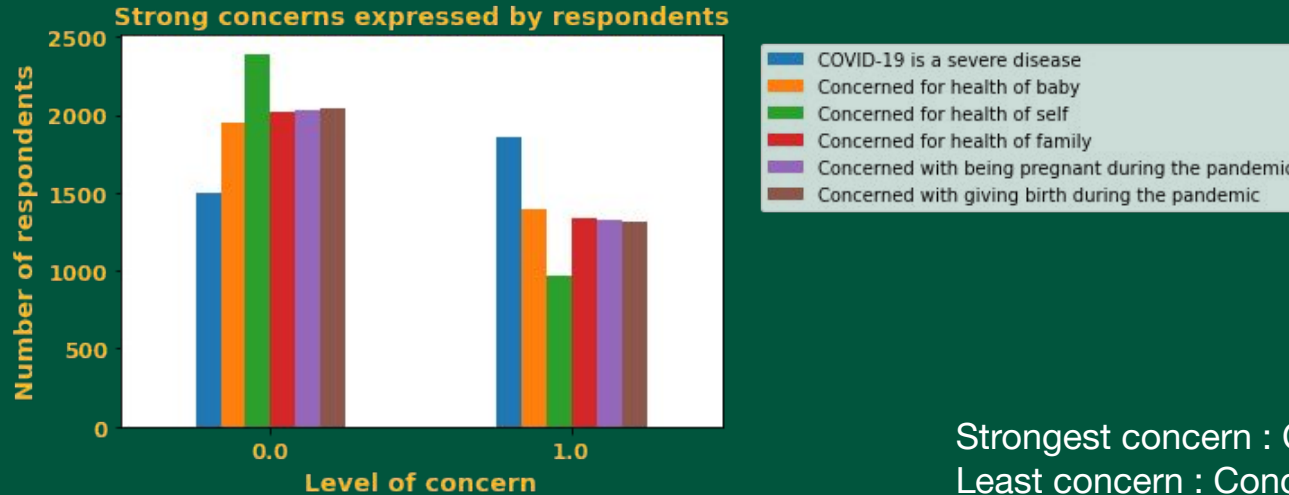
- Level of concern measured through strength of agreement with six statements (on a likert scale: 1=strongly disagree and 5=strongly agree)

- Level of concern for baby's health
- Level of concern for family's health
- Being pregnant & giving birth during the pandemic

How strongly do you agree or disagree with the following statements about COVID-19.

