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# Longitudinal Assessment of Changes in Mental and Sexual Health Outcomes Due to COVID-19 Among Latinx SMM and TGW

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To the Editors:

#### INTRODUCTION

Mental and sexual health disparities have been well documented among lesbian, gay, bisexual, and transgender (LGBT) communities <sup>1–3</sup> and are often further exaggerated for Latinx LGBT. For example, increasingly restrictive US immigration policies have heightened the unwillingness of many Latinx sexual minority men (SMM) and transgender women (TGW) to engage in formal systems such as health care. <sup>4</sup> COVID-19 has the potential to widen existing mental and sexual health disparities in general, <sup>5,6</sup> and among Latinx LGBT communities in particular, <sup>7</sup> yet there remains limited empirical data, and most existing studies evaluate outcomes only during the pandemic, which confounds the pre-COVID-19 status with the (additional) impact of COVID-19. We provide much-needed, longitudinal information on how COVID-19 is impacting the mental and sexual health of Latinx SMM and TGW across Los Angeles County.

## **METHODS**

We evaluate the impact of COVID-19 longitudinally based on prepandemic data from participant responses in a NIH-funded study [R34 MH109373] collected between August 29, 2018, and July 03, 2019, and from a randomized subset of 50 of the same participants gathered during the stay-at-home-order between May 1, 2020, and May 18, 2020. Detailed information on the parent study is published elsewhere<sup>8,9</sup>; thus, we provide only a brief summary below.

All participants were originally recruited through our partner Bienestar Human Services Inc., a community-based organization focused on serving Latinx and LGBT communities

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with 6 offices across Los Angeles County. Inclusion criteria were being HIV negative, self-identifying as Latinx and SMM or TGW, 18 years of age or older, owning or having regular mobile phone access, and fluency in English or Spanish. The institutional review board approval was received for all study protocols and materials. A random subsample of 50 participants of the parent study were called, read a copy of the informed consent document, and asked to provide verbal consent. The survey took an average of 20–30 minutes to complete.

The primary outcomes are based on validated measures of mental health (assessed using the Kessler 10 interviewer-administered nonspecific distress scale <sup>10</sup>) and sexual health (based on select questions from the AIDS Risk Behavior Assessment <sup>11</sup>). Basic descriptive statistics and longitudinal comparisons (difference-of-means tests and difference-in-proportions tests) were conducted (paired t-tests and z-tests) using Stata version 15.1. <sup>12</sup> Because of the small sample size, we abstain from conducting statistical tests for differences between Latinx SMM and TGW. The qualitative data were recorded, transcribed, translated (for those conducted in Spanish), and then coded using Dedoose (Version 8.3.21). <sup>13</sup> Two team members (M.I. and S.M.) jointly coded a random set of 21 transcripts and achieved a pooled Cohen <sup>14</sup>'s Kappa of 98% indicating "good agreement." A directed content analysis <sup>15</sup> was used to provide context for key themes.

#### **RESULTS**

The sample included 35 Latinx SMM and 15 Latinx TGW. We found no statistically significant differences on key sociodemographic characteristics between the study sample reported here and the parent study.

Both groups show similar age (mean age of 40.2 years for Latinx SMM vs. 38.5 for Latinx TGW) and relationship status (65.7% of Latinx SMM single vs. 73.3% of Latinx TGW) (Table 1). The 2 groups differ in their incomes (22.9% of Latinx SMM had an annual income of over \$35,000 vs. 6.7% of Latinx TGW), education (82.9% of Latinx SMM have at least a high school education vs. 46.7% of Latinx TGW), and a higher proportion of full-time employment (65.7% of Latinx SMM vs. 46.7% of Latinx TGW). More Latinx SMM are US citizens or permanent residents (65.7% of Latinx SMM vs. 53.3% of Latinx TGW), but the same proportion had undocumented residency status (20.0% Latinx SMM vs. 20.0% of Latinx TGW). Although no participant reported testing positive for COVID-19, many reported increased risk of complications if infected with COVID-19 (40.0% of Latinx SMM vs. 20.0% of Latinx TGW).

#### **Mental Health**

Table 1 shows significant declines in mental health due to COVID-19. Before the pandemic, about 80% of respondents fell into the category of "likely to be well," decreasing to 56% during the stay-at-home-order (*P*-value = 0.01), with Latinx TGW experiencing a larger drop from 93% to 50%. Importantly, there is a statistically significant change in 7 of 10 items of the scale, indicating a broad decrease in mental health.

Qualitative findings illustrate how much of the distress was tied to the financial hardship associated with job loss. One Latinx SMM participant said, "Well the stress, the anguish, in the news that so many people are dying... also what's going on with the economy, because they say the economy has gotten worse. Everything is getting worse and there is more of this in future plans" (age 54). At the same time, some said that thinking about leaving their house to return to work increased their fear of contracting COVID-19. Some reflected that staying at home gave them the opportunity to process their emotions, whereas others said having so much time, without access to their traditional coping mechanisms—and in particular the support of their friends and family— was overwhelming.

