



Understanding the Impact of COVID-19 on Latino Sexual Minority Men in a US HIV Hot Spot

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Miami-Dade County (MDC) leads the United States in new HIV diagnoses, with Latino gay, bisexual, and other men who have sex with men (hereafter referred to as Latino sexual minority men or LSMM) experiencing the majority of these new diagnoses [1, 2]. Accordingly, our team has been conducting a mixed-methods study (the *DÍMELO* project—*Determining Influences on MSM Engagement among Latinos*) to understand barriers and facilitators to engaging LSMM in HIV-prevention (e.g., pre-exposure prophylaxis/PrEP, post-exposure prophylaxis/PEP, and HIV testing) and behavioral health services (e.g., mental health and substance use treatment).

The *DÍMELO* project began with qualitative interviews with community members and stakeholders which informed the development of a survey to quantitatively identify predictors of LSMM's use of HIV-prevention and behavioral health services. We plan to enroll 300 LSMM in the baseline survey, followed by 4-month and 8-month follow up assessments. Our goal is to identify modifiable factors that can be addressed to scale up and disseminate HIV-prevention and behavioral health services, thereby mitigating health disparities impacting LSMM.

The novel coronavirus (COVID-19), a global pandemic that has required individuals, communities, organizations, and governments to engage in swift preventive actions to contain and mitigate its spread, emerged as a major public health concern in the US after we had collected approximately 40 baseline surveys for the *DÍMELO* project. Despite

data collection largely taking place online (before COVID-19, participants had the option to complete the survey in our offices), there were questions about continuing data collection in the context of COVID-19. For instance, among our predictors of interest were participants' sexual behaviors and mental health/substance use. Yet, participants' sexual behaviors and mental health/substance may have shifted in response to COVID-19 preventive measures such as physical distancing, isolation, and quarantine, along with other changes such as loss of income, new caretaking roles, and stress about potential health impacts of COVID-19. Additionally, our goal was to understand how predictors identified from our qualitative work related to uptake of HIV-prevention and behavioral health services. Yet, clinics across MDC have been announcing that in-person HIV-prevention or behavioral health services were to be discontinued or limited in many cases, creating new barriers to accessing this type of care. Beyond this, even for clinics that continued to be open for in-person services, it is unclear if engaging would currently be an optimal health behavior, given the risk of exposure to COVID-19 and local "stay at home" orders.

At the same time that these discussions were unfolding regarding the *DÍMELO* project, the Center for Latino Health Research Opportunities (CLaRO), an NIMHD-funded center that co-funded the *DÍMELO* project began its own discussion about their funded projects continuing their Latino health disparities focused research during COVID-19. Through correspondence initiated by the CLaRO PI (Behar-Zusman), we began discussing whether and how to continue our health disparities research and if continuing, how to account for behavior changes and stressors participants may be experiencing related to COVID-19. From these conversations, as well as collaboration between the *DÍMELO* PI (Harkness) and mentor (Safren), we decided to continue with online data collection, but to develop a measure to systematically assess these impacts.

The *Pandemic Stress Index* is the outcome of this measure development effort. Based on the conversations regarding

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the impact of COVID-19 locally, nationally, and on health disparity populations (e.g., Latinos, sexual minority men), as well as a review of studies highlighting the impacts of public health crises (e.g., pandemics, hurricanes) and preventive measures on individuals and communities (3–5), we developed an initial set of items assessing behavior changes and stressors that may have occurred in response to COVID-19. Following the development of the initial measure, we distributed and received feedback from over 20 colleagues representing diverse academic training, scientific areas of study, and professional affiliations, including clinical health psychology, nursing studies, public health sciences, prevention science, education and human development, and cognitive/behavioral neuroscience. Contributors to the measure included experts in health disparities and underserved populations (e.g., sexual and gender minorities, Latinx populations, Haitian populations, justice-involved individuals), HIV treatment and prevention, mental health, and substance abuse. Feedback from colleagues was iteratively incorporated, with the goal of capturing a broad range of behavior changes and psychosocial impacts, while at the same time being inclusive of population-specific factors.

