SSM - Qualitative Research in Health 3 (2023) 100233

Contents lists available at ScienceDirect

SSM - Qualitative Research in Health

journal homepage: www.journals.elsevier.com/ssm-qualitative-research-in-health

Between two pandemics: Older, gay men's experiences across HIV/AIDS and COVID-19

Ingrid Handlovsky [a,b,*], Tessa Wonsiak [a], Anthony T. Amato [b,c,d], Michael Halpin [e], Olivier Ferlatte [f,g], Hannah Kia [h]

[a] School of Nursing, University of Victoria, 3800 Finnerty Road, Victoria, BC, V8P 5C2, Canada
[b] Institute on Aging & Lifelong Health, University of Victoria, 3800 Finnerty Road, Victoria, BC, V8P 5C2, Canada
[c] School of Public Health and Social Policy, University of Victoria, 3800 Finnerty Road, Victoria, BC, V8P 5C2, Canada
[d] Community-Based Research Centre, 1007-808 Nelson Street, Vancouver, BC, V6Z 2H2, Canada
[e] Department of Sociology and Social Anthropology, Dalhousie University, Box 15000, Halifax, Nova Scotia, B3H 4R2, Canada
[f] École de Santé Publique de l'Université de Montréal, 7101 Ave. du Parc Montreal, Quebec, H3N 1X9, Canada
[g] Centre de Recherche en Santé Publique, Université de Montréal et CIUSSS du Centre-Sud-de-l'Île-de-Montréal, Canada
[h] UBC School of Social Work, 2080 West Mall, Vancouver, British Columbia, V6T 2Z3, Canada

ARTICLE INFO

Keywords:
Gay men
Aging
HIV/AIDS
COVID-19
Stigma
Discrimination
Public health

ABSTRACT

Pandemics are a component of human life, and have had great bearing on the trajectory of human evolution. Historically, the biomedical aspects of pandemics have been overrepresented, but there is growing recognition of the degree to which pandemics are socially and culturally embedded, highlighting how virus perception is socially and politically informed. Older (50+), gay men represent a population who have experienced two global pandemics in their lifespans: HIV/AIDS and COVID-19. Although governments and health officials largely failed gay men during the HIV/AIDS pandemic, gay men represent an important source of pandemic information and their experiences have much to offer health professionals and policymakers. As such, a small but growing body of literature has compared gay men's experiences amidst the two pandemics. The current study drew on constructivist grounded theory methods to examine how living through the HIV/AIDS pandemic has influenced older gay men's perspectives of COVID-19. Twenty Canadian-based gay men aged 50+ participated in semi-structured interviews via Zoom. Analysis revealed three key processes: (1) uncertainty and the familiarity of loss, (2) witnessing pandemic inequities, and, (3) navigating constantly evolving (mis)information. We highlight the utility of this knowledge to informing future pandemic planning and policies.

1. Introduction

Pandemics are an intricate component of human history, wreaking havoc on populations and greatly affecting the course of human evolution (Jones, 2020; Roth, 2020). It is worthwhile to consider what learning may be gleaned from previous and current pandemics, in an effort to mitigate the challenges imposed on individuals, groups and populations in the wake of future public health crises. Historically, biomedical knowledge has been privileged particularly in health discourses with the recognition that at the core of every pandemic is a pathogen, and the contributions of biomedical science have been invaluable to understanding and consequently mitigating the deleterious effects of these pathogens (Jones, 2020; Roth, 2020). With a growing appreciation in the literature of the influence of social factors and inequities on health outcomes (i.e., social determinants of health) and an extensive body of social research specific to HIV/AIDS (El-Sadr, 2020; Forstein, 2013; Halkitis, 2021) the social aspects of pandemics are receiving more attention (Gregersen, 2020; Halkitis, 2021; Jones, 2020). Socioeconomic status, for example, is identified as a powerful predictor of health; consequently, those living in poverty are much more likely to fall ill and experience further disadvantage amidst a pandemic than those who are not (Hatzenbuehler, Phelan, & Link, 2013; Thomas, 2019; Torres & López-Cevallos, 2021). To add to the growing body of literature that highlights that pandemics are socially and culturally embedded, and the consequent social implications, we conducted a study informed by the research question: how did the HIV/AIDS pandemic shape older gay