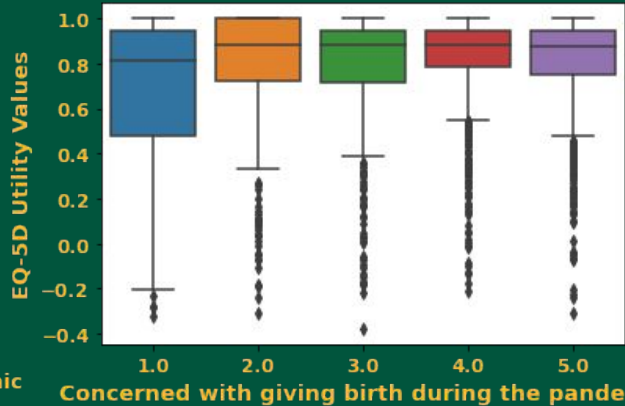
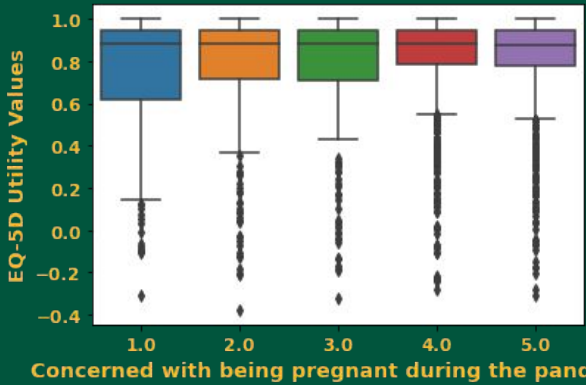
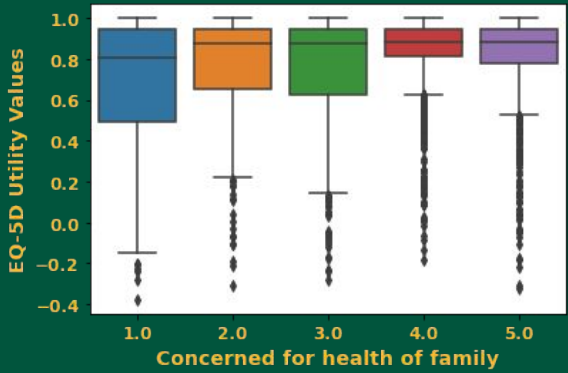
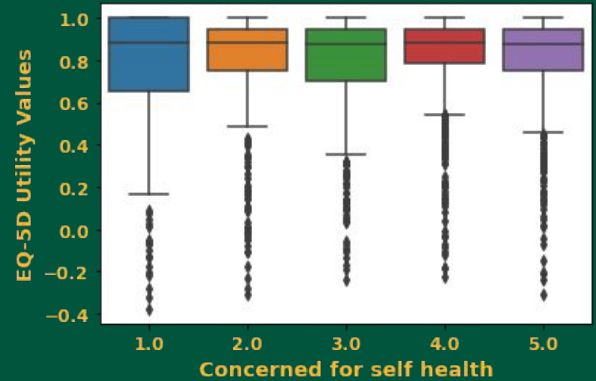
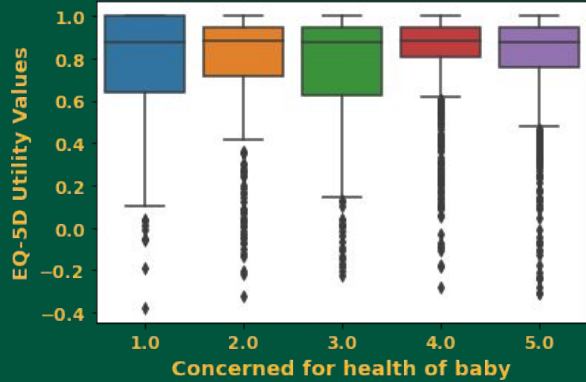
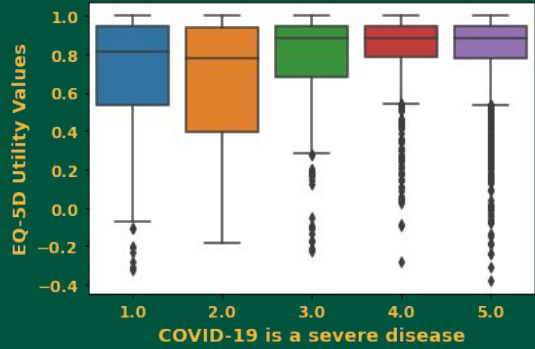
	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
I believe that COVID-19 is a serious disease.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about getting sick from COVID-19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
↳ I am concerned about my baby getting sick from COVID-19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about someone in my family getting sick from COVID-19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am/was concerned about being pregnant during the COVID-19 pandemic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am/was concerned about my delivery experience during the COVID-19 pandemic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Strong concerns expressed by respondents



0.0 - Least concern ; 1.0 - Strong concern

Strongest concern : COVID-19 is a serious disease
Least concern : Concern for their own health

