Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

_____ _____

Daniel Camp Date

Parenting Intentions of Young Gay and Other Men Who Have Sex With Men Living With HIV in Mexico City, Mexico

By

Daniel M. Camp

Master of Public Health

Hubert Department of Global Health

Sophia A. Hussen MD, MPH – Committee Chair
Assistant Professor – Department of Global Health
Rollins School of Public Health, Emory University

Parenting Intentions of Young Gay and Other Men Who Have Sex With Men Living With HIV in Mexico City, Mexico

By

Daniel M. Camp

Bachelor of Science
Stanford University
2015

Thesis Committee Chair: Sophia Hussen MD, MPH

An abstract of
A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health in Global Health
2020

Abstract

Parenting Intentions of Young Gay and Other Men Who Have Sex With Men Living With HIV in Mexico City, Mexico

By Daniel M. Camp

Background: Young gay and other men who have sex with men (YGMSM) are disproportionately affected by HIV in Mexico. Men in Mexico typically start thinking about fatherhood in late adolescence; however, little is known about Mexican YGMSM's thoughts about childbearing. This issue is complicated by both their sexual identity and their HIV serostatus; however, reproductive justice theory holds that individuals – regardless of gender or sexual orientation – have a right to bear and raise healthy children. Within this framework, we sought to explore conceptualizations of fatherhood and parenting desires among YGMSM living with HIV in Mexico City.

Methods: We conducted 16 in-depth qualitative interviews with YGMSM living with HIV in Mexico City. Participants were recruited from two large HIV clinics. Domains of the questionnaire included: (1) parenting desires, (2) preferences about different methods (e.g., adoption, in-vitro fertilization), and (3) perceived barriers. A modified grounded theory approach was used for coding and qualitative analysis.

Results: Participants ranged in age from 17 to 21 (mean 19.3) years, and had been diagnosed with HIV for an average of 15 months (range:15 days to 6 years). Most participants expressed a desire to have a child in the future, but were uninformed as to their options for doing so. Participants largely preferred adoption as a mechanism for fathering a child, citing a perceived risk of HIV transmission as a deterrent to artificial insemination and other assisted reproductive technologies. However, some participants expressed a desire to have a child that was genetically their own, but shared doubts as to whether this would be feasible. The majority of participants stated that the topic of childbearing had never come up during the course of their routine HIV care.

Conclusion: YGMSM living with HIV in Mexico City are interested in having children. Our findings suggest a role for future interventions, both to inform YGMSM living with HIV about potential avenues for pursuing parenthood, as well as with to support HIV care providers to initiate discussions about future parenting with their YGMSM patients.

Acknowledgments

As I reflect on the innumerable hours I've poured into this thesis, I have come to the stark realization that this was far from a one-man show. The pages produced herein would not have been possible without the help and support of so many people, a few of which I'd like to mention by name. First and foremost, I'd like to extend my deepest gratitude towards my thesis chair, mentor, and friend Dr. Sophia Hussen. Thank you for inspiring me with the work you do, for constantly pushing me to be the best version of myself, and for never failing to brighten my day. This work would not be even a fraction of what it is without your edits and guidance. I'd next like to express my gratitude towards Dr. Alicia Piñeirúa-Menéndez. This project was the opportunity of a lifetime and would not have existed without her. Thank you for keeping me motivated, showing me what it really means to work hard, and for broadening my worldview with our early morning conversations on the way to work. Having two primary mentors who are both infectious disease physicians has certainly influenced my decision to apply to medical school next year in the aims of becoming an infectious disease physician. I'd like to extend appreciation to the *Secretaría de Educación, Ciencia, Tecnología, e Innovación de la Ciudad de México* for funding this work's parent study, the Global Field Experience Financial Award through the Rollins School of Public Health for funding my fieldwork in Mexico, and all the staff at the *Clínica Especializada Condesa* and *Clínica Especializada Condesa Iztapalapa* for the hard work that they do in the fight against HIV/AIDS, especially the doctors, nurses, and social workers who helped me find participants to interview for this study. I'd especially like to thank my research collaborators Monica, Panch, and Marian, who to this day can simultaneously make me laugh while thinking critically about my role as a researcher – my summer would have been much less enjoyable and productive without the three of you. I would be remiss without thanking the valiant people who fought the brave fight of trying to sate my insatiable appetite the ten weeks I spent in Mexico City, my life without some of the finest cuisine in the world around the corner has not been the same. To my family and friends spread all around the world, thank you for your unwavering support. To my Rollins friends: know that there is a special reassurance that comes from knowing that as the fabric of society falls down around our ears, we will still have our group messages to exchange motivational messages about our theses. Lastly, I'd like to thank the 16 brave participants who took the time to share their stories with me. Time and time again I was inspired by your resilience, your dreams, and your capacity to love. Your stories are valuable, and I am humbled at the opportunity to represent them. I'd like to dedicate this work to them, in the hope that we will also find the inspiration to pursue our dreams, whatever they may be.

Parenting Intentions of Young Gay and Other Men Who Have Sex With Men Living With HIV in Mexico City, Mexico

By

Daniel M. Camp

Bachelor of Science
Stanford University
2015

Thesis Committee Chair: Sophia Hussen MD, MPH

A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health in Global Health
2020

TABLE OF CONTENTS

Chapter 1: Introduction

1.1 Introduction and Rationale

The HIV epidemic in Mexico is concentrated among key populations such as gay and other men who have sex with men (GMSM), who have an HIV prevalence of 12.2% (CENSIDA, 2020). Young people under the age of 29 are also at heightened risk of acquiring HIV, making up 45% of new infections (CENSIDA, 2020). Nevertheless, Mexico has demonstrated a commitment to the battle against HIV/AIDS, committing to providing universal access to antiretroviral treatment in 2003 (Bautista-Arredondo, Dmytraczenko, Kombe, & Bertozzi, 2008) and developing a National Strategic Plan for HIV that aims to bolster prevention messaging towards key populations and reduce discrimination on the basis of sexual orientation (UNAIDS, 2017). In fact, Mexico has shown itself to be a regional leader in advancing the rights of lesbian, gay, bisexual, transgender, and other queer (LGBTQ+) individuals. In 2009, Mexico City became the first major Latin American city to grant LGBTQ+ individuals the right to marry and adopt (Rodríguez Martínez, 2010), rights that now are essentially extended to all Mexican jurisdictions due to subsequent Supreme Court rulings (Suprema Corte de Justicia de la Nación, 2017).

Due to advances in treatment over the past decades, HIV can now be considered a chronic disease (Underhill, Kennedy, Lewis, Ross, & Loutfy, 2016), shifting emphasis from merely prolonging survival, towards improving quality of life for people living with HIV (PLWH). Adherence to antiretroviral treatment has been repeatedly shown to be effective in blocking transmission of HIV, a concept known as “undetectable equals untransmissible” (The Lancet, 2017), as well as to improve the personal health of PLWH (Siedner & Triant, 2019). Young GMSM who are coming of age while living with HIV infection are therefore expected to fulfill the typical developmental milestones that characterize the transition to adulthood. For many, the

decision to become a parent is considered a key developmental milestone in a person's life (Schindler, 2010). Among Mexican men, becoming a father is regarded as one of the crucial markers of becoming a "real" man (Salguero Velásquez, 2006); however, this milestone is more difficult to achieve for GMSM. Worldwide, gay men (Riskind & Tornello, 2017; Tate, Patterson, & Levy, 2019) and PLWH (Berhan & Berhan, 2013; Martins, Alves, Chaves, Canavarro, & Pereira, 2019) have often expressed their desires to become parents. However, these desires have historically been discouraged, either implicitly or explicitly, such that "coming out" as gay (Mallon, 2004) or receiving an HIV diagnosis (Nostlinger, Desjardins, Dec, Platteau, & Hasker, 2013) were equated to a functional diagnosis of infertility. Currently, however, neither of these identities present legal or biological disqualifications for parenthood.

International research has shown that as societal attitudes toward LGBTQ+ rights have been increasingly accepting, the number of gay individuals having children has increased (Amodeo et al., 2018). Gay men have several paths to parenthood, including adoption and the use of assisted reproductive technologies. The use of assisted reproductive technologies typically involves having another person (a woman) act as a surrogate and carry the child to term. Though the practice is controversial (Stacey, 2018) due to the concerns for exploitation of vulnerable women, these concerns may be mitigated by the increased use of new forms of surrogacy such as gestational surrogacy, in which the surrogate carries a separate donor's egg, and altruistic surrogacy in which no money is exchanged for the service. Men living with HIV who wish to conceive using assisted reproductive technologies can also use sperm washing, a technique in which the HIV is separated from the seminal fluid and thus also reduces the risk of transmission to virtually zero (Newmeyer et al., 2011; Zafer et al., 2016).

Studies have repeatedly demonstrated that gay men have a diminished parenting desire when compared to heterosexual counterparts (Baiocco & Laghi, 2013; Riskind & Patterson, 2010; Riskind & Tornello, 2017; Shenkman, 2012; Tate et al., 2019), whereas PLWH display an equal or increased desire to their HIV-negative counterparts (Berhan & Berhan, 2013; Martins et al., 2019; Nattabi, Li, Thompson, Orach, & Earnest, 2009; Nobrega et al., 2007). The latter statement may be understood in that studies regarding the parenting intentions of PLWH have mainly been carried out with African women, who have been shown to desire larger families. Though no studies have been carried out regarding attitudes towards parenting among PLWH in Mexico, one study of parenting desires among young cisgender GMSM in Mexico City found that less than half (41%) of surveyed individuals endorsed some sort of aspiration towards parenthood (Salinas-Quiroz, Costa, & Lozano-Verduzco, 2019).

Desiring children is merely the first step in the parenting process. For example, an individual may passively wish to have children but decide that it is not worth the trouble to do so. The intention to parent involves a commitment to following through on one's parenting desires (Riskind & Patterson, 2010). It is at this stage of the parenthood process that many GMSM and PLWH likely end their journey to parenthood as they encounter barriers to being able to realize their goal, and thus where interventions can serve mitigate these obstacles (Riskind & Patterson, 2010; Riskind & Tornello, 2017).

Numerous factors may have an effect on an individual's parenting intentions. These can exist at the individual level, such as sexual orientation and HIV status, and may include other individual factors such as age, religion, financial means, competing goals, and personal attitudes towards childbearing. In Mexico, the ability to provide for one's family is intricately tied to the concept of fatherhood (Salguero Velásquez, 2006), and adolescent men may see childbearing as

something occurring in a distant future, only after having finished schooling and having a stable job (Correa Romero, García y Barragan, & Saldívar Garduño, 2013). External factors – such as social support, relationship/marital status, discrimination and legal/logistic factors – may also have an effect on parenting intentions. Social support, or the absence thereof, of family, friends, and other gay individuals has been shown to have an effect on gay men's parenting intentions (A. E. Goldberg & Smith, 2011), and partner's parenting intentions have been shown to influence women with living HIV's desire to have a child (Nobrega et al., 2007). A relationship that culminates in marriage appears to be a traditional prerequisite to childbearing among heterosexual Mexican men (Salguero Velásquez, 2006), a sentiment that may be echoed by the Mexican LGBTQ+ community, among whom relationship status served as a strong predictor of parenting aspiration (Salinas-Quiroz et al., 2019). Societal approval of gay marriage has been increasing in Mexico but remains below 50% in parts of the country (El Sol de Mexico, 2019b), which may leave gay men subject to discrimination on the basis of their sexual identity. Discrimination also exists on the basis of serostatus, with the majority Mexican healthcare providers feeling as though PLWH should not be allowed to have children (Infante et al., 2006), though these feelings may well have changed since this study took place. The right for gay men to adopt has been mandated as a right by the Supreme Court without amending individual state codes (Kahn, 2015), thus presenting an arduous if feasible path in some states for gay individuals desiring to become fathers. Surrogacy is illegal for gay couples in at least one Mexican state, but the lack of legislation in the rest of the country does not necessarily mean it is accessible. The right for PLWH to adopt or use assisted reproductive technologies is similarly ambiguous, with at least one source claiming that governmental regulations prohibited PLWH from adopting (de Bruyn, 2006). The lack of explicit governmental regulations around HIV does not necessarily

indicate a lack of discrimination towards PLWH on the part of adoption or fertility centers, who also may institute their own restrictions on who is eligible to use their services. Finally, the high cost of adoption and surrogacy services likely restrict access to these services to all but a wealthy few.

Mexico City provides a unique setting for young GMSM living with HIV to make the transition into adulthood and potentially to contemplate future fatherhood. On one hand, Mexico City has shown itself as a leader in terms of LGBTQ+ rights when compared to the rest of Mexico, Latin America, and the world. The Mexican government has also demonstrated a strong commitment to the fight against HIV/AIDS. Most studies on parenting desires with gay men have been conducted among affluent men in high-income countries, whereas studies on parenting focused on PLWH have typically been conducted with women in lower-income countries. To our knowledge, no studies on parenting desires have been conducted specifically with GMSM living with HIV, in Mexico or elsewhere. Thus, as a middle income country with at least one viable path to parenthood for GMSM (legalized adoption) that also has a fertility rate and poverty line similar to many low-income countries, Mexico provides an interesting intersection of factors that may be pertinent to the study of parenting desires among young GMSM living with HIV. We sought to qualitatively explore parenting desires and intentions among young GMSM living with HIV in Mexico City, in the hopes of informing future interventions to help GMSM living with HIV exercise their reproductive rights.

1.2 Problem Statement

People living with HIV (PLWH) now have life-expectancies on par with people not living with HIV, and thus HIV can be considered a chronic illness. Now that HIV is not treated as a fatal illness, the focus is shifting to providing a life of quality for PLWH. Gay and other men who

have sex with men in Mexico are particularly at risk for acquiring HIV infection, with a prevalence of 12.2%. Young people are also at elevated risk for HIV acquisition, making up 45% of new infections. One crucial aspect of many people's lives is the act of parenting and having children. Studies have shown that PLWH and gay individuals are desiring of having children but the intention and act of carrying out that desire, as well as the manner in which they do so, are often affected by their serostatus or sexual identity. To date, no studies have assessed the parenting desires or intentions of gay men living with HIV. Investigating these topics and the socio-contextual factors that influence them will allow clinicians, policy makers, and other public health practitioners to better assist gay men living with HIV to fully exercise their reproductive rights.