* Corresponding author. School of Nursing, University of Victoria, 3800 Finnerty Road, Victoria, BC, V8P 5C2, Canada.
E-mail addresses: ihandlovsky@uvic.ca (I. Handlovsky), twonsiak@uvic.ca (T. Wonsiak), anthonyamato@uvic.ca (A.T. Amato), michael.halpin@dal.ca (M. Halpin), olivier.ferlatte@umontreal.ca (O. Ferlatte), hannah.kia@ubc.ca (H. Kia).

https://doi.org/10.1016/j.ssmqr.2023.100233
Received 14 November 2022; Received in revised form 6 February 2023; Accepted 7 February 2023
Available online 8 February 2023

men's perspectives of COVID-19?

The impact of prevailing political and ideological perspectives greatly shapes the impact of pandemics through influencing perceptions of the pathogen and subsequent public health and prevention efforts (Lupton, 1994; Torres & López-Cevallos, 2021). In North America, the prevailing ideology of individualism which espouses self-realization, personal autonomy, and personal responsibility for health (Tesh, 1998) relegates the social, economic and political elements that contribute to disease overrepresentation across populations (Link & Phelan, 1995). Individualism continues to have a major bearing on health promotion policy and public health approaches and greatly relies on behavioural modification to address health issues (Chin & Gillies, 2007; Gregersen, 2020; Link & Phelan, 1995; Tesh, 1998). Critical discourses highlight how individualism has contributed to marked social stigma for individuals and groups due to the assumption that ill health is the consequence of poor behaviours (Lupton, 1994; Tesh, 1998). Pandemic stigma is also ideologically motivated and is a prejudicially motivated process in which groups of people are associated with specific infections, most often groups who are already subject to marginalization (Dionne & Turkmen, 2020). Cases in point include the blaming of Jewish individuals for the Black Death (Tesh, 1988) and Chinese migrants for regional smallpox outbreaks in North America in the 1800s (Markel & Stern, 2002). These groups were blamed and held responsible for infection, and experienced marked social isolation (Markel & Stern, 2002; Tesh, 1998). Similar dynamics of blaming and social isolation unfolded and are unfolding in relation to the HIV/AIDS pandemic. Amidst the emergence of the virus in the late 1970s/early 1980s (Epstein, 1996; Forstein, 2013; Shultze, 2015), a period often referred to as "pre-HAART,"[1] particularly in North America, the infection was conflated with gay men, Haitians, people with hemophilia and individuals using heroin. These groups suffered tremendous pandemic stigmatization; however, we will focus on the pandemic stigmatization of gay men specifically. During pre-HAART, gay identity was constructed as deviant (Al Hourani, 2021; Halkitis, 2021), gay men were held responsible for the novel virus, positioned as morally inept, and oftentimes described as deserving of infection (Epstein, 1996; Forstein, 2013; Lupton, 1994). Consequently, the labelling of HIV/AIDS as a 'gay plague' was a dominant narrative in North America, fostered by the prevailing political leadership of the time - most notably under the Reagan Administration in the United States - and leveraged to substantiate the dearth of any public health response (Epstein, 1996; Forstein, 2013; Lupton, 1994; Oppenheimer, 1988; Shultze, 2015).