#### **Sexual Health**

In Table 1, the fraction of people reporting condomless sex dropped from 36% to 19% (*P*-value = 0.06); prepandemic more than one quarter (29%) of Latinx SMM respondents reported condomless sex compared with 53% among Latinx TGW, decreasing to 14% and 31%, respectively (because of the small sample size we do not know whether the differences are statistically significant). Furthermore, among those instances of condomless sex, the perceived risk of contracting HIV also decreased significantly, from 18% saying there was some risk of infection ("almost no risk" was classified as knowing that the partner either is HIV-negative or virally suppressed) prepandemic to 2% during the pandemic (*P*-value = 0.01).

Qualitative results revealed that most participants reduced the number of their sexual partners to avoid the risk of getting infected with COVID-19: "I don't want to get COVID-19; so, I'd rather not expose myself to other individuals..." (LSMM age 51). Some Latinx SMM and TGW reported increased fears associated with COVID-19 to continue engaging in sex work: "[With respect to sex work, I feel] a little fear because I still have had to do it when nothing's opened and I'm exposed to people, but I have to support myself' (Latinx TGW age 37).

#### DISCUSSION

To the best of our knowledge, this is the first study to leverage longitudinal data to isolate the impact of COVID-19 on the mental and sexual health of Latinx SMM and TGW by comparing data collected during California's stay-at-home-order with their situation approximately 8–18 months before the pandemic's start. With respect to mental health, we find a significant decline across mental health outcomes that seem to be more pronounced among Latinx TGW. We also find a decrease in sexual behaviors such as condomless sex, although a small minority of respondents did report engaging in sex work to counter their financial strain while also engaging in risk reduction techniques. For example, 1 participant noted that to safely continue engaging in sex work, they reduced their number of sexual partners and avoided home visits.

Our findings contribute to a currently limited literature on the impact of COVID-19 among LGBT populations and Latinx LGBT specifically. Existing studies have focused on people living with  $\rm HIV,^{16,17}$  with the exception of 1 study based on a cross-sectional online survey among SMM (n = 1051)—not Latinx specifically—that reported adverse impacts on general

wellbeing and that half reduced the number of sexual partners.  $^{18}$  Another small study among Latinx SMM (n = 12) $^{19}$  reported that mental health concerns were exacerbated by financial loss; a decrease in sexual behaviors was also noted. Our study contributes to this literature and enlarges the evidence base by confirming similar results among Latinx SMM and TGW in Los Angeles County, based on an assessment of critical mental and sexual health outcomes prepandemic compared with data collected during the stay-at-home-order.

Our study has significant strengths and provides critical insights based on a longitudinal study design that allows us to more clearly isolate the impact of COVID-19. There are also limitations: first, it is based on a relatively small sample of 50 participants, preventing us from statistically evaluating differences between Latinx SMM versus TGW. We cannot compare the changes observed to a control group to investigate to what extent they may be driven by factors other than COVID-19. The outcomes are self-reported and as such may be subject to social desirability bias. Furthermore, the prepandemic data collection happened over a relatively extended time period, so we therefore cannot exclude that other events may have also negatively influenced their mental health. However, the qualitative data convincingly support the paramount role of COVID-19. Finally, our focus on Latinx populations limits our ability to concretely state if and how the deterioration in sexual and mental health outcomes within our sample is reflective of widening gaps in disparities with other racial/ethnic populations.

Our results suggest public health responses should address unique COVID-19 stressors on mental health such as anxiety because of job loss or isolation from social support networks. The pandemic also presents opportunities, as some health departments have already shown<sup>20</sup> to promote the enjoyment of safer sex and mental health support through virtual spaces while simultaneously reducing the risk of spreading COVID-19.

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TABLE 1.

Sociodemographic Characteristics of and Changes in Mental and Sexual Health Among Latinx SMM and TGW (n = 50)

	D.o. C	Dro COVID 10 Summon	Cummon		AOS	COVID 10 Currou	1021
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Variable	SIMIM	TGW	Pooled	z-stat	Pooled	SMIM	TGW
Age					39.7	40.2	38.5
At least a high school education	82.9	46.7	72				
Full-time employed	65.7	46.7	09				
Annual income >\$35,000	22.9	6.7	18				
Relationship status							
Single					89	65.7	73.3
Married or living with a partner					30	31.4	26.7
Divorced/separated/widowed					2	2.9	0
Documentation status							
US citizen or permanent resident					62	65.7	53.3
Deferred action for childhood arrivals (DACA), asylum, and U visas for victims of violent crimes					10	5.7	20
Undocumented					20	20	20
Others					8	8.6	6.7
COVID-19 characteristics							
Have a risk factor increasing potential complications of COVID-19					34	40	20
Currently or previously had COVID-19 symptoms					14	14	13.3
Tested positive for COVID-19					0	0	0
Mental health							
Fraction likely well	74	93	80	$-2.62^{\ddagger}$	99	58	50
Sexual health							
Condomless sex	29	53	36	-1.90	19	14	31
Perceived HIV risk from condomless sex			18	-2.73‡	2		

The value displayed for paired z-tests are the differences in means between surveys.

 $<sup>\</sup>ddagger$ ,  $\dagger$ , and \* indicate significance at the alpha = 0.01, 0.05, and 0.1 levels, respectively.