1.3 Statement of Purpose

Parenting desires of young GMSM living with HIV in Mexico City are nuanced due to the confluence of several factors including their young age, HIV serostatus, and sexual orientation. These are further influenced by the settings they grew up in and the social support they receive from their networks and communities. Qualitative analysis of in-depth interviews is a useful method of exploring common themes regarding how these intersecting factors affect the way young GMSM living with HIV navigate their desires to have children and form a family. This research aims to investigate (i) the parenting desires of young GMSM living with HIV, (ii) the parenting intentions and preferred reproductive methods of young GMSM living with HIV and (iii) barriers and facilitators they foresee on the path to parenthood. This research will add to the existing knowledge about the socio-contextual factors that shape the life course of young GMSM living with HIV and inform future interventions to mitigate barriers this population faces in living out lives of quality.

1.4 Research Questions

In order to improve the understanding of how young GMSM living with HIV in Mexico City build their parenting desires and inform future interventions regarding the matter, this exploratory qualitative study aims to investigate the research questions:

- What are the parenting desires of young GMSM living with HIV?
- What are young GMSM living with HIV's thoughts on the reproductive methods available for them to carry out their parenting desires?
- What are the barriers and facilitators young GMSM living with HIV see in carrying out their parenting desires?

1.5 Significance Statement

Gay and other men who have sex with men (GMSM) have historically been and continue to be disproportionately affected by the HIV/AIDS pandemic, which affects millions of people worldwide. The topic of parenthood has often been neglected among both GMSM and PLWH, with members of these populations historically having received implicit or explicit messages that they are not allowed to fulfill their parenting desires. However, the theory of reproductive justice holds that gay and other MSM and PLWH deserve the opportunity to carry out their parenting desires. Particular attention is required towards the subpopulation of gay men living with HIV, who face an even greater challenge due to compounding identities hindering their ability to fulfill their reproductive right. Research examining the experiences of young gay men living with HIV can help identify the multiple barriers and facilitators these individuals face in carrying out their reproductive rights and inform how to best target interventions to help them live lives of quality.

Chapter 2: Literature Review

I. Epidemiology of HIV in Mexico Among Young GMSM

HIV-related illness is the second leading cause of death among people aged 10-24 in the world, with approximately 3.9 million people aged 15-24 living with HIV in 2014 (UNAIDS, 2017). Mexico accounts for 10% of new cases of HIV in Latin America (UNAIDS, 2014), second only to Brazil. 25% of reported cases occur in Mexico City and the surrounding state of Mexico (CENSIDA, 2016). As of 2016, there were 4,913 people under the age of 19 living with HIV in Mexico and the incidence among men aged 15-24 was 14 per 100,000 persons (CENSIDA, 2016). 81.3% of diagnosed HIV infections in Mexico occur in men (CENSIDA, 2016), perhaps due to its epidemic concentrated among key populations. One crucial key population is men who have sex with men (MSM), who have an HIV prevalence of 12.2% (CENSIDA, 2020). Approximately 50% of people living with HIV in Mexico have achieved viral suppression (Spring, 2017), the ultimate goal of HIV care needed to reduce morbidity and mortality and reduce further HIV transmission. Nevertheless, Mexico has taken steps to address the HIV epidemic, with a commitment to offer universal access to antiretroviral treatment since 2003 (Bautista-Arredondo et al., 2008) and a comprehensive National Strategic Plan that includes reducing discrimination on the basis of sexual orientation as part of its four key priorities (UNAIDS, 2017).

Adolescents, particularly those belonging to key populations such as men who have sex with men, face disproportionate risk for HIV infection (AVERT, 2018). Approximately one third of new HIV infections in Latin America occur in young people aged 15-24 (UNAIDS, 2014). In Mexico, young people under the age of 29 make up 45% of new infections (CENSIDA, 2020). Adolescence is characterized by a series of rapid psychosocial transitions (WHO, 2014), which

can adversely influence health-seeking behavior and decrease HIV care engagement (Pantelic, Boyes, Cluver, & Meinck, 2017). Adolescents face unique barriers to accessing HIV prevention and care services. Youth may be dependent on parental supervision to receive test results, and thus avoid doing so to avoid the stigmas associated with HIV, sexual activity, and/or same-sex behavior (AVERT, 2018). Conversely, adolescence can be a time when youth leave parental supervision and are responsible for making healthcare decisions for themselves for the first time. This sudden lack of support/supervision can lead to worse adherence, retention, and survival among this population (Nachega et al., 2009).

II. LGBTQ+ Rights in Mexico

Acceptance of homosexuality in Mexico may not be a novel occurrence, with records of indigenous persons in Mexico recounting homosexual acts and the existence of muxes, or third-gender, people being accepted and even honored by society (Borruso, 2001). The Aztec god Xochipilli is the patron of homosexuals and male prostitutes (Greenberg, 1988).

Nevertheless, homophobia has been engrained in Mexican culture for much of history, likely dating back to the imposition of harsh anti-homosexuality mandates on the part of Christian conquerors in the 16th century. However, there is evidence that Mexico is becoming more progressive, with recent polls finding that around 60% of Mexicans approve of gay marriage (with a marked north-south distribution: nearly 72% of people in the capital but only 41% of people in Chiapas, the southernmost state, approving of same-sex marriage) (El Sol de Mexico, 2019b). In 2006, civil unions were legalized in Mexico City and some Mexican states (Asamblea Legislativa del Distrito Federal, 2006). Three years later, in 2009, Mexico City became the first major city in Latin American to legalize gay marriage, as well as the right of same-sex couples to adopt a child (Rodríguez Martínez, 2010). The battle over same-sex couples' right to marry

swept in state after state in Mexico until in 2015 the Supreme Court ruled that same-sex couples in Mexico had both the right to marry and to adopt, though individual state codes were not amended (Kahn, 2015). This meant that in states that had not modified their legal code same-sex couples could only marry by injunction, providing a feasible (albeit time-consuming) route to marriage (and subsequently parenthood) for all Mexican citizens. Considering that five granted injunctions in a state provided grounds for codifying the injunction into law, even unwilling states have been amending their civil code to grant the right to marry and adopt to same-sex couples. To this date, same-sex marriage is explicitly legal in 19 out of 32 states.

In 2016, then-President Enrique Peña Nieto proposed equal access to marriage in the Federal Civil Code. Not only was the bill defeated but it appears to have had unintended repercussions for LGBTQ+ (Costa & Salinas-Quiroz, 2019) rights in Mexico as it mobilized the religious right-wing party to oppose equal rights in several parts of the country. Nonetheless, several significant gains in LGBTQ+ rights have been accomplished since then. The Supreme Court ruled in 2017 that all same-sex couples have the right to create a family (Suprema Corte de Justicia de la Nación, 2017), in 2018 that Social Security (IMSS) must extend benefits to same-sex partners of covered beneficiaries (Cámara de Diputados, 2018), and in 2019 that it was unconstitutional to deny a same-sex couple the right to register their child with the Civil Registry (El Sol de Mexico, 2019a). In December 2019 the ruling party MORENA proposed a constitutional amendment that would legalize same-sex marriage at the federal level (El Universal, 2019).

III. Parenting

Fatherhood in Mexico

Parenting is recognized as major event in one's life, being something many aspire to and having the potential to influence one's psychological well-being (Schindler, 2010). Having a child

appears to be a central theme in Mexican life, with 73.3% of Mexican women above the age of 15 having at least one child (Gobierno de México, 2018). Though similar statistics for Mexican men are not available (Gobierno de México, 2017), an anthropological approach suggests that becoming a father is also a central theme in Mexican men's lives. Mexican men identified fatherhood as a requisite step to legitimize their position in society as "real men" (Salguero Velásquez, 2006), with these sentiments being echoed by adolescent men as young as 13 (Correa Romero et al., 2013). Partnership was closely intertwined with this concept, with having a relationship with someone and then marrying them being regarded as a prerequisite to having children among heterosexual Mexican men (Salguero Velásquez, 2006). It appears the concept is not limited to heterosexual Mexicans, as being in a relationship served as the strongest predictor to parenting aspirations in a sample of LGBTQ+ Mexicans (Salinas-Quiroz et al., 2019). Finally, being able to provide for one's family was intricately tied to Mexican men's definition of manhood (Salguero Velásquez, 2006), with adolescents seeing children as part of a distant future after which they have completed their studies and have a stable job (Correa Romero et al., 2013) and men who interrupted their studies to become premature parents seen as irresponsible by Mexican society (Ramos, García y Barragan, Saldívar Garduño, & Contreras-Ibáñez, 2001).

Gay Individuals as Parents

Families comprised of parents differing from a "traditional" heterosexual model have been socially stigmatized throughout history, and it could be said that it has long been assumed that gay (among other non-heteronormative) relationships would exist in a childless state (Mallon, 2004; Tate et al., 2019). Though attitudes, both at the macro and micro level, have been rapidly changing in regards to gay marriage, parenting, and rights in general, and the number of gay parents has been increasing (Amodeo et al., 2018; Abbie E. Goldberg, 2010; Perrin, Hurley,

Mattern, Flavin, & Pinderhughes, 2019), evidence shows that gay men are still less likely to report having or wanting to have children when compared to men in heterosexual relationships, a disparity not seen between queer and heterosexual women. Most studies investigating the parenting desires have been conducted in high-income countries such as the United States. These have found that gay men report lower desires to become a parent, and among those who desire to have a child, fewer individuals intend to follow up through with those desires (Baiocco & Laghi, 2013; Riskind & Patterson, 2010; Riskind & Tornello, 2017; Shenkman, 2012; Tate et al., 2019). These findings remain true even after controlling for age, race, and education. Even considering those who manage to follow through with their parenting intentions, gay (and lesbian) adults still remain less likely than heterosexual peers to become parents (Riskind & Tornello, 2017).

There are several potential explanations for the lower rates of parenting desires and intentions among gay men. Social support from one's family of origin, friends, and romantic partner has been linked to an increased childbearing desire (Tate et al., 2019) and a more positive transition to parenthood (A. E. Goldberg & Smith, 2011). Gay men are more likely to report a lack of social support from their families (Frost, Meyer, & Schwartz, 2016). Gay men also face unique barriers compared to heterosexual couples in terms of the financial and legal obstacles they must overcome to follow through with the desire to have a child. They often experience stigma, from the societal level down to their relationships with family and friends, with respect to their sexual identities in general as well as specifically their desire to parent a child. Gay men may even face pressure from within the gay community to not have children (Mallon, 2004; Perrin, Pinderhughes, Mattern, Hurley, & Newman, 2016), with this strain of arguments often hinging on the belief that childbearing is a way of subscribing to a heteronormative ideal and thus relinquishing one's gay identity. Gay men also face unique obstacles when compared to lesbian

or other queer individuals who are natal females in that carrying a child is not biologically feasible for them. The high costs of adoption (A. E. Goldberg, Downing, & Moyer, 2012; Perrin et al., 2019) and surrogacy (Perrin et al., 2019; Riggs & Due, 2014), as well as the dearth of culturally competent providers willing to work with sexual minorities (A. E. Goldberg & Smith, 2011), may be precluding gay men from realizing their parenting desires.

"Coming out" for a gay man has long been considered a relinquishment of the possibility to become a father (Mallon, 2004). In Mexico, paternity has been noted as one of the key attributes utilized to recognize someone's heterosexuality (Laguna Maqueda, 2016), following the false belief that non-heterosexual persons do not have a desire to form a family. Nevertheless, 41% of cisgender MSM surveyed in Mexico City reported some sort of parenting aspiration (Salinas-Quiroz et al., 2019).

Parenting Methods for gay men

Previous heterosexual relationship

Traditionally, most openly gay men became fathers during a previous heterosexual relationship, which they subsequently left, later coming out as gay. Evidence suggests that this is no longer the case. Perrin et al. (2019) showed that gay fathers in the U.S. with higher incomes or living in states with more legal protections were less likely to have had children in a heterosexual relationship and more likely to have had a child via adoption or surrogacy, implying that a heterosexual relationship is not the choice most gay fathers would take to fatherhood if able to choose.

Adoption

Research shows that children adopted by gay parents have no difference in mental or physical health outcomes when compared to heterosexual couples (Lavner, Waterman, & Peplau, 2012), with some studies finding that children adopted by gay parents are more well-adjusted than those adopted by heterosexual parents. This holds true when studying both parental and child well-being. This may be due to the fact that gay couples often choose to adopt as a first choice, whereas heterosexual couples may choose adoption as a last recourse after infertility (A. E. Goldberg et al., 2012). Nevertheless, adoption is a prevalent option for many gay men desiring to have children. This may in part be due to rejection faced by gay men on the part of their biological families, thus making them value relational ties over biological ties in choosing who they call their family. Furthermore, similarly to many heterosexual couples, gay men may choose to adopt out of an altruistic desire to provide for someone in need (A. E. Goldberg et al., 2012).

Surrogacy and assisted reproductive technologies

Surrogacy is becoming an increasingly popular route for becoming a parent in many parts of the world (Perkins, Boulet, Jamieson, & Kissin, 2016). Though estimates are difficult to come by due to the lack of regulation and study of the practice, sources state that the number of babies born to surrogates each year in the USA has tripled in the past decade. This could potentially be attributed to the rise of new reproductive technologies, which make the process more likely to result in success and thus attract more people who are willing to pay the high price associated with surrogacy. It is estimated that the entire process of surrogacy in the United States costs an average of $150,000 (Smietana, 2019), though some estimates place the cost as higher. The cost of surrogacy drastically decreases when considered in a lower-income setting, with a round of surrogacy in Mexico costing a third of what it does in the U.S., with websites commonly quoting estimates in the $40,000 range. The number of babies born to surrogacy may also be increasing

due to the transition from traditional to gestational surrogacy. In gestational surrogacy, the surrogate carries an egg donated by another person, and thus the legal complications regarding parental rights is mitigated due to the surrogate not being biologically related to the fetus they gestate.

Common critiques of surrogacy are linked to its unattainability by those other than affluent persons from high income countries, which contributes to exploitation of the person willing to act as a surrogate (Stacey, 2018). Many countries around the world have banned surrogacy, including most European nations, Canada, and Australia. The surrogacy market appeared to turn to low-income nations, in particular Mexico, India, and Thailand. However, India and Thailand have since both passed laws prohibiting commercial surrogacy, or by applying restrictions such as the need to for a parent to be a citizen and for the surrogate to be a relative of one of the parents. Indeed, it appears the U.S. is one of the few if not the only country to be increasing access to surrogacy, with states reversing bans on surrogacy under pressure from gay rights advocates, among others.