Presently, a growing body of literature has revealed the prominent role of social factors in shaping the conditions and experiences of the COVID-19 pandemic (Braksmajer & London, 2021; Catlin, 2021; Quinn, Walsh, John, & Nyitray, 2021; Santo, 2021). In a structured literature review, Dionne and Turkmen (2020) argue that pandemics exacerbate pre-existing inequities for groups and emphasize the need to analyze policies to ensure equitable protection of populations. Dionne and Turkmen's (2020) review echoes Wrigley-Field's (2020) assertion that a social issue-that of racial injustice in the United States - is as pressing a threat to health as COVID-19 and that racialized groups are more vulnerable to the harms of COVID-19. Additional studies such as the one conducted by Quinn et al. (2021) have revealed the relevance of HIV/AIDS experiences in understanding the realities of COVID-19. Quinn et al. (2021) conducted a content analysis of the data drawn from interviews with men in five major cities in the United States that suggested responses to the COVID-19 pandemic are shaped by stigma, responsibility, collective action, and their experiences with the HIV pandemic. Braksmajer and London (2021) also collected perspectives from gay men pertaining to the similarities and differences between HIV/AIDS and COVID-19. Men's narratives spoke to the themes of progressive revelation of the pandemic, managing randomness, and negotiating public response. Progressive revelation refers to increasing understandings of COVID-19 over time with more available information, while managing randomness spoke to the fear and uncertainty that men navigated in relation to COVID-19 which felt similar to those emotions experienced during the beginning of the HIV/AIDS pandemic.

These studies offer preliminary insights into the social implications of pandemics, but more work is needed to bring new nuances and to provide a more integrated interpretation of the social experiences of pandemics, particularly for those who have experienced multiple pandemics. Therefore, the goal of the present study was to provide insights into the experiences of the COVID-19 pandemic by gay men over 50 who experienced the beginning of the HIV/AIDS pandemic. Drawing on previous work (e.g., Braksmajer & London, 2021; Epstein, 1996; Rosenberg, 1989; Wrigley-Field, 2020), we sought to emphasize the importance of moving beyond biomedical knowledge to appreciate the social aspects of pandemics and the value of understanding human pandemic experiences. We also focused on the experiences of older men explicitly, addressing a knowledge gap, as there are presently no studies specific to older adults and COVID-19. Given that older adults represent a group who are more susceptible to severe infection and mortality amidst pandemics due to the health challenges imposed by the aging process and deteriorating mental health due to exacerbated isolation and loneliness (D'cruz & Banerjee, 2020; Lebrasseur et al., 2021) perspectives specific to this population are needed here. While biomedical research often eclipses the challenges of living with illnesses (Halpin, 2018; Charmaz, 1990) we detail the lived experience of older gay men in relation to the social experiences of two pandemics, demonstrating the social and individual difficulties that intersect with the physiological risks of the pathogen (see also Epstein, 1996). Our findings detail gay men's experiences with uncertainty, inequalities, and (mis)information across both pandemics, as well as the hardship of experiencing two global pandemics during their lifespan. We discuss how study findings can inform pandemic related planning and policies.

2. Methods

2.1. Design

This study comprised a constructivist grounded theory design as per Charmaz (2006), which ensured a focus on contextual circumstances specific to living through the HIV/AIDS pandemic. Constructivist grounded theory as an approach asserts that social processes are embedded within contextual circumstances, which in turn necessitates attention to the role of context in shaping the experiences of participants (Charmaz, 2006). The contextual emphasis necessitates researchers to seek meaning in the data, while searching for and querying meanings about beliefs and ideologies (Charmaz, 2006). Such an approach was essential for this project given the recognition that pandemics are deeply ideologically driven (Lupton, 1994; Shah, 2016; Tesh, 1998). Charmaz (2006) posits that discovered reality arises from the interactive processes and their structural and temporal contexts. As such, constructivist grounded theory methods enabled consideration of the impact of socio-structural and historical elements of HIV/AIDS on men's perspectives and experiences amidst the COVID-19 pandemic via the questions asked in interviews and the approach to analysis.