The final *Pandemic Stress Index* includes three items. The first item “What are you doing/did you do during COVID-19 (coronavirus)?” assesses behavior changes in response to COVID-19. This includes changes that may have taken place in response to public health messaging (e.g., physical distancing, isolation, quarantine), changes in the workplace (e.g., working remotely, job loss), and changes to protect one’s own or others’ health (e.g. caretaking). The second item asks individuals to rate the overall degree to which COVID-19 has impacted their daily life, “How much is/did COVID-19 (coronavirus) impact your day-to-day life?” rated on a 5-point scale. Finally, participants are asked to report the psychosocial impact of COVID-19, “Which of the following are you experiencing (or did you experience) during COVID-19 (coronavirus)?” with a checklist of items pertaining to emotional distress, substance use, sexual behavior, financial stress, stigma, and support. With support from two NIH-funded centers at UM (CLaRO and CHARM), we then translated the measure to Spanish, using a 3-step forward-translation, back-translation and check for equivalent meaning of the original English and back-translated English versions. The complete measure in English and Spanish are shown in Figs. 1 and 2, respectively.

Since developing and translating this measure, we have received IRB approval to use it in the *DÍMELO* project and we collected data from 12 participants at the time of writing, with additional data incoming daily. We have begun to learn how COVID-19 is impacting this group of LSMM living in the Miami area, an HIV hot spot in the US. All are practicing social distancing (average of 13 days), and most reported that it was to protect someone else in their household.

Participants also reported being worried about local family, friends, and partners, with three indicating they were caring for an elderly person. Although none had been diagnosed with COVID-19, nearly all feared acquiring it or transmitting it to others. More than half reported being laid off or personal financial loss due to COVID-19, perhaps unsurprising given the hospitality industry, which has been hard-hit by COVID-19, is a primary employer in Miami. Half reported a decrease in sexual activity, which we will further explore in terms of changes to likelihood of acquiring HIV and need for preventive services during COVID-19 as more data are collected. Despite substantial changes in mental health/substance use (e.g., anxiety, depression, loneliness, sleep changes, increased alcohol/substance use), only two endorsed receiving emotional or social support from family, friends, partners, a counselor, or someone else, highlighting the sense of isolation that this group of individuals may be experiencing.

Together, our experiences navigating this project and these early findings suggest COVID-19 is impacting this group of LSMM’s lives. We will continue to learn more with further data collection. We also plan to utilize this measure as a tool to facilitate qualitative inquiry; given the novelty of COVID-19, we do not yet know some of the impacts that it has had and will have on this population’s access to services such as PrEP and HIV testing, which for many, will still be needed despite the pandemic, as well as behavioral health services, the need for which may be exacerbated by the pandemic. This is particularly important to understand for populations who are already disproportionately impacted by the HIV epidemic, as well as other health disparities rooted in minority stress, including but not limited to LSMM in South Florida.

We hope that sharing this information about how COVID-19 is impacting our research and LSMM in South Florida will help other HIV researchers to consider the common and unique impacts for the populations with whom they work, as well as opportunities for intervention and support, even during this acute period of social distancing. For instance, telehealth services, including remote HIV testing, PrEP delivery, mental health counseling, and support groups may be particularly beneficial to those who are experiencing continued service needs and high levels of social isolation. Additionally, we hope to share access to this measure to facilitate research and the aggregation or comparison of results on a broader scale, identifying common and unique impacts across different populations disproportionately impacted by HIV. Such data sharing can help to inform research, clinical, and advocacy efforts to ensure that needed resources (e.g. healthcare delivery, social support, financial support) are appropriately delivered to these populations during and following the immediate impacts of COVID-19.