The surrogacy landscape in Mexico is a difficult one to evaluate due to the lack of formal reporting or regulation around the issue. Several surrogacy companies operate in of Mexico, primarily out of Mexico City and Cancun, though they appear to heavily cater to parents from the United States or similarly high-income nations. The state of Tabasco appears to have been a hotspot for commercial surrogacy until a law was passed in 2016 prohibiting the practice to anyone but Mexican citizens who could prove inability to carry a pregnancy (Burnett, 2017). Nevertheless, the surrogacy market in Mexico (and worldwide) seems to cater to high income individuals willing and able to devote the time and money necessary to have a child born from

surrogacy. There is little evidence that any Mexican persons other than a select wealthy few have access to commercial surrogacy, at least through any sort of official practice.

There are limited options for gay and other same-sex or same-gender couples to access surrogacy, and male same-sex couples are still the minority accessing surrogacy services (Norton, Crawshaw, Hudson, Culley, & Law, 2015) after heterosexual couples. The majority of infertility or surrogacy clinics in the United States do not appear to be welcoming or at least openly advertising to gay men, with the minority that do being geographically clustered and thus further decreasing gay men's access to the service (Jacobson, 2018).

PLWH as Parents

As access to and effectiveness of antiretroviral therapy continues to increase, HIV can now be considered a chronic disease (de Bruyn, 2006; Underhill et al., 2016), and PLWH are entitled to the same quality of life as a person not living with HIV. One consequence of this is that intentional planning of families has increased among PLWH (Underhill et al., 2016). Without antiretroviral treatment rates of vertical transmission, or the transmission of HIV from parent to child, range as high as 45% (Andiman et al., 1990; E. R. Cooper et al., 2002; Temmerman et al., 1995). However, the recognized practice of prevention of mother-to-child transmission (PMTCT), can bring that rate down to virtually zero. Though several factors affect the success of PMTCT programs, the biological implication is that PLWH are able to have children without a risk of transmitting to their child if taking the proper precautions.

Studies have repeatedly found that the desire to have children does not vary between PLWH and HIV-negative persons (Berhan & Berhan, 2013; Martins et al., 2019; Nattabi et al., 2009; Nobrega et al., 2007). Women living with HIV have spoken about the importance of motherhood, offering reasons such as it giving them a purpose in life (D. Cooper et al., 2007),

being a major contributor to their happiness (Wesley et al., 2000) and motivating them to stay healthy and optimistic about life (Barnes & Murphy, 2009). Young age (Berhan & Berhan, 2013; Nobrega et al., 2007), childlessness (Martins et al., 2019), and partner's desire for a child (Nobrega et al., 2007) were commonly associated with an increased parenting desire in PLWH, and a variety of cultural influences, especially the societal expectation to have children, were often associated with increased parenting desires.

PLWH in Mexico

Studies conducted among women living with HIV in Mexico have found that they face numerous obstacles to carrying out their fertility desires, often facing stigma from healthcare providers such as feeling judged for their pregnancies or being counselled not to have more children. A majority of Mexican providers surveyed by Infante et al. (2006) felt as though women living with HIV should not be allowed to give birth. These studies align with others from Latin America and around the world (Cuca & Rose, 2016), though it is plausible that feelings among Mexican providers may have changed in recent years.

Adoption

PLWH are sometimes told they can only adopt HIV-positive children (Newmeyer et al., 2011). de Bruyn (2006) found that a Polish non-governmental organization was mediating adoptions among PLWH, though only children who were also living with HIV could be placed with these parents.

The literature on PLWH accessing adoption as a path to parenthood is scant, with de Bruyn (2006) concluding based two literature reviews that parenting options for PLWH other than through unprotected sexual intercourse were lacking. Respondents in three African countries

(Kenya, Lesotho, and Swaziland) stated that they knew of PLWH who had adopted children, though the children's HIV statuses were unknown or unreported. A study in Ontario of 77 adoption service providers found that most (64%) did not exclude PLWH as prospective adoptive parents, 13% excluded or placed restrictions on prospective adoptive parents living with HIV, and 23% did not know whether PLWH were eligible to adopt (Underhill et al., 2016). Domestic (public) agencies in this study reported no restrictions on PLWH accessing their services. The main restriction among private agencies was that the birth parent would be responsible for the selection of the adoptive parent(s) and would have access to all their health records, whereas international agencies stated that PLWH's adoption rights depended on laws in the child's birth country. It is unclear how these findings translate from a Canadian context to a Mexican one. de Bruyn (2006) purports that according to a Mexican non-governmental organization, PLWH were prohibited from adopting per governmental regulations. However, these findings are from over thirteen years ago and we were unable to find any evidence to substantiate that that is the case today.

Surrogacy

Men living with HIV who wish to engage in fertility treatment are able to undergo a process known as sperm washing, in which the HIV is separated from the seminal fluid via centrifugation and swim-up techniques (Newmeyer et al., 2011). "Washed" sperm can thereby be directly implanted into the woman's uterus using intrauterine insemination. Sperm washing has been proven efficacious in preventing HIV transmission from a seropositive father to a seronegative mother, with Zafer et al. (2016) detecting no cases of HIV transmission in 11,585 cycles of assisted reproduction with the use of sperm washing in 3,994 women. Unfortunately, the high cost of assisted reproduction, especially with the addition of sperm washing, places this outside

of many if not most PLWH's realm of possibility. PLWH are actively seeking assisted reproductive services (Klein, Pena, Thornton, & Sauer, 2003) and yet access to these services remains severely limited. Despite calls from around the world to expand fertility treatments to PLWH ("Human immunodeficiency virus and infertility treatment," 2010), the clinical community so far has had a tepid response.

Chapter 3: Manuscript

Student Contribution

I am the primary author of this research paper. I created the interview guide, conducted the in-depth interviews, analyzed the data, and composed these results. Dr. Piñeirúa-Menéndez and Ms. Hernández Leyva assisted in finalizing the interview guide and recruiting participants, and Dr. Hussen provided guidance on the interview guide, code creation, and the entirety of the written thesis through her role as Thesis Committee Chair.

Title: Parenting intentions of young gay and other men who have sex with men living with HIV in Mexico City, Mexico

Authors: Daniel M. Camp[1], Sophia A. Hussen[1], Mónica Hernández Leyva[2], and Alicia Piñeirúa-Menéndez[3]

[1]Hubert Department of Global Health, Emory University Rollins School of Public Health, Atlanta, GA, USA
[2]Facultad de Medicina, Universidad Nacional Autónoma de México
[3]Clínica Especializada Condesa Iztapalapa, Mexico City, Mexico

Abstract

Background: Young gay and other men who have sex with men (YGMSM) are disproportionately affected by HIV in Mexico. Men in Mexico typically start thinking about fatherhood in late adolescence; however, little is known about Mexican YGMSM's thoughts about childbearing. This issue is complicated by both their sexual identity and their HIV serostatus; however, reproductive justice theory holds that individuals – regardless of gender or sexual orientation – have a right to bear and raise healthy children. Within this framework, we sought to explore conceptualizations of fatherhood and parenting desires among YGMSM living with HIV in Mexico City.

Methods: We conducted 16 in-depth qualitative interviews with YGMSM living with HIV in Mexico City. Participants were recruited from two large HIV clinics. Domains of the questionnaire included: (1) parenting desires, (2) preferences about different methods (e.g., adoption, in-vitro fertilization), and (3) perceived barriers. A modified grounded theory approach was used for coding and qualitative analysis.

Results: Participants ranged in age from 17 to 21 (mean 19.3) years, and had been diagnosed with HIV for an average of 15 months (range:15 days to 6 years). Most participants expressed a desire to have a child in the future, but were uninformed as to their options for doing so. Participants largely preferred adoption as a mechanism for fathering a child, citing a perceived risk of HIV transmission as a deterrent to artificial insemination and other assisted reproductive technologies. However, some participants expressed a desire to have a child that was genetically their own, but shared doubts as to whether this would be feasible. The majority of participants stated that the topic of childbearing had never come up during the course of their routine HIV care.

Conclusion: YGMSM living with HIV in Mexico City are interested in having children. Our findings suggest a role for future interventions, both to inform YGMSM living with HIV about potential avenues for pursuing parenthood, as well as with to support HIV care providers to initiate discussions about future parenting with their YGMSM patients.

Introduction

The HIV epidemic in Mexico is concentrated among key populations such as gay and other men who have sex with men (GMSM), who have an HIV prevalence of 12.2% (CENSIDA, 2020). Young people under the age of 29 are also at heightened risk of acquiring HIV, making up 45% of new infections (CENSIDA, 2020). Nevertheless, Mexico has demonstrated a commitment to the battle against HIV/AIDS, committing to providing universal access to antiretroviral treatment in 2003 (Bautista-Arredondo et al., 2008) and developing a National Strategic Plan for HIV that aims to bolster prevention messaging towards key populations and reduce discrimination on the basis of sexual orientation (UNAIDS, 2017). In fact, Mexico has shown itself to be a regional leader in advancing the rights of lesbian, gay, bisexual, transgender, and other queer (LGBTQ+) individuals. In 2009, Mexico City became the first major Latin American city to grant LGBTQ+ individuals the right to marry and adopt (Rodríguez Martínez, 2010), rights that now are essentially extended to all Mexican jurisdictions due to subsequent Supreme Court rulings (Suprema Corte de Justicia de la Nación, 2017).

Due to advances in treatment over the past decades, HIV can now be considered a chronic disease (Underhill et al., 2016), shifting emphasis from merely prolonging survival, towards improving quality of life for people living with HIV (PLWH). Adherence to antiretroviral treatment has been repeatedly shown to be effective in blocking transmission of HIV, a concept known as "undetectable equals untransmissible" (The Lancet, 2017), as well as to improve the personal health of PLWH (Siedner & Triant, 2019). Young GMSM who are coming of age while living with HIV infection are therefore expected to fulfill the typical developmental milestones that characterize the transition to adulthood. For many, the decision to become a parent is considered a key developmental milestone in a person's life (Schindler, 2010). Among

Mexican men, becoming a father is regarded as one of the crucial markers of becoming a "real" man (Salguero Velásquez, 2006); however, this milestone is more difficult to achieve for GMSM. Worldwide, gay men (Riskind & Tornello, 2017; Tate et al., 2019) and PLWH (Berhan & Berhan, 2013; Martins et al., 2019) have often expressed their desires to become parents. However, these desires have historically been discouraged, either implicitly or explicitly, such that "coming out" as gay (Mallon, 2004) or receiving an HIV diagnosis (Nostlinger et al., 2013) were equated to a functional diagnosis of infertility. Currently, however, neither of these identities present legal or biological disqualifications for parenthood.

International research has shown that as societal attitudes toward LGBTQ+ rights have been increasingly accepting, the number of gay individuals having children has increased (Amodeo et al., 2018). Gay men have several paths to parenthood, including adoption and the use of assisted reproductive technologies. The use of assisted reproductive technologies typically involves having another person (a woman) act as a surrogate and carry the child to term. Though the practice is controversial (Stacey, 2018) due to the concerns for exploitation of vulnerable women, these concerns may be mitigated by the increased use of new forms of surrogacy such as gestational surrogacy, in which the surrogate carries a separate donor's egg, and altruistic surrogacy in which no money is exchanged for the service. Men living with HIV who wish to conceive using assisted reproductive technologies can also use sperm washing, a technique in which the HIV is separated from the seminal fluid and thus also reduces the risk of transmission to virtually zero (Newmeyer et al., 2011; Zafer et al., 2016).

Studies have repeatedly demonstrated that gay men have a diminished parenting desire when compared to heterosexual counterparts (Baiocco & Laghi, 2013; Riskind & Patterson, 2010; Riskind & Tornello, 2017; Shenkman, 2012; Tate et al., 2019), whereas PLWH display an equal

or increased desire to their HIV-negative counterparts (Berhan & Berhan, 2013; Martins et al., 2019; Nattabi et al., 2009; Nobrega et al., 2007). The latter statement may be understood in that studies regarding the parenting intentions of PLWH have mainly been carried out with African women, who have been shown to desire larger families. Though no studies have been carried out regarding attitudes towards parenting among PLWH in Mexico, one study of parenting desires among young cisgender GMSM in Mexico City found that less than half (41%) of surveyed individuals endorsed some sort of aspiration towards parenthood (Salinas-Quiroz et al., 2019).

Desiring children is merely the first step in the parenting process. For example, an individual may passively wish to have children but decide that it is not worth the trouble to do so. The intention to parent involves a commitment to following through on one's parenting desires (Riskind & Patterson, 2010). It is at this stage of the parenthood process that many GMSM and PLWH likely end their journey to parenthood as they encounter barriers to being able to realize their goal, and thus where interventions can serve mitigate these obstacles (Riskind & Patterson, 2010; Riskind & Tornello, 2017).

Numerous factors may have an effect on an individual's parenting intentions. These can exist at the individual level, such as sexual orientation and HIV status, and may include other individual factors such as age, religion, financial means, competing goals, and personal attitudes towards childbearing. In Mexico, the ability to provide for one's family is intricately tied to the concept of fatherhood (Salguero Velásquez, 2006), and adolescent men may see childbearing as something occurring in a distant future, only after having finished schooling and having a stable job (Correa Romero et al., 2013). External factors – such as social support, relationship/marital status, discrimination and legal/logistic factors – may also have an effect on parenting intentions. Social support, or the absence thereof, of family, friends, and other gay individuals has been

shown to have an effect on gay men's parenting intentions (A. E. Goldberg & Smith, 2011), and partner's parenting intentions have been shown to influence women with living HIV's desire to have a child (Nobrega et al., 2007). A relationship that culminates in marriage appears to be a traditional prerequisite to childbearing among heterosexual Mexican men (Salguero Velásquez, 2006), a sentiment that may be echoed by the Mexican LGBTQ+ community, among whom relationship status served as a strong predictor of parenting aspiration (Salinas-Quiroz et al., 2019). Societal approval of gay marriage has been increasing in Mexico but remains below 50% in parts of the country (El Sol de Mexico, 2019b), which may leave gay men subject to discrimination on the basis of their sexual identity. Discrimination also exists on the basis of serostatus, with the majority Mexican healthcare providers feeling as though PLWH should not be allowed to have children (Infante et al., 2006), though these feelings may well have changed since this study took place. The right for gay men to adopt has been mandated as a right by the Supreme Court without amending individual state codes (Kahn, 2015), thus presenting an arduous if feasible path in some states for gay individuals desiring to become fathers. Surrogacy is illegal for gay couples in at least one Mexican state, but the lack of legislation in the rest of the country does not necessarily mean it is accessible. The right for PLWH to adopt or use assisted reproductive technologies is similarly ambiguous, with at least one source claiming that governmental regulations prohibited PLWH from adopting (de Bruyn, 2006). The lack of explicit governmental regulations around HIV does not necessarily indicate a lack of discrimination towards PLWH on the part of adoption or fertility centers, who also may institute their own restrictions on who is eligible to use their services. Finally, the high cost of adoption and surrogacy services likely restrict access to these services to all but a wealthy few.