2.2. Sample

Upon securing ethical approval from the University research ethics board, a recruitment flyer was disseminated to community-based organizations whose members supported recruitment by sharing the flyer on

[1] Pre-HAART (Pre-highly active anti-retroviral therapy) marked a period (approximately 1981–1996) where there was no available treatment for HIV/AIDS, care was essentially supportive/palliative - to minimize pain and discomfort - and HIV was constructed as a gay illness (Forstein, 2013; Shultze, 2015). Post-HAART represents the period from 1996 onwards, when effective, viable treatment (HAART) was available for individuals with HIV/AIDS and the virus had broached heterosexual communities (Forstein, 2013; Shultze, 2015).

social media sites. The flyer was also shared with community members known to the principal investigator whom are connected to groups of gay men. Once interviews were underway, we further drew on snowball sampling by asking that participants share the flyer with individuals in their social/community/work circles that they felt may be interested to participate. Eligibility was contingent upon (1) self-identification as a gay man, (2) being 50 years of age or over, (3) currently residing in one of the following locations: Vancouver Island, Gulf Islands, or the Lower Mainland (a region inclusive of the city of Vancouver and its suburbs), and (4) English-speaking. Twenty men ranging in age from 54 to 71 years old (*mean* = 65 years) participated (Table 1). Five men shared that they were currently employed, 13 were retired, and two were unemployed. Nineteen men self-identified as White and one as Southeast Asian, and half of the men ($n = 10$) self-disclosed a positive HIV status (see Table 1).

Individual semi-structured interviews were conducted via the Zoom platform between June and September 2021. Questions focused on three key domains: 1) describing the most challenging aspects of the COVID-19 pandemic, 2) recollecting and describing the most challenging aspects of the HIV/AIDS pandemic, and 3) Considering/reflecting on commonalities between the two pandemic experiences. Although the emphasis as on commonalities, participants also shared key differences. Due to the emphasis on contextual circumstances, specific probes were embedded within questions to support communicating the unique aspects of living through the HIV/AIDS pandemic, including interpersonal discrimination, media representation, the public reaction to HIV/AIDS, experiences within and beyond the gay community, relationships with family and social networks to explore the social implications of the HIV/AIDs pandemic for gay men, particularly at the beginning of the pandemic. A list of psychosocial support resources was available for participants if needed due to the sensitive nature of the conversations. Interviews were audio recorded, lasted on average 60 min, and were transcribed verbatim by an experienced transcriptionist. Verbal consent was obtained prior to each interview, participants were informed they could withdraw from the study at any time, and all interviews were conducted by the first author. Each participant was assigned a pseudonym and offered $30 CDN in cash as appreciation for their contributions.

2.3. Data analysis

Data analysis was informed by an emphasis on how the historical and socio-structural aspects of living through the HIV/AIDS pandemic have potentially influenced men's experiences amidst the current COVID-19 pandemic. We paid specific attention to how the sociohistorical context of the HIV/AIDS pandemic (e.g., confusion, fear, discrimination, grief, loss and other themes reflected in relevant literature) unfolded in men's stories of living through COVID-19. We drew on key tenets of constructivist grounded theory including a constant comparison of the data to identify key emergent concepts and reflexivity to remain attuned to how our own biases – for example, based on educational and/or disciplinary influence - and assumptions informed by social location – the intersections of sexual and gender identity, race, ability, socioeconomic status fro example - could potentially be influencing interpretations. Data collection and analysis occurred simultaneously, as per the iterative approach foundational to constructivist grounded theory (Charmaz, 2006). Analysis commenced with a broad read of each interview transcript to establish familiarity with the content and the opportunity to reflect on it (Charmaz, 2006). Open coding was the next step, where portions of data were compared and sizeable portions of information were captured by assigning a succinct phrase. Examples of open codes included 'losing multiple friends to HIV/AIDS', 'feeling confused with health information' and 'wishing more of an organized public health response to support the suffering and dying gay men during the pre-HAART period'. As the analysis continued, we shifted our emphasis to consider how aspects of living through HIV/AIDS such as persistent stigma, discrimination, loss and confusion affected men's contemporary experiences amidst COVID-19. Memo writing was a fundamental process and included noting relationships between codes and the participants' experiences amidst HIV/AIDS and COVID-19 (Charmaz, 2006). After systematically comparing codes and examining the relationships between them, analysis culminated in the identification of three processes that represent how living through HIV/AIDS has influenced men's contemporary experiences of the COVID-19 pandemic. As per a constructivist grounded theory approach (Charmaz, 2006; Sandelowski, 1986), and a means to ensure accuracy, feedback was elicited from participants twice during analysis by sending a summary document that outlined the developed and finalized themes. Participants were invited to offer their feedback and voice any concerns.