1. What are you doing/did you do during COVID-19 (coronavirus)? (check all that apply)

- ☐ no changes to my life or behavior
- ☐ practicing social distancing (i.e., reducing your physical contact with other people in social, work, or school settings by avoiding large groups and staying 3-6 feet away from other people)
 (if yes – how long have you been doing/did you do this for? [days])
 ➔ Of these X days, how many did you end up needing to be physically near people (i.e., you were not able to practice social distancing on those days)?
 (if yes – did you choose to do this yourself or did someone else require you to?)
 (if yes – did you do this to protect someone else in your household?)
- ☐ isolating or quarantining yourself (i.e., while you are sick or if you have been exposed, separating yourself from other people to prevent others from getting it)
 (if yes – how long have you been doing/did you do this for? [days])
 ➔ Of these X days, how many did you end up breaking the isolation or quarantine (i.e., you were not isolated or quarantined on those days)?
 (if yes – did you choose to do this yourself or did someone else require you to?)
 (if yes – did you do this to protect someone else in your household?)
- ☐ caring for someone at home
 (if yes –
 ☐ a child or children
 ☐ an elderly person
- ☐ working from home
 (if yes – did you have to balance this with taking care of others [e.g., parents, kids, partners?])
- ☐ not working
 (if yes – did you lose your source of income because of COVID-19/coronavirus?)
 (if yes – why? (check all that apply)
 ☐ because I am/was sick or under quarantine
 ☐ because someone in my household was sick/under quarantine
 ☐ because my place of work was closed and didn't offer a remote work option
 ☐ because I was laid off or lost my employment
- ☐ a change in use of healthcare services (e.g., calling your healthcare provider, going to urgent care, etc.)
 (if yes – was this an increase or decrease?)
- ☐ following media coverage related to COVID-19 (e.g., watching or reading the news, following social media coverage, etc.)
 (if yes: on average, how many hours per day did you spend on this?)
- ☐ changing travel plans
 (if yes – did you travel more or less?)

2. How much is/did COVID-19 (coronavirus) impact your day-to-day life?

- 1 - Not at all
 2 - A little
 3 - Much
 4 - Very much
 5 - Extremely
 9 - Decline to answer

Fig. 1 Pandemic Stress Index (English)

3. Which of the following are you experiencing (or did you experience) during COVID-19 (coronavirus)? (check all that apply)

- ☐ being diagnosed with COVID-19
- ☐ fear of getting COVID-19
- ☐ fear of giving COVID-19 to someone else
- ☐ worrying about friends, family, partners, etc.
 - (if yes, were you worried about people:
 - ☐ locally
 - ☐ in other parts of the US
 - ☐ outside the US
- ☐ stigma or discrimination from other people (e.g., people treating you differently because of your identity, having symptoms, or other factors related to COVID-19)
- ☐ personal financial loss (e.g., lost wages, job loss, investment/retirement loss, travel-related cancellations)
- ☐ frustration or boredom
- ☐ not having enough basic supplies (e.g., food, water, medications, a place to stay)
- ☐ more anxiety
- ☐ more depression
- ☐ more sleep, less sleep, or other changes to your normal sleep pattern
- ☐ increased alcohol or other substance use
- ☐ a change in sexual activity
 - (if yes – was this an increase or decrease?)
- ☐ loneliness
- ☐ confusion about what COVID-19 is, how to prevent it, or why social distancing/ isolation/ quarantines are needed
- ☐ feeling that I was contributing to the greater good by preventing myself or others from getting COVID-19
- ☐ getting emotional or social support from family, friends, partners, a counselor, or someone else
- ☐ getting financial support from family, friends, partners, an organization, or someone else
- ☐ other difficulties or challenges (We want to hear from you! Please tell us more_____)

Fig. 1 (continued)

1. ¿Que esta haciendo/que hizo durante COVID-19 (coronavirus)? (marque todos los que apliquen)

___ Ningún cambio en mi vida o comportamiento

___ Practiqué “distancia social” (es decir, reduje mi contacto físico con otras personas en lugares sociales, de trabajo o escolares para evitar estar en grupos grandes de personas y me mantuve a 3-6 pies de distancia de otras personas)

(si su respuesta es Sí—cuanto tiempo lo ha estado haciendo/cuanto tiempo lo hizo? [días])

➔ De estos X días, cuantos días tuvo que estar físicamente cerca de otras personas (es decir, ¿cuantos días no pudo practicar distancia social)?

(si su respuesta es Sí—¿la decisión fue suya u otra persona se lo requirió?)

(si su respuesta es Sí—¿la decisión fue para proteger a otra persona o a miembros de su hogar?)

___ Me aislé o me puse en cuarentena (es decir, si estuvo enfermo o fue expuesto, se separo de otras personas para prevenir que otros se enfermaran)

(si su respuesta es Sí—cuanto tiempo lo ha estado haciendo/cuanto tiempo lo hizo?)