Mexico City provides a unique setting for young GMSM living with HIV to make the transition into adulthood and potentially to contemplate future fatherhood. On one hand, Mexico City has shown itself as a leader in terms of LGBTQ+ rights when compared to the rest of Mexico, Latin America, and the world. The Mexican government has also demonstrated a strong commitment to the fight against HIV/AIDS. Most studies on parenting desires with gay men have been conducted among affluent men in high-income countries, whereas studies on parenting focused on PLWH have typically been conducted with women in lower-income countries. To our knowledge, no studies on parenting desires have been conducted specifically with gay men living with HIV, in Mexico or elsewhere. Thus, as a middle income country with at least one viable path to parenthood for GMSM (legalized adoption) that also has a fertility rate and poverty line similar to many low-income countries, Mexico provides an interesting intersection of factors that may be pertinent to the study of parenting desires among young GMSM living with HIV. We sought to qualitatively explore parenting desires and intentions among young GMSM living with HIV in Mexico City, in the hopes of informing future interventions to help GMSM living with HIV exercise their reproductive rights.

Methods

This study was nested within a longitudinal cohort study being conducted at the Condesa Specialized Clinic (CEC) and Condesa Specialized Clinic Iztapalapa (CECI), two publicly funded clinics providing the majority of HIV care to the Mexico City metropolitan area. The study sought to investigate sociodemographic, cultural, and economic factors that contribute to the heightened risk of HIV infection among young people in order to inform interventions to improve HIV outcomes among this population. All persons born after December 1, 1997 being tested and/or treated for HIV at the clinics were eligible for inclusion in this study, which

entailed a quantitative survey and following of HIV progression using medical chart abstraction if testing positive. This sub-study added a qualitative component to this study to learn more about young GMSM's quality of life, specifically as it related to parenting and their future desires.

Participant Recruitment

Data collection took place at the CEC and CECI. Participants were recruited from the patient population in each clinic and had to meet the following inclusion criteria to be included in the study: male sex at birth, self-reported sex with another man, horizontal (i.e., non-perinatal) HIV acquisition, and a birthdate on or before December 1, 2017 (age 21 or younger at time of interview). Potential candidates were identified by medical staff at the CEC and CECI and referred to the primary interviewer. To participate in the interview, participants also had to be able and willing to read and sign the informed consent document. Participants did not receive any compensation for participation in the study and were made aware of this before asked to give consent.

Data Collection

A semi-structured qualitative interview guide **(Appendix 1)** was designed by the sub-study's primary investigator (DMC). The preliminary guide was then read over and refined by the three coauthors. The revised guide was used to pilot the interview with two participants at the CECI in Mexico. Their responses and feedback were then used to revise the guide one final time prior to enrollment of the study' participants.

The final interview guide explored the following domains:

Domain	Research questions	Interview guide questions

Parenting desires	Are these men thinking about having children?	*¿Te gustaría tener hijos? ¿Por qué si/no?* Would you like to have children? Why/why not?
Preference of method	What do these men know about their options for having children? Do they have a preference for one option over another?	*¿Qué sabes sobre las diferentes estrategias para tener hijos?* What do you know about the different methods of having children? *¿Qué piensas sobre estas opciones?* What do you think about these options? *¿Piensas que estas opciones son viables para ti? ¿Por qué sí/no?* Do you think any of these options are viable for you? Why/why not? *¿Considerarías utilizar algunas de ellas? ¿Por qué si/no?* Would you consider using any of them? Why/why not?

Perceived barriers	What barriers do these men perceive to stand in the way of gay men living with HIV who desire to have children?	*¿Qué impacto piensas que tiene tu diagnostico de VIH en acceder a este tipo de procesos?* What impact do you think your diagnosis has in being able to access these methods?
Trust in provider		*¿Me podrías contar alguna conversación que hayas tenido con tu doctor o cualquier persona en el sistema medico sobre la posibilidad de tener hijos en el futuro?* Can you tell me about any conversation you've had with your doctor about the possibility of having children in the future?

Interviews length ranged from 36 to 128 minutes, with a mean of 63.6 minutes. All interviews were conducted by the primary author, who is fully bilingual in Spanish and trained in qualitative methods. Several steps were taken to maximize participant comfort, with the hope that this would compel participants to speak more freely about the topics discussed in the interview. Interviews took place in a private room within the clinic to ensure privacy for the participants, and they were made aware of the steps taken to ensure confidentiality. Participants were offered light refreshments before the interview and were told to consider this a conversation as opposed to a formal interview. These steps were taken to try to capture the emic, or the own personal, perspective of the participant. A total of 16 interviews were conducted until we reached thematic

saturation, which was determined to have occurred once no new themes relating to the primary questions were arising in further interviews. The interview followed the interview guide as closely as possible, though there were slight variations in the order of questions asked and the types of probes used due to variations in the loquacity and experiences of each participant.

Security

Audio recordings of each interview were uploaded to the Emory Box (a secure storage site) immediately after the interview and then deleted from the recording device.

Ethical Considerations

The study protocol was submitted and approved by the Institutional Review Boards of Emory University and the Mexican *Instituto Nacional de Salud Publica* (National Institute of Public Health).

Data Analysis

We conducted thematic analysis to determine recurring themes brought up during the in-depth interviews by participants. After de-identification the verbatim transcripts were uploaded to MAXQDA20 (VERBI Software, Berlin, Germany) for subsequent coding and analysis. To begin codebook development, three transcripts were read and extensive memos were written about potential patterns and codes. The codebook was then generated and shared with research team members who refined it in an iterative manner. Both deductive codes based on the literature and interview guide and inductive codes based on themes emerging from the data were included. The three transcripts were then coded and thick descriptions were written based on those results.

All sixteen transcripts were coded two months later, including the three originally coded transcripts. The re-coding of the three transcripts was conducted to ensure consistency in coding,

which was confirmed before going on to code the rest of the transcripts. Thick descriptions were written about each code and then were grouped based on related patterns to answer the three questions the researchers were interested in, namely, “What are the parenting desires of young GMSM living with HIV in Mexico City?” “What are young GMSM living with HIV’s thoughts on the reproductive methods available for them to carry out their parenting desires” and “What are the barriers and facilitators to for young GMSM living with HIV in Mexico City to carry out their parenting desires?”

Results

Sample

Our participants (N=16) ranged in age from 17 to 21 (mean = 19.25, standard deviation = 1.13) years. Participants’ months since diagnosis ranged from less than a month to 72 months (mean = 15.2, standard deviation = 17.4). Almost all (n=15) of the participants had completed some secondary education. 13 of the 16 participants reported living with their family, and all participants reported depending financially on their family to some degree. A more detailed breakdown of participant demographics can be found in **Table 1.** Participants discussed three themes throughout their interviews, (i) individual parenting desires, (ii) preference for reproductive methods, and (iii) barriers and facilitators to parenting, which will be expanded upon below.

Parenting Desires

Most of the participants expressed a desire to have a child in the future. They described several different factors that motivated this parenting desire, including parenting as a right, the traditional ideal of a what a family looks like, their own family experiences, the desire to love someone, and their desire to leave their legacy.

The right to parent

Participants were unanimously supportive of the idea of gay individuals and same-sex couples having children or desiring to have children. Some participants focused on the concept of *rights*, saying that everyone had the right to start a family and have children. Along those lines, many expressed that no one had the right to decide whether someone else was able to have a child or not.

> "Todos tenemos el derecho de poder tener un hijo, de sentir, de saber qué es lo que se siente cuidar una persona." (P8)
>
> "We all have the right to be able to have a child, to feel, to know what it means to take care of another person." (P8)

Or, as another participant put it,

> "si todos pagamos impuestos, y los homosexuales igual, ¿por qué no tener hijos igual, todos?" (P10)
>
> "if we all pay taxes, and homosexuals do as well, why can't we all have children?" (P10)

Some participants not only supported the idea of gay parenting as a right, but additionally advocated for more gay parenting, which they perceived as having societal benefit. These participants stated that when gay parents adopted children they were helping with issues such as overpopulation, or that the children of gay parents grew up to be more educated and respectful.

Participants displayed more hesitation towards the thought of someone living with HIV parenting a child, in general related to the prospect of further transmission of HIV. An HIV diagnosis did not exclude someone from becoming a parent in the participants' opinion, rather it just entailed a greater deal of mindfulness about the preparation needed and the potential manner in which to become a parent.

Traditional family ideal and family experiences

The desire to become a parent in the future was expressed by several participants as part of a larger, prevalent ideal of what it mean to be a man in Mexico, which included having a house, a job, and a family to provide for.

> "Es que a lo mejor es más que nada como el arquetipo que todos tenemos del adulto realizado con pareja, con trabajo y casa. A lo mejor no es tanto porque lo necesite, más que nada es porque es como esa idea que se nos ha plantado desde siempre de que eso es cuando ya has triunfado en la vida." (P11)

> "Maybe more than anything it's the archetype we all envision it means to be an adult – having a partner, a job, and a house. Maybe it's not something I need but rather it's an idea that's always been pushed on us – that that's when you've triumphed in life." (P11)

Participants' reasons for wanting or not wanting to have children were often very tied to their own childhood experiences with their families – whether these were positive or negative experiences. Some participants said they wanted to have children to be able to give them the life their own parents were unable to give them.

> "Quiero tener una familia, quiero tener hijos. Y….ser lo que no pudieron ser mis papás." (P13)

> "I want to have a family, I want to have children. To be what my parents weren't able to be." (P13)

Other participants said the opposite, that their experience with their family members had led them to not desire having a child in the future.

> "Tal vez es una idea que me pegó mi mamá desde pequeño, pero era como de 'cuando tengas hijos te van a tratar como tú me tratas.'… Y no, no

> "Maybe it's an idea my mom left me with since I was a kid but she'd say to me 'when you have children they're going to treat you like you treat me.'…

quiero tener hijos porque no quiero que tal vez crezcan y pase algo que arruine nuestra relación y después sentirme como mi mamá se siente." (P15)	And I don't want to have kids because I don't want them to potentially grow up and something happens to ruin our relationship and then end up feeling like my mom feels." (P15)

Loneliness and wanting someone to love

Another common motivator for wanting to have children was the feeling of loneliness. Many of the young men reported being lonely and feeling as though having a child would ease that feeling of loneliness. This was often tied to a general desire to take care of and provide for someone else. These young men said they wanted to have someone to love and be loved by in return.

"Estar solo es algo que me, que siento- me siento muy mal. Y no una necesidad así de… de tener una pareja. Si no es necesidad de tener a alguien que te quiera. Como de la forma, en la que sea. Pero que te quiera. Entonces yo digo ay pues sería lindo tener un hijo, ¿no? Sería bonito pues que alguien te quiera de una forma pues distinta, ¿no?" (P6)	"Being alone is something that – makes me feel really badly. And I'm not talking about needing to have… a partner. Rather it's the need to have someone who loves you. In whatever way they want, but that they love you. So I think it'd be really nice to have a child, no? It's be nice to have someone love you in a different way." (P6)

Legacy

Participants were also motivated by a desire to leave their mark on the world. For some, this meant having someone to remember them when they were gone, for others it was being able to pass on their last name:

"…le falle a mi papá en lo de cuidarme, pero el apellido de mi papá podría seguir." (P13)	"…I failed my dad in protecting myself [from HIV)], but his last name could still continue." (P13)

Mechanisms

Participants also discussed different mechanisms for becoming a father as a young gay man living with HIV, including adoption, surrogacy, in a heterosexual relationship, and through co-parenting.

Adoption

Participants were particularly supportive of adoption as their preferred mechanism for becoming a parent. There were several reasons for this support. A prevalent opinion was that it would avoid the risk of passing on HIV to their children. Another reason participants gave for supporting adoption was the concept of doing good for someone. Participants stated that there were lots of children who needed a home and a family, and that adoption was a good way to help out those who needed it.

"sí quiero adoptar a como… a niños, o sea, si tengo las posibilidades y tengo los medios para poder apoyar a alguien, pues poder apoyar a esos niños. O sea, y no solamente ellos, si no a niños que estén necesitados, y poderles brindar amor. Porque siento que, o sea, todo merecemos amor y 35ajor puedes darle amor a una persona, pues que increíble." (P12)	"I'd like to adopt like… children, I mean if I have the capability and I have the means to be able to support someone else, then I mean I'd like to be able to support these children. Not just them but children who are in need, and be able to give them love. Because I believe we all deserve love and if you're going to give that to someone else, I mean how incredible is that?" (P12)

Another theme that came up was the concept of overpopulation and how it related to climate change and the state of the world. Participants gave varying responses as to how adopting was preferable to having a biologically related child in light of these issues, such as how it reduces one's carbon footprint. Participants expressed the opinion that there were already too many people in the world and that they did not want to bring more into it, or,

> "…tal vez veo el problema en si no buscan en adoptar y quieren tener un hijo ellos con una madre subrogada o cosas por el estilo porque pues ya somos muchos. En realidad, hay bastantes niños que se pueden adoptar, sí es un proceso complicado, sé que es complicado y toma tiempo, pero siento que si quieren ser padres pues mejor vean esa opción." (P11)

> "…maybe I see an issue if they don't want to adopt but want to have their own child with a surrogate mother or something like that because there's already too many of us. There's lots of children who are waiting to be adopted, yes it's a complicated process, I know it's complicated and takes time, but I feel like if [gay couples] want to be parents then this is the best option." (P11)

In spite of this feeling of supporting adoption, participants spoke of many barriers in relation to being able to adopt a child if and when they were ready to do so. Both their gay identities and HIV statuses came up as potential obstacles to wanting to adopt. One participant said that adoption centers were looking for whatever pretext to deny you a child, particularly if you were a gay man. Participants stated that adoption centers would prefer to facilitate adoptions for heterosexual couples as opposed to homosexual ones.