Table 1
Descriptive statistics.

Characteristic	$n = 20$
Age, in Years	
Range	54–71
Mean	65
Ethnoracial Identity *n* (%)	
White/Caucasian	19 (95)
Southeast Asian	1 (5)
Employment Status *n* (%)	
Employed	5 (25)
Unemployed	2 (10)
Retired	13 (65)
Self-Disclosed HIV Status *n* (%)[a]	
Positive	10 (50)
Negative	10 (50)

[a] Note that some participants may have identified as both HIV-positive and undetectable; however, this estimate is unavailable as it was not explicitly asked.

3. Findings

Initially, participants often stated they viewed the two pandemics as simply too different to have dedicated too much thought as to how experiences during HIV/AIDS may impact their experiences amidst COVID-19. However, in the process of reflecting on focused questions (e.g. tell me a bit about some of the greatest challenges you faced during the early period of HIV/AIDS-are there any memories that resonate with your current experiences amidst COVID-19?), overarching similarities – and differences, particularly related to the speed of response to COVID-19 vs. HIV/AIDS - related to dealing with a novel, uncertain and frightening reality became evident. The role of this investigation to alerting men to personacross the two pandemics is notable, and we query the role of grief and loss associated with HIV/AIDS memories as potentially obfuscating these kinds of connections and is a question that necessitates additional exploration. Ultimately, despite biomedical differences between COVID-19 and HIV/AIDS (e.g., mode of transmission), participants made numerous connections – similarities and differences - between the two pandemics. Parallels were inevitably drawn once prompted on the matter because participants maintained the unique position of having been unwilling subjects in two major pandemics that spurred immense social, political and economic consequences (Catlin, 2021). We identified three key processes that capture how participants' experiences as gay men amidst the HIV/AIDS pandemic influenced their perspectives of the current COVID-19 pandemic: facing uncertainty amidst familiarity, witnessing pandemic inequities, and navigating constantly evolving (mis) information.

3.1. Facing uncertainty amidst familiarity

A sense of pandemic familiarity was a recurring theme for participants. In particular, the impositions of pandemic life, such as isolation and uncertainty, were previously encountered by men in various extents throughout HIV/AIDS. Men stated that the onset of COVID-19 incited memories of the AIDS crisis, ranging from the damage to neighbourhoods

(e.g., the transformation of once-crowded areas into ghost towns) to the unsettling, growing uncertainty of what the coming days and weeks would hold. Maintaining some elements of previous pandemic experience was recognized by men as both beneficial and detrimental – that is, the confidence of having dealt with an experience previously but also the distress that comes from knowledge of some of the key challenges. In some ways, their previous experiences contributed to diminished fear and/or anxiety but also introduced emotional challenges due to the distressing nature of these memories. For some men having simply lived through a pandemic that deeply impacted their community offered a form of buffer to the fear of what COVID-19 would bring, while at the same time invoking the pain of mourning the many loved ones lost toe HIV/AIDS. For some men, the isolation invoked by COVID-19 brought back memories that William, a 71 year old man described in terms of a metaphor:

> Yes, it has [COVID-19 invoked memories of HIV/AIDS]. To some degree. Um, because you know what, it [COVID-19] forces you back into the closet again. A different kind of closet … but it, it's another forcing you back from society, to a, a much lonelier place

William articulates how COVID and HIV/AIDS effectively forced him into a lonely place-which he describes as being in a 'closet': that feeling of invisibility, being completely removed from others, unable to connect and engage.