➔ De estos X días, ¿cuantos días tuvo que romper su aislamiento o cuarentena (es decir, no estuvo aislado o en cuarentena)?

(si su respuesta es Sí—¿la decisión fue suya u otra persona se lo obligo?)

(si su respuesta es Sí—¿la decisión fue para proteger a otro miembro de su hogar?)

___ Cuido a alguien en mi casa

(si su respuesta es Sí—

___ niño(s)

___ una persona mayor de edad (anciano)

___ Trabaje desde casa

(si su respuesta es Sí—¿tuvo que balancear esto con cuidar a otros [por ejemplo, tuvo que cuidar a sus padres, niños, compañero (a)]?)

___ No Trabaje

(si su respuesta es Sí—perdió su fuente de ingreso debido a COVID-19 (coronavirus)?)

(si su respuesta es Sí—¿por qué? (marque todos los que se apliquen)

___ porque estoy/estaba enfermo/a o estaba bajo cuarentena

___ porque alguien en mi hogar estaba enfermo/a o estaba bajo cuarentena

___ porque mi lugar de empleo estaba cerrado y no había opción de trabajar a distancia (o de manera remota)

___ porque hicieron ajustes de trabajo en mi compañía o me despidieron de mi trabajo

___ Seguí la cobertura periodística de COVID-19 (es decir, vio o leyó las noticias, siguió la cobertura por las redes sociales, etc.)

(si su respuesta es Sí—¿que promedio de horas cada día?)

___ Cambie mis planes de viaje

(si su respuesta es Sí—¿viajo mas o menos?

___ Use más servicios de salud (es decir, llamo mas a su proveedor de atención medica, fue al centro de urgencia medica, etc.)

(si su respuesta es Sí—¿incremento o se redujo?)

2. ¿Cuanto es/ fue el impacto de COVID-19 (coronavirus) en su vida cotidiana?

1- Ninguna

2- Un poco

3- De cierta manera

Fig. 2 Pandemic Stress Index (Spanish)

- 4- Bastante
- 5- En gran manera
- 9- Se niega a responder

3. **¿Por cual de las siguientes experiencias esta pasando (o ha pasado) durante COVID-19 (coronavirus)? (Marqué todas las que apliquen)**

- ☐ Fui diagnosticado con COVID-19
 - ☐ Miedo de contagiarme con COVID-19
 - ☐ Miedo de contagiar a otros con COVID-19
 - ☐ Preocupación por amigos, familia, compañeros/as, etc.
 - (Si su respuesta es Sí:
 - ☐ En su zona local
 - ☐ en otras partes de los Estados Unidos
 - ☐ Afuera de los Estados Unidos
 - ☐ Estigma o discriminación de otras personas (es decir, que la gente lo trate diferente por su identidad, por tener síntomas, u otros factores relacionados con COVID-19)
 - ☐ Perdida financiera personal (por ejemplo, perdida de su sueldo, perdida de inversiones/retiro, cancelaciones relacionadas a viajes)
 - ☐ frustración o aburrimiento
 - ☐ No tener provisiones básicas (es decir, comida, agua, medicamentos, un lugar donde quedarse)
 - ☐ mas ansiedad
 - ☐ mas depresión
 - ☐ dormir mas, dormir menos, u otros cambios en su rutina normal de dormir
 - ☐ mas uso de bebidas alcohólicas o sustancias ilícitas
 - ☐ un cambio en actividad sexual
 - (si su respuesta es Sí—¿incremento o se redujo?)
 - ☐ soledad
 - ☐ confusión sobre COVID-19, como prevenirlo, o porque la distancia social, el aislamiento y la cuarentena son necesarios
 - ☐ la sensación que estaba contribuyendo al bien común previniendo que yo u otros nos enfermásemos con COVID-19
 - ☐ recibiendo apoyo emocional o social de la familia, amigos, compañeros, consejero/a, u otra persona
 - ☐ recibiendo apoyo financiero de la familia, amigos, compañeros, una organización u otra persona
 - ☐ otras dificultades o retos
- (¡Queremos escuchar de usted! Por favor comparta con nosotros_____)

Fig. 2 (continued)

References

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