> "…es más fácil que se lo den en adopción a una pareja heterosexual que a una pareja homosexual. No sé por que. Si... yo pienso que los dos verían por el niño. O sea, las

> "…it's easier for them to give a child to adopt to a heterosexual couple than a homosexual one. I don't know why. If… I mean I think both

dos parejas verían por el niño." (P13)	would look after the child." (P13)

They also related that adoption centers would refuse to give a PLWH a child due to their risk of dying prematurely.

Surrogacy/Assisted Reproductive Technologies

When asked what mechanisms they had available to have children, most participants brought up some version of using assisted reproductive technologies, which for them primarily entailed having a child genetically related to themselves. A minority of the participants were able to discuss the process of using some form of assisted reproductive technology, but none of the participants talked at length about how the process(es) worked. It was far more common for participants to report not knowing anything about these methods, or not enough to talk about them. There was a sense that it was something that was "seen in the movies" but that was not an option that was commonly used.

Participants had a general preference for adoption over using surrogacy or other assisted reproductive technologies. The fear of passing the virus along to their children was often mentioned, as was the fear of transmitting the virus to the potential mother of the child. Another potential difficulty mentioned was having to find someone who would be willing to carry the child to term. There was also a fear that the surrogate mother might change her mind and then not want to give up the child after birth. Another fear that came up in the context of using a surrogate mother was having a child grow up missing the connection to its mother. There was also the thought that feminism was contrary to surrogacy as it was a way of "using'" or exploiting a woman's body. However, many participants replied that they would be interested in

having a genetically related child if they could be certain that that child would not be born with HIV, like P14, who responded, "Si no hubiera ese miedo, sí,/If there weren't that fear, yes" when asked whether he'd choose surrogacy if there was no risk of HIV transmission.

Conversely, other participants discussed having wanted a biologically related child but now being more desiring of adopting since their HIV diagnosis. For example, when asked how his HIV diagnosis affected his ability to have a child, one participant responded:

> "Lo llegué a pensar si pudiera, quisiera tener un hijo de mi sangre." Pero pues ya después fui descartando ideas y dije, bueno pues hay muchos niños que no tienen familias, ¿por qué no adoptar a un niño? No sé, no creo que tendría alguna implicación en eso." (P8)
>
> "I used to think that if I could, I'd want to have a child of my blood. But then I started changing my mind and I thought, 'well if there's lots of children who don't have a family, why not adopt one?' I don't know, I don't think there'd be any issues in using that option." (P8)

Other childbearing methods

The most common other mechanism for having a child that was not adoption or assisted reproductive technologies was having a child within a heterosexual relationship. This was brought up in the context of friends' parents or other people they knew who had been in a heterosexual relationship and then separated from their original partner and coming out after already having had children. These sorts of situations seemed to lead to positive relationships between child and gay father in most cases, though one participant said his friend had had a difficult time accepting her parent who came out as a transwoman. However, none of the participants indicated wanting to pursue this scenario themselves. Notably, no participant explicitly indicated they would want to have sexual relations with a woman to have a child.

Only one participant mentioned anything that resembled a co-parenting relationship. This participant mused that he was intrigued by the thought of finding a lesbian couple, each of whom could carry a child (one from each gay parent). This participant did not elaborate on the specifics of the process, such as whether each couple would keep one child or whether there would be a shared parenting agreement, but this scenario was different from the adoption and surrogacy options that were typically discussed.

Barriers and Facilitators

Participants discussed several obstacles and motivators they saw on their path to parenthood, which are elaborated upon below.

Financial

Participants often referenced the importance of finances in the context of having children in the future. They discussed being capable to provide for their future families as a prerequisite to childbearing, which entailed having the proper financial means. Having insufficient financial means would also bar them from accessing reproductive methods. Though no participant was able to give a monetary price tag on utilizing a method such as adoption or artificial insemination, many mentioned how expensive these services were and how they were inaccessible to people without a good deal of money. Other participants stated that adoption centers looked for financial stability as a requisite to being able to utilize their services, and that if they did not have stable jobs they would be rejected as potential parents. Some participants had known others who had wanted to adopt but had been unable to because of the cost, with one having had this experience himself.

"Entonces, se puede decir que… principalmente es el	"So I mean one could say that… what matters the most is

> dinero lo que importa. Si yo tuviera todos los recursos… quisiera yo adoptar yo a una niña… Me veo ya teniendo mi casa, mi departamento, y tener lo necesario más que nada. Y pues, tener mi negocio, mi trabajo bien, estable." (P10)
>
> money. If I had the financial means… I'd want to adopt a daughter… I see myself having my house, my apartment, and whatever is necessary. And, of course, having my business, a good job that's stable." (P10)

Legal

Participants cited legal barriers as an obstacle to exercising their reproductive rights. For some participants, this meant the legality of gay marriage in Mexico. Some participants stated that gay marriage was only legal in select states in Mexico, whereas others believed it to be illegal all throughout Mexico.

> "Primero el lado legal, sé que no es legal en todos los estados, no sé si sea ya legal en algún estado de aquí de México, la verdad no sé." (P11)
>
> "First there's the legal aspect, I know [same-sex marriage] isn't legal in every state, I don't know if it's already legal in any state here in Mexico, I really don't know." (P11)

Participants said that if they were unable to marry their partners then it was difficult to imagine having children with them.

Participants also referenced legal barriers in accessing childbearing methods.

> "Siento que el marco legal sí es mucho más alto para parejas homoparentales porque la adopción de parejas heterosexuales es legal en todos lados, pero por este
>
> "I feel like the legal requirements are much higher for same-sex couples because heterosexual adoption is legal everywhere, but at this moment [homosexual adoption] might only be legal in [Mexico City]." (P11)

> momento sólo en la ciudad a lo mejor es legal." (P11)

Many participants stated that the law prevented them from adopting in Mexico as a gay man living with HIV, others were unsure as to the legality of adopting. Some participants stated that assisted reproductive technologies were illegal in Mexico, whereas others stated that they were precluded from accessing these methods due to their HIV status. None of the participants differentiated between the legality of assisted reproductive technologies in general, such as an infertile heterosexual couple using in vitro fertilization, and gestational surrogacy as a practice.

Age

Their young age was another barrier for many participants. They stated that they wanted to start families but that they still were not ready to do so. Others stated that they did not want to have children but that they might change their minds in the future when they got older.

> "Porque lo que sí tenía así como que me daban… ¿Cómo lo puedo decir?... ganas es de tener hijos, pero, bueno, en sí ese tema nunca se lo he preguntado a la doctora o así por lo de la enfermedad qué posibilidades había porque todavía estoy chico. Entonces sí me gustaría, pero ahorita no. Porque pues me gustaría ya que tenga algo que ofrecerle, ya que tenga un trabajo, ya que tenga una casa, ya que tenga algo para estar bien. Pero ahorita que me puse a pensar, no le he preguntado a la doctora si hay algún impedimento." (P9)

> "Because what I did have was a desire to… how can I put it… have a child. But, well, I haven't asked my doctor about that, due to my illness what possibilities I have [to have a child] because I'm still young. So I would like to [have children], but not right now. Because I'd like to have something to offer it, once I have a job, a house, something to be ok in life. But now that I think about it, I haven't asked the doctor whether there are any obstacles with [HIV]. (P9)

Discrimination

Discrimination took many forms for the participants, but was a prevalent theme in every interview. One form of discrimination was on the basis of gay identity. There were mixed responses as to the attitude in Mexico towards gay men. Some participants reported a great deal of stigma in Mexico towards homosexuality, recounting experiences they'd faced when displaying their sexual orientation.

> "Pues yo creo que, como tal, pues yo creo que la sociedad. Porque no lo permite todavía. Como tal, como fácilmente no lo permite. Entonces que creo que ahí sería el obstáculo para las parejas homosexuales que quieran adoptar" (P5)

> "Well I think that, as it stands, I think that society [is a barrier]. Because it still doesn't permit it. At least, as it is, it doesn't easily permit it. So I think that's where the obstacle would be for homosexual couples who want to adopt." (P5)

Others were more optimistic, stating that Mexico was getting more progressive on the matter.

> "…en México ya estamos como avanzado más en ese aspecto. Digo en esta época ya podemos usar faldas en las escuelas" (P7)

> "…in Mexico we're more advanced in that aspect. I mean, this day and age we can even wear skirts to school." (P7)

There was also a common thought that societal opinion was something that would have to change slowly over time, but that it had been changing and likely would continue to evolve in a positive manner. As one participant put it,

> "últimamente hemos crecido mucho como personas, y como que creo que ya la gente ya

> "lately we've grown a lot as people, and like I think that people are, people now are

> está más abierta y creo esas cosas van a dejar de seguir cerando, como la discriminación, si desde chiquitos les enseñamos a nuestros hijos a que hay una infinidad de mucha diversidad." (P8)
>
> more open and I think those things are going to keep diminishing, like discrimination, if from an early age we're teaching our children that there's an infinite amount of diversity." (P8)

Generally, participants expressed that people who were from rural areas, older, or religious would be more likely to be antagonistic towards gay couples and parents, whereas people who were from urban areas, younger, or not religious would be more likely to be supportive of gay parents. Certain neighborhoods in Mexico City were linked to more gay-friendliness, with the Zona Rosa (the gay district in Mexico City) and proximal neighborhoods in the center of the city being perceived as of being more socially accepting of gay parents and acceptance waning the further from these neighborhoods you were.

Some participants discussed HIV stigma as a deterrent to childbearing:

> "siento que van a pensar que van como que propagar la enfermedad, como que van a tener el hijo también, el vecino también se va a contagiar, y todos van a hacer casi como una… epidemia." (P1)
>
> "I feel like they're going to think that they're [same-sex couples] are going to propagate the illness, like they're going to have the kid and then the neighbor is going to get sick, and altogether it's going to cause like an… epidemic." (P1)

However, participants felt that the stigma associated with gay parents was much higher than that associated with PLWH as parents. A large part of that was due to what they called the "hidden nature" of HIV – that is, no one could tell they were living with HIV just by looking at them, and thus the disapproval received from society would be more as a result of their gay identities as

opposed to their HIV status. Because HIV was so far removed from most people in Mexico's minds, stigma did not really "exist" towards HIV. Rather, it represented something most people tied to being gay and as such used as a slur against gay (or gay-presenting) individuals.

A key form of discrimination participants feared was when they went to access childbearing mechanisms, saying that adoption or fertility centers would decline to work with them.

> "Y la adopción es otra complicada. Porque imagínate te ven que tienes VIH. Entonces van a decir "ay no esta persona se puede poner enferma. No tiene ningún trabajo tan bueno. Entonces pues no, no le vamos a dar la niña. O el niño." (P6)

> "And adoption is another complicated one. Because imagine that they see that you have HIV. So they're going to say, 'oh no, this person could get sick. He doesn't have that good of a job. So no, we're not going to give them the girl. Or the boy." (P6)

Some participants believed this would be only as a result of either their sexual orientation or their HIV status, whereas others believed it was a confluence of the two.

Even if they were able to successfully have a child, participants also reported the fear of discrimination towards themselves, their partners, and/or their potential children as a deterrent to wanting to have children. They stated that they would not want their children to be bullied in school, or to be ostracized on account of having two fathers. Other recurring fears were events like receiving slurs while walking as a family or otherwise going about their daily life.

> "…eso es también en parte un motivo por el cual no quiero tener hijos, porque no quiero ir con [mi novio] y con un niño o una niña y que alguien nos ataque, nos diga algo grosero o nos golpee por tener una hija y que ella vea todo." (P15)

> "…that's also part of the reason why I don't want to have children, because I don't want to be walking down the street with [my boyfriend] and with a son or daughter and have someone assault us, say something derogatory, or hit us

> for having a daughter and have her see it all." (P15)

Social support

Social support came up in every interview as well, though its influence was much less marked. Friendship networks were generally described as more supportive:

> "Sí yo digo que sí piensan así. Porque la mayoría de mis amigos son como pro-vida, pro…todo, entonces como que sí aceptan." (P2)
>
> "Yeah, I'd say they think that way. Because the majority of my friends are like pro-life , pro… everything, so like yeah they'd be accepting." (P2)

Some had had affirmative interactions with their friends around the topic of childbearing:

> "mis amigas, pues me han dicho igual que si he querido tener hijos y pues me dirían que estuviera padre." (P3)
>
> "My friends, well they've asked me if I want to have kids and I mean they'd tell me that's awesome." (P3)

None of the participants reported feeling as though their friends would be unsupportive of their decision to have a child. However, some participants relayed not having strong friendship networks outside of their family.

Family networks carried a more varied role in participants' lives. Some had supportive parents, whereas others said that one parent would be supportive of their decision to have a child and another parent would be antagonistic. Some recalled comments that family members had made about same-sex parents, questioning how it was possible or remarking about how it was immoral. Others reported having the support of their family. For some participants this was intuited

whereas others had actually discussed the issue of future parenting with their families and knew that they had their families' support if and when they decided to have a child:

> "Pues sé que mi papá quiere que le dé nietos. Él está seguro y él está convencido de que voy a tener hijos… y sabe que va a ser en un matrimonio homoparental y él está feliz con eso." (P15)
>
> "Well I know my dad wants me to give him grandchildren. He's certain, he's convinced that I'm going to have children… and he knows it will be in a homosexual partnership and he's happy with that. (P15)

Discussing the topic with their families and receiving their support seemed to be a motivator for most participants.

Despite most participants being desiring of having a child, participants who mentioned it cast the gay community as unsupportive towards the idea of childbearing. It was talked about as being an untraditional desire within the gay community, with participants' sharing how their friends who identified as gay often did not understand their desire to become a parent.

However, there was a common opinion among participants that in the end the decision to have a child lay with them, and sometimes their partners. They remarked that no matter what friends, family, or society opined, the decision was ultimately up to them.