Other participants communicated a sense of sheer disbelief that they were living through another pandemic. For many, the experience of HIV/AIDS was in and of itself unimaginable. In particular, that a novel virus would be grossly overrepresented amongst gay men on the heels of the gay rights movement that was picking up particular momentum after the Stonewall riots. The pre-HAART period of HIV/AIDS marked, for many, the end of an era: the celebratory and joyful aspect of life within gay communities that was widespread in the '70s and '80s was substantially dampened by the introduction of a novel and deadly infection. The pre-HAART period was devastating for gay men, and the prospect of facing another pandemic in light of this history was simply inconceivable, as articulated by Adam, a 64-year-old man:

> "And that, frankly the, the COVID thing brought all of that back (suffering amidst HIV/AIDS). Brought all of that back. And it was just like, (fuck)! You know, I can't believe I got through one pandemic, you know. Now there's another one."

In expressing his disbelief, Adam marvelled that he managed to live through HIV/AIDS, a perspective shared by many participants. The reality for many men was that they did not expect to survive the AIDS crisis, given the devastating and deadly impacts of the infection on gay communities. The fact that Adam endured, despite all the grief and suffering, to find himself amidst another pandemic where once again survival was questioned, was incomprehensible.

Other men shared how COVID-19 brought back memories of the uncertainty and unknowns that come about in the wake of a novel infection; in particular, uncertainties about transmission. Specifically, the dearth of information pertaining to the mode of transmission of COVID-19 in the early days of the pandemic was reminiscent of the early days of the HIV/AIDS pandemic. Initially, COVID-19 was believed to be transmitted via fomites,[2] and thus endorsement of wearing gloves at gas pumps was a key practice endorsed to protect from infection (USA Today, 2020). This lack of information about transmission contributed to fears about contracting the virus and becoming ill - an all-too-familiar scenario for many participants regarding HIV/AIDS. Participants shared that once the mode of transmission of HIV/AIDS was established, it often became a question of how to navigate the context of sexual encounters; that is, determining what was considered 'reasonably safe' became paramount. The parallels of grappling with relative risk amidst HIV/AIDS and COVID-19 were described by Daniel, a 59-year-old man who highlighted and reflected on the questioning of risk, the degree and approaches to mitigation as a means to avoid illness:

> "It was difficult afterwards because you're always stuck with this like, what if, what if, what if, what if, what if? And uh it's the same with the COVID thing. It was like, you know, I went to the grocery store and, you know, I–I had to briefly take off my mask, or somebody doesn't have a mask! And then you're like, and I'm like, oh my God, this is the same deal, you know? I can't come back from the grocery store without thinking for two weeks whether I'm going to have COVID. It was the same deal with that [HIV], it—it ruined it (sexual encounters). Um, I did have sexual encounters. It forced the sexual encounters to be uh income—incomplete and unfulfilling." [Participant 2, page 5]

Despite the stark differences in transmission between the two viruses, the fear and uncertainty of becoming ill and the consequent negotiation of practices to avoid and/or minimize risk was a consistent experience. Daniel describes the early days of the COVID-19 lockdown, where knowledge about transmission was limited such that any interaction involving others was disconcerting and brought back memories of fear and anxiety about contracting HIV/AIDS and possible suspicion of others (amidst sexual encounters) during the early days of that pandemic. Daniel outlines how activities that were once seemingly innocuous (i.e., going to the grocery store) or enjoyable (sex) in the context of a pandemic become contexts of risk negotiation and subsequent anxiety. The adoption of risk negotiation practices by gay men informed by the early period of the HIV/AIDS era has been described in the literature, highlighting how men's experiences during HIV/AIDS informed their approaches to, namely, navigating sexual encounters amidst COVID-19 (Murphy et al., 2022).