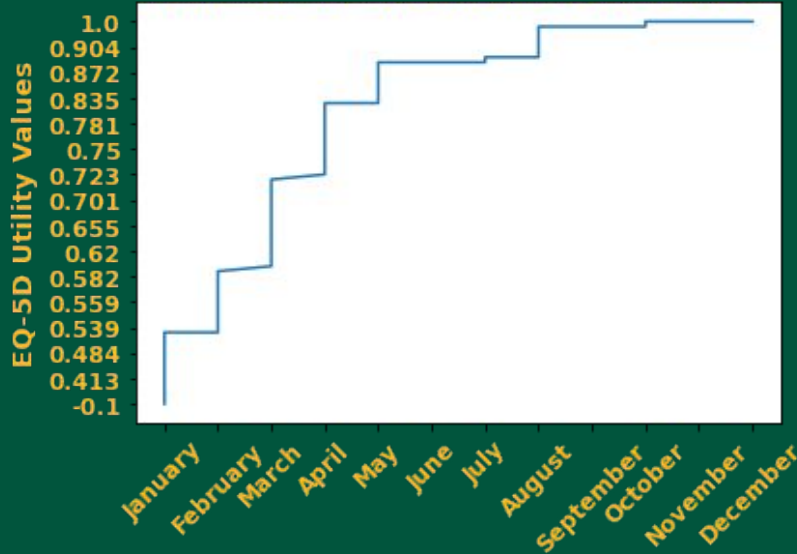


1.0 - Least concern ; 5.0 - Strong concern

Concern that Covid-19 is a severe disease is associated with slightly lower EQ-5D Utility Values.

Pregnant Early in the Pandemic

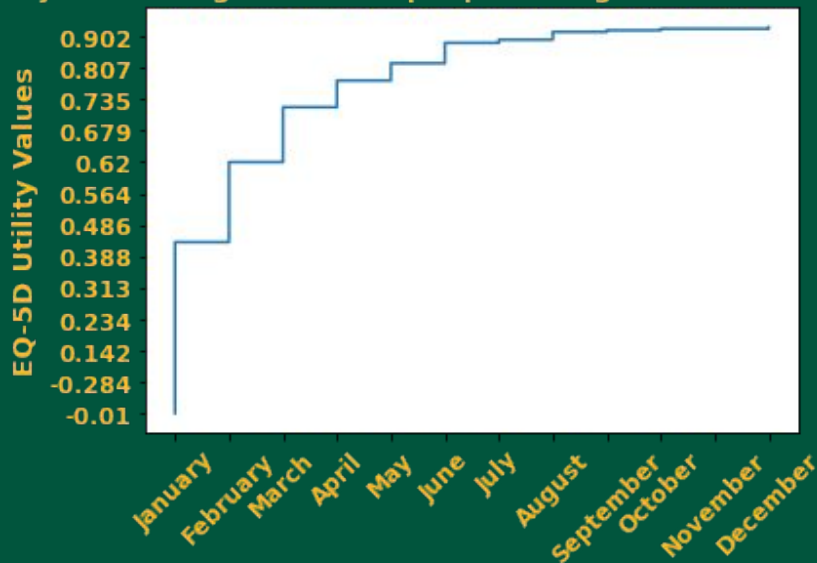
EQ-5D Utility Value Progression for people who gave birth before December 2020



Pregnant respondents experienced lower Utility Values in the beginning of the pandemic

Pregnant Later in the Pandemic

EQ-5D Utility Value Progression for people who gave birth after December 2020



Pregnant Respondents who gave birth later in the pandemic seemed to have slightly higher utility values.

Summary

- Women were most concerned that COVID-19 was a severe disease, followed by concerns about the health of their baby. They were least concerned with their own health.
- Individuals with stronger concerns about COVID-19 being a severe disease had lower utility values on average.
- Associations between COVID-19 concerns and HRQoL were strongest for those who were pregnant early in the pandemic (i.e., delivered prior to December 2020).

Conclusion and future research

- There was no significant association between HRQoL measures and maternal concerns during COVID-19.
- No difference was observed in EQ5D-VAS scores ($\beta=0.00$; 95% CI -0.01, 0.01).
- No other differences in HRQoL were observed.
- More research is needed to help evaluate what is influencing HRQoL.
- Investigations to analyse vaccination attitudes relating to HRQoL.

EQ-5D-5L is an overall measure of a respondent's health but EQ-VAS is a measure of respondent's current health status.

Acknowledgements

Research Team

Dr. Annette Regan

Dr. Ning Yan Gu

Dr. Marcianna Nosek

Nikita Chaudhari

Karla Penilla Lozano

Funder



Contact Information:

Pallavi Aytha Swathi

Email: paythaswathi@dons.usfca.edu

LinkedIn: <https://www.linkedin.com/in/pallaviaythaswathi/>