Partnering

Another barrier that participants reported was the difficulty finding a romantic partner. Though some participants who said they wanted children said they would still want to become parents even if they were not in a stable relationship, it was evident that many of the participants desired having someone with whom to share their lives. Again, this phenomenon seemed to be based on both their sexuality and their HIV status. Some participants believed that their sexual orientation

would make it difficult to find a stable partner, stating their opinions that there was too much promiscuity in the gay community and that the other gay men they knew were just looking for more sexual partners and were not looking to settle down. They also discussed their HIV status as a significant deterrent for being able to find a partner. According to most participants, there exists a large amount of stigma towards PLWH.

> "Pues no sé yo siento que ya no va a ser fácil tener una pareja ahora así. Eso es lo que me- me detiene… si otras personas que escuchan "VIH" *uy*, casi que les dijiste que ya los vas a matar." (P6)
>
> "I feel like it's not going to be easy to find a partner now [that I have HIV]. That's what holds me back… if other people hear 'HIV', oof, it's almost like you told them you're going to kill them." (P6)

Conversely, for those who did (or expected to) have a stable partner, this made them more likely to want to have a child in the future.

> "A lo mejor si me caso sí me gustaría tener una familia bien, la pareja con la que yo esté y mi hijo." (P9)
>
> "Maybe if I got married I'd like to have a "right" family, a partner whom I am with and my son." (P9)

Mental health

Another prerequisite that came up in participants' minds was the need to have sound mental health before considering having a child.

> "Pues, bien por ellos. Siempre y cuando sean responsables y le puedan brindar a ese hijo toda la educación y la vida de calidad que necesite… Así como a las personas del mismo sexo se les hacen unas pinche
>
> "Well, good for them. As long as they are responsible and can provide that child all of the education and quality of life it needs… Just like same-sex couples are subjected to a *curse word* series of surveys

> series de encuestas y estudios para ver si son capaces de adoptar, se le deberían de hacer estas mismas pinches encuestas y estudios a las personas que realmente quieren tener hijos. O sea, ok, ya me embaracé, ahora tengo que someterme a estas encuestas y estudios para ver si realmente tengo la salud mental para poder cuidar a un niño, tengo la solvencia económica para que no le falte nada, carezco de mentalidades de odio… Entonces, está bien que tengas- que tengan hijos todos, todes. Realmente están en su derecho siempre y cuando cumplan con la obligación de ser padres." (P4)

> and studies to see if they're capable of adopting, those same surveys and studies should be done with anyone who really wants to have children. I mean, 'ok, I'm pregnant. Now I have to take part in all these surveys and studies to see if I really have the mental health to be able to take care of a child, whether I have the financial means so that the child is not missing anything, am I lacking hateful ideologies?'... So it's ok that everyone has children. It's really within their right as long as they fulfill the obligation of being a parent. (P4)

Though a minority of the participants were taking advantage of the free counselling services, the prevalent discourse around mental health was the difficulty accessing services, their families' disregard for mental health, and the toll HIV and their sexual orientation had taken on their mental health. Interestingly, the physical health of future parents did not arise in interviews, except for in the context of HIV.

HIV

Importantly, most of the participants did not see HIV as an obstacle to accomplishing their goals.

> "Yo creo que el VIH es como una característica más que yo tengo, así como puedo decir que soy intolerante a la lactosa. No considero que sea un obstáculo. Creo que puede… puede dificultar un poco las

> "I think that HIV is like another characteristic I have, like being lactose intolerant. I don't see it as an obstacle. I think it can… make some things more difficult, because there are still a lot of stupid

cosas, porque aún hay personas muy estúpidas, pero no lo veo como un obstáculo. Yo creo que, en lugar de verlo como un obstáculo, tengo que verlo como algo que me impulse para callar a esas personas que creen que a una persona con VIH se le acabó la vida." (P15)	people in the world, but I don't see it as an obstacle. I think in lieu of seeing it as an obstacle I need to see it like something that pushes me quiet those people who believe that for someone with HIV it means their life is over." (P15)

The aspect of their lives that appeared to be most affected by HIV was the ability to have children. However, as has been related, these obstacles appeared to be mainly on the basis of a fear of transmission and discrimination due to their serostatus, not in terms of it hindering them from being good parents. Most participants did not feel as though HIV disqualified one from being a parent.

"Creo que no deberías como que… tener miedo de querer tener un hijo… el VIH no debería de influir en ningún aspecto de tu vida, ni social, ni con tu familia, ni nada." (P8)	"I don't think you should like… be afraid of wanting to have a child… HIV shouldn't influence any aspect of your life, not social, nor with your family, nothing." (P8)

The exception was that a minority of participants mentioned the fear of dying or being too sick to take care of children:

"ya estando enfermo o algo así no voy a poder cuidar de ellos." (P14)	"being sick or something like that I won't be able to take care of them [my children]." (P14)

These participants, however, had had more recent diagnoses and had had difficult experiences, namely seeing someone die as a result of complications of HIV. Those who had been living with

HIV for more than a few months tended have a much more optimistic view of their futures. They spoke about how being undetectable meant you could have a normal life, other than having to take a pill every day. This view had largely been influenced by their HIV providers.

> "Pues ahí no, no habría ningún obstáculo. ¿Por qué? Porque si sé que voy a estar bien tomando mis medicinas y todo eso, pues no creo que haya ningún obstáculo. Con mi hija, pues no creo yo contagiarla porque pues no, no vamos a utilizar el mismo rastrillo, esto y lo otro. No va a ver contagio de nada porque al llegar al indetectable, me dijo la doctora que, que ya no puedo contagiar." (P10)

> "Well there there'd be no obstacle. Why? Because if I know that I'm going to be ok taking my meds and all that, well I don't think there's any obstacle. With my daughter, well I don't think I'll infect her because I mean we won't use the same razor or anything like that. There's no chance of infecting her because being undetectable, the doctor told me I can't infect someone else." (P10)

Lack of information

There was a general lack of information about the subject of childbearing that came up in almost every interview. Many participants had no knowledge of prevention of mother-to-child transmission, and thus had never considered using artificial insemination and other reproductive technologies. Others had never even heard about or thought about the ways in which gay parents could have children. Participants often said they were unsure as to the costs associated with the childbearing methods they were interested in, be they adoption or other reproductive technologies, and thus were not sure if utilizing them was an option within their realms of possibility. When the legality of gay marriage or gay parenting came up, most participants could not say whether or not it was legal for them to get married, to adopt, or to have a child by another mean. Participants said that it was difficult to receive any information about childbearing.

"Bueno, es que no sé si a lo mejor soy yo el único que no sabe mucho del tema [de tener hijos]… no sé porque como a mí cuando me diagnosticaron el VIH yo no sabía absolutamente nada, entonces a lo mejor y algunas personas sí estaban más informadas y yo era como el que no." (P9)	"Well I mean it's just that I don't know if maybe I'm the only one who doesn't know much about the topic [of childbearing]… I don't know because when I was diagnosed with HIV I didn't know absolutely anything, so maybe other people are more informed [about childbearing] and I'm like the one that doesn't know." (P9)

There was a desire, arising in nearly every interview, on the part of the participants for their HIV providers to provide them with more information regarding their options for having children.

"…informarles sobre el tema. O sacarles el tema y decirles como de… no sé, preguntarles más que nada. Porque muchas veces o sea crees que no sé, no va a pasar nada o te da pena preguntar o cosas así. Pero pues ¿qué mejor que tengas la información o que la clínica de cierta forma te pueda brindar? Y decirte como 'oye o sea si piensas tener hijos' o algo así, 'o sea tenemos como… o sea tenemos que seguir esto, ¿sabes? Y nosotros tenemos esto.'" (P12)	"…inform [us] about the subject [of childbearing]. Or bring up the topic and… I don't know, more than anything to ask [us] about it. Because a lot of times they think that, I don't know, [we're] uninterested or maybe [we're] scared to ask about it out of pity. But I mean what's better than having all the information that the clinic is capable of giving you? If they just asked you 'hey are you thinking of having kids?' or something like that, 'I mean we have like… these options and we can follow up on it.'" (P12)

Participants described their options to inform themselves on the subject as limited and related that what was available, predominantly on the internet, was untrustworthy and did not compare to face-to-face discussions with their physician.

Discussion

Young GMSM living with HIV in Mexico City are desiring of having children, but lack specific knowledge about barriers that they might face or strategies to overcome them. They formulate these parenting desires based on a variety of factors, including wanting to share their love, leave their mark on the world, and recreate or atone for their own family experiences. Despite feeling on like they had been ostracized by Mexican society on the basis of their sexual orientation, these young men still appeared to be influenced by the traditional Mexican ideal of masculinity, that to become a "real" man you must be married, have children, and provide for your family (Salguero Velásquez, 2006). They tried to navigate this heteronormativity in different ways: by wanting to impart a differing ideology upon their children, seeking alternative childbearing methods, or sometimes abandoning the desire to have children altogether.

Their anecdotes are consistent with previous literature with regards to the distinct obstacles gay men and PLWH face with regards to becoming parents. Not only did these men resemble heterosexual men in having to worry about having a loving partner and being financially stable, but they also had to contend with obstacles such as the biological infeasibility of gestating a fetus, the fear of current and future discrimination for themselves and for their families, and questions regarding the legality of their desire to have a child. Though the confluence of these two identities would be expected to make these individuals very unlikely to desire to have children in the future out of a belief of futility, the participants were largely optimistic about the prospects of young GMSM living with HIV having children, regardless of their own individual parenting desire. Though societal stigma was a very real fear, the prevalent idea was that Mexican views towards homosexuality were progressing towards equity. The messaging around viral suppression and "undetectable equals untransmissible" appears to have been successful in

Mexico as these young men did not see HIV as an obstacle to accomplishing their goals, be they regarding childbearing or otherwise, with views towards HIV as an impediment appearing to be tempered through time.

Overall there seemed to be a general preference for adoption via other methods such as surrogacy via assisted reproductive technologies, which may prove beneficial as adoption seems a more attainable route to parenthood for these young men. Though it is not within the scope of this paper to discuss the ethics of surrogacy at length, surrogacy does seem to be a largely unattainable goal for persons fitting the profile of those most at risk for HIV – i.e. from a low SES and likely to face stigma from their communities. However, there is no biological reason why GMSM living with HIV would not be able to father a healthy, HIV-negative child via surrogacy given the effectiveness of antiretroviral treatment and sperm washing technologies (Zafer et al., 2016). This is an important fact given that many of the participants seemed to have considered their HIV diagnosis to have rendered their chances at biological fatherhood null, and there was evidence to suggest that participants may have had more of a preference for having a genetically related child if they considered it something within their reach.

Though many participants desired to have children, only one had actually discussed it with his HIV care provider. Though their young age may be influencing this phenomenon, the findings from this study imply that these young men are thinking about childbearing but are afraid or unwilling to discuss the matter with their HIV providers. This presents an opportunity for HIV providers to be instigating and facilitating these conversations, particularly at an early age when GMSM living with HIV still express high levels of optimism in terms of their prospects of having children. We certainly do not intend to imply any obligation to parenthood, whether positive or negative, but rather hold that that any individual who desires to have children should

have an equal opportunity to do so and make an informed choice about the matter. Eliminating the barriers for gay men living with HIV who are actively trying to have children may result in an increased parenting desire among gay men in Mexico, who currently may be suppressing their desires out of a perceived futility and lack of gay role models living with HIV who are carrying out their childbearing intentions. Alternatively, easing the heteronormative pressure to emulate the traditional Mexican family structure may result in fewer gay men expressing a desire to have children. More thorough research is required, both in Mexico and worldwide, into the influences of gay men living with HIV's parenting desires, the feasibility of their having children, potential routes to this goal, and how to best disseminate information regarding childbearing to this vulnerable population.

Limitations

Though we aimed to achieve saturation in terms of common themes arising in interviews, it is possible that further interviews would have allowed us to more fully develop some of the themes that were not touched upon at depth during this round of interviews. This may be particularly true as we aimed to have equal numbers of participants from the CEC and CECI, but due to recruitment challenges the vast majority of participants (N=14) were engaged at care at the CECI. Thus, we are unable to say whether more interviews with patients from the CEC would have offered different perspectives into the topic. Finally, though the principal investigator who conducted the interviews is of Latin American heritage and fully fluent in Spanish he is neither Mexican nor had lived in Mexico prior to data collection and thus may have been lacking in Mexican idiosyncrasies or context that are critical to understanding the topics explored in this study.

Conclusions

Young GMSM living with HIV in Mexico City are desiring of having children but face many barriers to doing so. Interested parties such as activists, clinicians, and policy-makers should advocate for further research to fully understand the factors that influence young GMSM living with HIV's decision-making around parenting. This research could serve to mitigate these barriers and assist them in exercising their reproductive right to make informed choices about the decision to start a family.

Table 1: Participant Demographics

Demographic Characteristic	Mean ± SD or n (%)
Age	19.3 ± 1.1
Sexual Identity	
Gay	15 (93.7)
Bisexual	1 (6.3)
Education	
Primary School Completed	1 (6.3)
Some High School	9 (56.3)
High School	6 (37.5)
Civil Status	
Single	14 (87.5)
Civil Union	1 (6.3)
Widowed	1 (6.3)
Employment	
Student	6 (37.5)
Employed	6 (37.5)
Unemployed, not studying	4 (25)
Viral Load	
Detectable	5 (31.3)
Undetectable	11 (68.8)
Months since diagnosis	15.1 ± 17.4
Income (pesos/month)	
<1500	4 (25)
1500 to 9000	8 (50)
>9000	3 (18.8)
Sexual Debut	15.5 ± 1.6
Desiring Children	11 (68.8)
Living with family	13 (81.2)

Chapter 4: Recommendations

1. Research Regarding Parenting Desires Among Vulnerable Populations

A key issue made clear throughout this research was that there is a dearth of literature regarding the parenting desires and intentions of vulnerable populations such as LGBTQ+ individuals and PLWH. Perhaps this stems from the prevalent assumption that the factors working against a man who is both gay and living with HIV are so great as to be insurmountable, and that these men were better off disregarding whatever parenting intentions they may have had before receiving their HIV diagnoses. Exmining the parenting desires of young GMSM living with HIV in Mexico via surveys or other quantitative means would provide further justification for the need to mitigate the barriers these men encounter when trying to realize their childbearing desires. Furthermore, I was able to come across some patients at the clinic who had in fact succeeded in realizing their childbearing intentions. Perhaps the next line of inquiry would be to learn about these men's experiences and how they were able to accomplish their goals of having children. If we are to successfully realize the promise of reproductive justice, then we cannot forget to include those falling under the double marginalization that GMSM living with HIV have to contend with.

2. Advocate for the Explicit National Legalization of Adoption Rights of LGBTQ+ Persons and PLWH

Even after extensive research into the subject, I remain unable to fully delineate what options, if any, a gay man living with HIV in Mexico has to pursue their intention to have a

child. There is a critical lack of legislation regarding HIV that theoretically could be interpreted in that PLWH are not prohibited and thus are able to adopt children. Considering the way in which the lack of legislation around surrogacy serves to effectively preclude gay men from accessing the services, the lack of legislation around adoption in practice likely lends itself to allow individual centers and services to discriminate against PLWH, gay men or otherwise, and virtually exclude them from being able to adopt. The Supreme Court has ruled that any person in Mexico has the right to adopt regardless of their sexual orientation, the same should be done regarding HIV status. Advocates and lawyers should push for this right to adopt to be enshrined as well as for there to be national legislation regarding LGBTQ+ individuals' right to adopt, rather than subjecting them to an arduous injunction in states that have not amended their civil codes.

3. Increase Provider-Patient Communication Around Childbearing

A prevalent theme in this research was the trust these young men had in their HIV providers. The success of the discourse around undetectable = untransmissible was evidently comprehensive in the fact that the vast majority of the participants (except for a small minority of recently diagnosed individuals who had undergone traumatic experiences) felt optimistic about their prospects in life despite their HIV status. Although nuances are missing from that conversation, in that the long-term effects of HIV are not altogether clear, I believe it a success for these young men to be able to view a once fatal diagnosis as an altogether manageable disease. There is no reason why the same sort of discourse cannot exist around the topic of childbearing, with providers being able bring up the subject with their patients and address their concerns. It became evident that it would have to be the providers initiating

these conversations due to the hierarchal nature of clinician-patient dynamics in Mexico, though this could have been a result of the young age of the participants involved in this research. I do not mean to place blame on the HIV providers at the Condesa Clinic system, who are in fact doing an exemplary job in providing HIV treatment to the greater Mexico City populace. Rather, I advocate for something resembling clear guidelines and a thorough review of the childbearing possibilities that could be made available to clinicians, who would then be able to have informed conversations with their patients.

4. Condesa Clinic Programs Focusing on Childbearing

This next section stems from the recommendations participants themselves gave in how the clinic could help aid patients like themselves who are deciding whether or not they want to have children in the future. The most common source the participants relied on was the internet, despite being in agreement that it was not a wholly dependable source. The Condesa Clinic could take this opportunity to create their own Internet page on the subject – potentially curating available information and presenting it in clear manner. Thus, patients would know where to first turn if and when they had questions regarding their ability to have children as PLWH. Many of the participants mentioned watching videos on YouTube and elsewhere regarding HIV, childbearing, coming out, or a variety of other topics. If the Condesa Clinics were to proceed with creating or finding informational material regarding childbearing then they would do well to take note of the effectiveness of video-based learning in transmitting messaging, at least as it pertains to their younger patient population.

For many participants, our interview was the first time they had reflected on their childbearing intentions, perhaps contributing to why the discussion had never arisen during

consults with their providers. Participants recalled seeing pamphlets and flyers regarding health messaging posted throughout the clinic and in the providers' consults. Were the same to be done with information about childbearing, patients might be more inclined to raise the issue with their HIV provider and ask questions. Participants also mentioned informational talks given at the clinic, which they found useful due to the opportunity to learn from both medical professionals and other PLWH. This again would be another opportunity for the Condesa Clinic to take a proactive stance on this topic and bring together interested parties to discuss and inform themselves about the issue.

5. Increase Mental Health Services and Social Support

Finally, it is evident that many of these young men were in need of mental health services and social support. Many of the participants spoke about estrangement from the gay community, other PLWH, and/or people their age in general. They also recounted difficult experiences with their families during their coming out and disclosure processes, if these had occurred at all. I would encourage the Condesa Clinic (and organizations elsewhere) to consider the formation of social support groups, particularly among young people, for whom navigating their sexual orientation and HIV status can add to an already difficult time in their lives as they navigate their adolescence. Though some of these programs did exist, they appeared to be poorly attended, likely due to a lack of publicity and difficulty in reaching these programs. Research exists on how to successfully implement these types of programs, however, which could be beneficial for the Condesa Clinics if they were to consider implementing and expanding these programs.

Though counseling is available at the Condesa Clinics, few participants had taken advantage of these services. I would recommend research investigating why this is the case, as well as in how to increase patient uptake of these services. The dialogue in Mexico City around mental health appears to be seriously lacking, as it does in many other Latin American settings. Providing effective communication on how to incorporate mental health care into one's health treatment, particularly among individuals with the unique identities of this research population that dispose them to poor mental health outcomes, would be invaluable in improving patients' overall health.

References

Amodeo, A. L., Esposito, C., Bochicchio, V., Valerio, P., Vitelli, R., Bacchini, D., & Scandurra, C. (2018). Parenting Desire and Minority Stress in Lesbians and Gay Men: A Mediation Framework. *Int J Environ Res Public Health, 15*(10). doi:10.3390/ijerph15102318

Andiman, W. A., Simpson, B. J., Olson, B., Dember, L., Silva, T. J., & Miller, G. (1990). Rate of transmission of human immunodeficiency virus type 1 infection from mother to child and short-term outcome of neonatal infection. Results of a prospective cohort study. *Am J Dis Child, 144*(7), 758-766. doi:10.1001/archpedi.1990.02150310026020

Decreto de ley de sociedad de convivencia para el distrito federal, (2006).

AVERT. (2018). Young People, HIV, and AIDS. Retrieved from https://www.avert.org/professionals/hiv-social-issues/key-affected-populations/young-people

Baiocco, R., & Laghi, F. (2013). Sexual orientation and the desires and intentions to become parents. *Journal of Family Studies, 19*(1), 90-98. doi:10.5172/jfs.2013.19.1.90

Barnes, D. B., & Murphy, S. (2009). Reproductive decisions for women with HIV: motherhood's role in envisioning a future. *Qual Health Res, 19*(4), 481-491. doi:10.1177/1049732309332835

Bautista-Arredondo, S., Dmytraczenko, T., Kombe, G., & Bertozzi, S. M. (2008). Costing of scaling up HIV/AIDS treatment in Mexico. *Salud Publica Mex, 50 Suppl 4*, S437-444. doi:10.1590/s0036-36342008001000004

Berhan, Y., & Berhan, A. (2013). Meta-analyses of fertility desires of people living with HIV. *BMC Public Health, 13*, 409. doi:10.1186/1471-2458-13-409

Borruso, M. M. (2001). *Género y Homosexualidad entre los Zapotecos del Istmo de Tehuantepec: El Caso de los Muxe.* Colegio de Antropólogos de Chile A. G., Santiago de Chile, IV Congreso Chileno de Antropología. Retrieved from https://www.aacademica.org/iv.congreso.chileno.de.antropologia/101

Burnett, V. (2017). As Mexican State Limits Surrogacy, Global System Is Further Constrained. *New York Times*. Retrieved from https://www.nytimes.com/2017/03/23/world/americas/as-mexican-state-limits-surrogacy-global-system-is-further-strained.html

DICTAMEN DE LA COMISIÓN DE SEGURIDAD SOCIAL, SOBRE LA MINUTO CON PROYECTO DE DECRETO POR EL QUE SE REFORMA Y ADICIONA DIVERSAS DISPOSIOCIONES DE LA LEY DEL SEGURO SOCIAL Y DE LA LEY DEL INSTITUTO DE SEGURIDAD Y SERVICIOS SOCIALES DE LOS TRABAJADORES DEL ESTADO, EN MATERIA DE SEGURIDAD SOCIAL PARA LOS CÓNYUGES DEL MISMO SEXO, (2018).

CENSIDA. (2016). *Vigilancia Epidemiológica de casos de VIH/SIDA en México Registro Nacional de Casos de SIDA Actualización al 15 de noviembre de 2016*. Retrieved from http://www.censida.salud.gob.mx/descargas/epidemiologia/RN_DIA_MUNDIAL_2016a.pdf

CENSIDA. (2020). *BOLETÍN DE ATENCIÓN INTEGRAL DE PERSONAS CON VIH*. Mexico: Gobierno de Mexico Retrieved from https://www.gob.mx/cms/uploads/attachment/file/545616/Bolet_n_DAI_4to_trimestre_VF.pdf

Cooper, D., Harries, J., Myer, L., Orner, P., Bracken, H., & Zweigenthal, V. (2007). "Life is still going on": reproductive intentions among HIV-positive women and men in South Africa. *Soc Sci Med, 65*(2), 274-283. doi:10.1016/j.socscimed.2007.03.019

Cooper, E. R., Charurat, M., Mofenson, L., Hanson, I. C., Pitt, J., Diaz, C., . . . Blattner, W. (2002). Combination antiretroviral strategies for the treatment of pregnant HIV-1-infected women and prevention of perinatal HIV-1 transmission. *J Acquir Immune Defic Syndr, 29*(5), 484-494. doi:10.1097/00126334-200204150-00009

Correa Romero, F. E., García y Barragan, L. F., & Saldívar Garduño, A. (2013). Estereotipo de paternidad e identidad de género en adolescentes de la Ciudad de México. *Revista Iberoamericana de Psicología: Ciencia y Tecnología, 6*(1), 41-50. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=4905180

Costa, P. A., & Salinas-Quiroz, F. (2019). A Comparative Study of Attitudes Toward Same-Gender Parenting and Gay and Lesbian Rights in Portugal and in Mexico. *J Homosex, 66*(13), 1909-1926. doi:10.1080/00918369.2018.1519303

Cuca, Y. P., & Rose, C. D. (2016). Social Stigma and Childbearing for Women Living With HIV/AIDS. *Qual Health Res, 26*(11), 1508-1518. doi:10.1177/1049732315596150

de Bruyn, M. (2006). Women, reproductive rights, and HIV/AIDS: issues on which research and interventions are still needed. *J Health Popul Nutr, 24*(4), 413-425.

El Sol de Mexico. (2019a). Corte facilita registro de hijos para parejas gay. *El Sol de Mexico,*. Retrieved from https://www.elsoldemexico.com.mx/mexico/sociedad/corte-facilita-registro-de-hijos-para-parejas-gay-3641016.html

El Sol de Mexico. (2019b). Quién está en contra del matrimonio gay? Retrieved from https://issuu.com/elsoldemexico/docs/web-data_matrimonio_gay

El Universal. (2019, December 18, 2019). Propone Morena reforma para garantizar matrimonio igualitario en México. *El Universal*. Retrieved from https://www.elsiglodetorreon.com.mx/noticia/1653990.propone-morena-reforma-para-garantizar-matrimonio-igualitario-en-mexico.html

Frost, D. M., Meyer, I. H., & Schwartz, S. (2016). Social support networks among diverse sexual minority populations. *American Journal of Orthopsychiatry, 86*(1), 91-102. doi:10.1037/ort0000117

Gobierno de México. (2017). Qué es ser padre en la actualidad? Retrieved from https://www.gob.mx/pensionissste/es/articulos/que-es-ser-padre?idiom=es

Gobierno de México. (2018). Las madres en cifras. Retrieved from https://www.gob.mx/inmujeres/articulos/las-madres-en-cifras

Goldberg, A. E. (2010). *Lesbian and gay parents and their children: Research on the family life cycle*. Washington, DC, US: American Psychological Association.

Goldberg, A. E., Downing, J. B., & Moyer, A. M. (2012). Why Parenthood, and Why Now?: Gay Men's Motivations for Pursuing Parenthood. *Fam Relat, 61*(1), 157-174. doi:10.1111/j.1741-3729.2011.00687.x

Goldberg, A. E., & Smith, J. Z. (2011). Stigma, social context, and mental health: lesbian and gay couples across the transition to adoptive parenthood. *J Couns Psychol, 58*(1), 139-150. doi:10.1037/a0021684

Greenberg, D. F. (1988). *The Construction of Homosexuality*. Chicago: University of Chicago Press, 1990.

Human immunodeficiency virus and infertility treatment. (2010). *Fertil Steril, 94*(1), 11-15. doi:10.1016/j.fertnstert.2010.01.077

Infante, C., Zarco, A., Cuadra, S. M., Morrison, K., Caballero, M., Bronfman, M., & Magis, C. (2006). HIV/AIDS-related stigma and discrimination: The case of health care providers in Mexico (El estigma asociado al VIH/SIDA: El caso de los prestadores de servicios de salud en México. *Salud Publica de Mexico, 48(2)*, 141-150.

Jacobson, H. (2018). A limited market: the recruitment of gay men as surrogacy clients by the infertility industry in the USA. *Reproductive biomedicine & society online, 7*, 14-23. doi:10.1016/j.rbms.2018.10.019

Kahn, C. (2015). How Mexico Quietly Legalized Same-Sex Marriage. *NPR*. Retrieved from https://www.npr.org/sections/parallels/2015/06/16/414964843/how-mexico-quietly-legalized-same-sex-marriage

Klein, J., Pena, J. E., Thornton, M. H., & Sauer, M. V. (2003). Understanding the motivations, concerns, and desires of human immunodeficiency virus 1-serodiscordant couples wishing to have children through assisted reproduction. *Obstet Gynecol, 101*(5 Pt 1), 987-994.

Laguna Maqueda, O. E. (2016). Arreglos parentales de varones gay en la Ciudad de México: De la paternidad negada a la transformación inadvertida del cuidado. *Másculinidades y cambio social, 5*, 182-204.

Lavner, J. A., Waterman, J., & Peplau, L. A. (2012). Can gay and lesbian parents promote healthy development in high-risk children adopted from foster care? *Am J Orthopsychiatry, 82*(4), 465-472. doi:10.1111/j.1939-0025.2012.01176.x

Mallon, G. P. (2004). *Gay men choosing parenthood*. New York: Columbia University Press.

Martins, A., Alves, S., Chaves, C., Canavarro, M. C., & Pereira, M. (2019). Prevalence and factors associated with fertility desires/intentions among individuals in HIV-serodiscordant relationships: a systematic review of empirical studies. *J Int AIDS Soc, 22*(5), e25241. doi:10.1002/jia2.25241

Nachega, J. B., Hislop, M., Nguyen, H., Dowdy, D. W., Chaisson, R. E., Regensberg, L., . . . Maartens, G. (2009). Antiretroviral therapy adherence, virologic and immunologic outcomes in adolescents compared with adults in southern Africa. *J Acquir Immune Defic Syndr, 51*(1), 65-71. doi:10.1097/QAI.0b013e318199072e

Nattabi, B., Li, J., Thompson, S. C., Orach, C. G., & Earnest, J. (2009). A systematic review of factors influencing fertility desires and intentions among people living with HIV/AIDS: implications for policy and service delivery. *AIDS Behav, 13*(5), 949-968. doi:10.1007/s10461-009-9537-y

Newmeyer, T., Tecimer, S. N., Jaworsky, D., Chihrin, S., Gough, K., Rachlis, A., . . . Loutfy, M. R. (2011). Case series of fertility treatment in HIV-discordant couples (male positive, female negative): the Ontario experience. *PLoS One, 6*(9), e24853. doi:10.1371/journal.pone.0024853

Nobrega, A. A., Oliveira, F. A., Galvao, M. T., Mota, R. S., Barbosa, R. M., Dourado, I., . . . Kerr-Pontes, L. R. (2007). Desire for a child among women living with HIV/AIDS in northeast Brazil. *AIDS Patient Care STDS, 21*(4), 261-267. doi:10.1089/apc.2006.0116

Norton, W., Crawshaw, M., Hudson, N., Culley, L., & Law, C. (2015). A survey of UK fertility clinics' approach to surrogacy arrangements. *Reprod Biomed Online, 31*(3), 327-338. doi:10.1016/j.rbmo.2015.06.009

Nostlinger, C., Desjardins, F., Dec, J., Platteau, T., & Hasker, E. (2013). Child desire in women and men living with HIV attending HIV outpatient clinics: evidence from a European

multicentre study. *Eur J Contracept Reprod Health Care, 18*(4), 251-263. doi:10.3109/13625187.2013.801072

Pantelic, M., Boyes, M., Cluver, L., & Meinck, F. (2017). HIV, violence, blame and shame: pathways of risk to internalized HIV stigma among South African adolescents living with HIV. *J Int AIDS Soc, 20*(1), 21771. doi:10.7448/ias.20.1.21771

Perkins, K. M., Boulet, S. L., Jamieson, D. J., & Kissin, D. M. (2016). Trends and outcomes of gestational surrogacy in the United States. *Fertil Steril, 106*(2), 435-442.e432. doi:10.1016/j.fertnstert.2016.03.050

Perrin, E. C., Hurley, S. M., Mattern, K., Flavin, L., & Pinderhughes, E. E. (2019). Barriers and Stigma Experienced by Gay Fathers and Their Children. *Pediatrics, 143*(2). doi:10.1542/peds.2018-0683

Perrin, E. C., Pinderhughes, E. E., Mattern, K., Hurley, S. M., & Newman, R. A. (2016). Experiences of Children With Gay Fathers. *Clin Pediatr (Phila), 55*(14), 1305-1317. doi:10.1177/0009922816632346

Ramos, I., García y Barragan, L. F., Saldívar Garduño, A., & Contreras-Ibáñez, C. C. (2001). *Percepción de los varones adolescentes sobre la paternidad*. Paper presented at the IX congreso mexicano de psicología, México.

Riggs, D. W., & Due, C. (2014). Gay fathers' reproductive journeys and parenting experiences: a review of research. *J Fam Plann Reprod Health Care, 40*(4), 289-293. doi:10.1136/jfprhc-2013-100670

Riskind, R. G., & Patterson, C. J. (2010). Parenting intentions and desires among childless lesbian, gay, and heterosexual individuals. *J Fam Psychol, 24*(1), 78-81. doi:10.1037/a0017941

Riskind, R. G., & Tornello, S. L. (2017). Sexual orientation and future parenthood in a 2011-2013 nationally representative United States sample. *J Fam Psychol, 31*(6), 792-798. doi:10.1037/fam0000316

Rodríguez Martínez, E. (2010). Los matrimonios homosexuales en el Distrito Federal: Algunas consideraciones en torno a la reforma a los códigos Civil y de Procedimientos Civiles. *Boletín mexicano de derecho comparado, 43*, 943-955. Retrieved from http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0041-86332010000200012&nrm=iso

Salguero Velásquez, A. (2006). Identidad, responsabilidad familiar y ejercicio de la paternidad en varones del Estado de México. *Papeles de población, 12*, 155-179. Retrieved from http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1405-74252006000200008&nrm=iso

Salinas-Quiroz, F., Costa, P. A., & Lozano-Verduzco, I. (2019). Parenting Aspiration among Diverse Sexual Orientations and Gender Identities in Mexico, and Its Association with Internalized Homo/Transnegativity and Connectedness to the LGBTQ Community. *Journal of Family Issues*, 0192513X19881675. doi:10.1177/0192513X19881675

Schindler, H. S. (2010). The Importance of Parenting and Financial Contributions in Promoting Fathers' Psychological Health. *Journal of Marriage and Family, 72*(2), 318-332. doi:10.1111/j.1741-3737.2010.00702.x

Shenkman, G. (2012). The gap between fatherhood and couplehood desires among Israeli gay men and estimations of their likelihood. *J Fam Psychol, 26*(5), 828-832. doi:10.1037/a0029471

Siedner, M. J., & Triant, V. (2019). Undetectable = Untransmittable and Your Health: The Personal Benefits of Early and Continuous Therapy for HIV Infection. *The Journal of infectious diseases, 219*(2), 173-176. doi:10.1093/infdis/jiy445

Smietana, M. (2019). Procreative consciousness in a global market: gay men's paths to surrogacy in the USA. *Reproductive biomedicine & society online, 7*, 101-111. doi:10.1016/j.rbms.2019.03.001

Spring, K. (2017). *Progress towards 90-90-90: Mexico Call to Action (2014)*. Retrieved from http://onusidalac.org/1/images/2017/dia1/Sess3-Spring-Monitoring90-90-90.pdf

Stacey, J. (2018). Queer reproductive justice? *Reprod Biomed Soc Online, 7*, 4-7. doi:10.1016/j.rbms.2018.06.004

DERECHO A LA VIDA FAMILIAR DE LAS PAREJAS DEL MISMO SEXO, (2017).

Tate, D. P., Patterson, C. J., & Levy, A. J. (2019). Predictors of parenting intentions among childless lesbian, gay, and heterosexual adults. *J Fam Psychol, 33*(2), 194-202. doi:10.1037/fam0000499

Temmerman, M., Nyong'o, A. O., Bwayo, J., Fransen, K., Coppens, M., & Piot, P. (1995). Risk factors for mother-to-child transmission of human immunodeficiency virus-1 infection. *Am J Obstet Gynecol, 172*(2 Pt 1), 700-705. doi:10.1016/0002-9378(95)90597-9

The Lancet, H. (2017). U=U taking off in 2017. *Lancet HIV, 4*(11), e475. doi:10.1016/s2352-3018(17)30183-2

UNAIDS. (2014). *The Gap Report*. Retrieved from Geneva: http://www.unaids.org/sites/default/files/media_asset/UNAIDS_Gap_report_en.pdf

UNAIDS. (2017). Country Factsheets: Mexico. Retrieved from http://www.unaids.org/en/regionscountries/countries/mexico

Underhill, A. A., Kennedy, V. L., Lewis, J., Ross, L. E., & Loutfy, M. (2016). Assessing access for prospective adoptive parents living with HIV: an environmental scan of Ontario's adoption agencies. *AIDS Care, 28*(10), 1269-1273. doi:10.1080/09540121.2016.1173643

Wesley, Y., Smeltzer, S. C., Redeker, N. S., Walker, S., Palumbo, P., & Whipple, B. (2000). Reproductive decision making in mothers with HIV-1. *Health Care Women Int, 21*(4), 291-304. doi:10.1080/073993300245159

WHO. (2014). Health for the World's Adolescents. Retrieved from http://apps.who.int/adolescent/second-decade/section2

Zafer, M., Horvath, H., Mmeje, O., van der Poel, S., Semprini, A. E., Rutherford, G., & Brown, J. (2016). Effectiveness of semen washing to prevent human immunodeficiency virus (HIV) transmission and assist pregnancy in HIV-discordant couples: a systematic review and meta-analysis. *Fertil Steril, 105*(3), 645-655.e642. doi:10.1016/j.fertnstert.2015.11.028

Appendix 1 – Interview Guide

Me gustaría empezar platicando de tu familia.

1. ¿Me cuentas un poco de ti?
    a. ¿A que te dedicas?
    b. ¿Con quien vives?
    c. ¿Qué actividades realizas en tu tiempo libre?

2. ¿Qué significa la palabra familia para ti? (a quienes consideras tu familia?)
    a. ¿Me podrías contar un poco sobre ella? (¿hay alguien mas con quien no compartes un lazo sanguino que consideras tu familia?)
    b. ¿Quiénes son los miembros de tu familia?
    c. ¿Cómo es la relación con los miembros de tu familia?
    d. ¿Cuál es la importancia de tu familia en tu vida?
    e. ¿Tienes algún amigo que también vive con VIH? ¿Eres parte de algún grupo de apoyo para personas viviendo con VIH? ¿Cuál es la importancia de esa(s) persona(s)/ese grupo en tu vida?

Ahora me gustaría platicar un poco sobre tu diagnostico de VIH y tu orientación sexual. Solo te quiero recordar que si en cualquier momento no te sientes cómodo o no quieres responder a una pregunta me avisas y la podemos saltar.

3. ¿Cuéntame como conociste tu diagnostico de VIH?
    a. ¿Cómo te sentiste?
    b. ¿Por qué decidiste hacerte la prueba? ¿Cómo fue la experiencia? (¿en algún momento pensaste que podrías adquirir el VIH?)
    c. ¿Me podrías platicar algunas experiencias (buenas o malas) que has tenido al compartir tu diagnostico con otras personas?
    d. Ahora, ¿Cómo te sientes?

4. ¿Qué entiendes por orientación sexual?
    a. ¿Qué palabra utilizarías para describir tu orientación sexual?
    b. ¿Cómo te sientes con tu orientación?
    c. ¿Qué experiencias has tenido a lo largo de tu vida tanto positivas como negativas compartiendo tu orientación sexual?

Ahora me gustaría hablar sobre tu percepción del futuro.

5. ¿Cómo te ves en diez años?
    a. ¿Qué expectativas laborales y profesionales tienes para el futuro?
    b. ¿Te gustaría casarte? ¿Por qué si/no?
    c. ¿Te gustaría tener hijos? ¿Por qué si/no?
    d. ¿Qué otros planes tienes para el futuro?
    e. ¿Qué aspectos consideras te impiden realizar tus objetivos planteados para el futuro?

f. ¿Consideras que tu proyecto de vida ha cambiado a partir del diagnostico de VIH? ¿Cómo?

6. ¿Cómo definirías una enfermedad crónica degenerativa? (diabetes, hipertensión)
    a. ¿Te parece que el VIH entra en esa clasificación? ¿Por qué?
    b. ¿Qué implicaciones hacia el futuro tiene para ti el vivir con VIH? (medicamentos, afectos adversos, vida sexual)
    c. ¿Conoces a alguien que ha estado viviendo con VIH por varios años? ¿Me platicas de ellos? (fuentes de información – adultos, médicos, investigación?)

7. ¿Qué significa para ti el ser indetectable?
    a. ¿De donde recibes tu información sobre ser indetectable?
    b. Cuéntame de cualquier campaña sobre que quiere decir el ser indetectable que has escuchado hablar.
    c. Cuéntame de lo que crees que piensan tu familia/amigos sobre lo que significa ser indetectable. ¿Crees que están bien informados? ¿Qué tal el tipo mexicano que no conoce a alguien quien vive con VIH?
    d. ¿Qué implicaciones tiene para ti el ser indetectable hacia el futuro?

El resto de las preguntas van a tratar sobre el tema de formar una familia y tener hijos.

8. ¿Cuál es tu opinión sobre las personas [homosexuales] que desean tener hijos?
    a. ¿Qué tan acogedora te parece la Ciudad de México hacia las personas [homosexuales] que desean tener hijos? (zona, edades, tu familia y amigos)
    b. ¿Conoces alguna persona [homosexual] que tiene hijos? ¿Me cuentas sobre ellos?

9. ¿Cuál es tu opinión sobre las personas con VIH que desean tener hijos?
    a. ¿Qué tan acogedora te parece la sociedad mexicana hacia alguien viviendo con VIH que desea tener hijos? (zona, edades, tu familia y amigos)
    b. ¿Conoces a alguien viviendo con VIH que tenga hijos? ¿Me cuentas sobre esa persona?

10. ¿Me podrías contar alguna conversación que hayas tenido con tu doctor o cualquier persona en el sistema medico sobre la posibilidad de tener hijos en el futuro?
    a. (Si han tenido esas conversaciones) – ¿Quién empezó la conversación? ¿Te sentiste cómodo? ¿Ellos te parecían bien informados?
    b. (Si no han tenido esas conversaciones) - ¿Te sentirías cómodo hablando con tu doctor sobre este tema? ¿Hay otra persona con quien preferirías hablar?

11. ¿Conoces alguna opción que las personas [homosexuales] tengan disponible para tener hijos?

12. ¿Cuáles te parecen que son los obstáculos principales que las personas [homosexuales] enfrentan para tener hijos?

Los hombres que tienen sexo con otros hombres, inclusivo aquellos viviendo con VIH, son capaces de tener hijos a través de varias estrategias. Estas incluyen sexo con una mujer, subrogación de vientre, adopción, y el uso de tecnologías reproductivas como la fecundación in vitro y la inseminación intrauterina.

13. ¿Qué sabes sobre estos procesos?

14. ¿Qué piensas sobre estas opciones?
    a. ¿Piensas que estas opciones son viables para ti? ¿Por qué sí/no?
    b. ¿Considerarías utilizar algunas de ellas? ¿Por qué si/no?
    c. ¿Qué impacto piensas que tiene tu diagnostico de VIH en acceder a este tipo de procesos?

Conclusión

15. ¿Cómo te parece que los médicos y los servicios de salud pueden apoyar a personas [homosexuales] que viven con VIH a ejercer su derecho a tener hijos? ¿Qué recomendaciones tienes para nosotros?
16. ¿Qué mas podríamos hacer para ayudarte?
17. Pensando en el momento que recibiste tu diagnostico, si pudieras ¿qué te contarías a ti mismo?