3.2. *Witnessing cross-pandemic inequities*

Men shared their contempt and disappointment with the dearth of any organized public health response in the early days of the HIV/AIDS pandemic, in contrast to the immediate, collective mobilization in the wake of COVID-19. They understood the inaction amidst HIV/AIDS as greatly motivated by politics and discrimination: the construction of gay men as a deviant group validated little interest in terms of public health support. Discourses echoed the political climate of the times, with participants recalling the refusal of then-American President Ronald Reagan to even speak the word 'AIDS' until the infection broached heterosexual communities. For participants, the realization had come quickly that no support was coming, that no help would be offered to navigate the formidable obstacles to health and well-being that HIV/AIDS imposed. Maurice, a 71-year-old man, articulated how the inaction on the part of public health coupled with anti-gay discourses sent a powerful message – implicitly and explicitly – that an entire group of people did not matter:

> I think the big difference is that, you know, that HIV was considered a gay plague and, and for the first 10 years of it, it was gay – the gay people were expendable.

As Maurice emphasizes, the inequity inherent to pandemics often manifests as the nature of *who* is affected (Wrigley-Field, 2020), and who is at risk (Hatzenbuehler et al., 2013; Link & Phelan, 1995), which can direct the quality of the response, or in the case of HIV/AIDS, the lack thereof (Epstein, 1996). Men talked about the response to COVID-19 being an entirely different experience, that because anyone and everyone could potentially be affected, the response was massive and coordinated which invoked anger and pain for a number of participants.

Other participants contrast the lack of response to the HIV/AIDS pandemic to the comprehensive response to COVID-19. Participants

[2] Fomite transmission represents the transmission of infectious diseases via contaminated objects and/or materials (Centers for Disease Control and Prevention, 2021).

commented on the magnitude of collective efforts to navigate COVID-19 from federal, regional, and municipal spheres of influence. For example, the daily briefings to the nation by the Prime Minister amidst lockdown, the regular briefings provided by the Provincial Health Officer and Minister of Health, and the plethora of available informative resources (e.g., provincial and federal government websites, regional public health sites, and so forth). In describing the disparity in pandemic responses, Philip, a 65-year-old man, expressed a degree of anger and/or frustration:

> Well, you know, my friends and I talk about the response to COVID-19 and how, how that response was a crazy amount—crazy amount of resources dedicated to dealing with COVID-19. And like 30 million people that died in North America, or more, from—from HIV/AIDS—and, and there was nothing. There were, there was no pressure for vaccinations or, or—it was crazy. And we just, we see the parallels, and you know, it's frustrating.

In recollecting on the absence of public health support during HIV/AIDS, Philip expressed deep anger that was aggravated by the collective action to protect the public from COVID-19. Men articulated how they felt ignored by the government-disposable, even-by virtue of sexual identity, which was confirmed by the organized public health efforts to address HIV/AIDS once it broached heterosexual communities (Forstein, 2013). In this sense, COVID-19 reminded men of the stigmatization they endured during pre-HAART and that their suffering, in part, was tied to othering (Catlin, 2021; Hatzenbuehler et al., 2013; Link & Phelan, 1995; Lupton & Willis, 2021; Tesh, 1988). Participants were not just experiencing a second pandemic, but a reminder of their marginalization and dehumanization.

Other participants spoke to the contextual differences believed to contribute to, in particular, the observed speed and efficacy of essential developments to protect the health of the public in relation to COVID-19 (e.g., development of a viable PCR test for the virus, the production of a vaccine) vs. the rate of developments amidst HIV/AIDS. Specifically, participants voiced that in the thirty years since the HIV/AIDS virus was first identified, there have been marked advancements in the fields of virology and immunology (including a greater understanding of the nature of retroviruses, the group to which HIV/AIDS belongs, as well as a decade of previous work on mRNA vaccine development). These advancements were recognized as driven by the scientific community, which is also closely tied to the government via research funding. Participants recognized these advancements as greatly facilitative to the feasibility of developing testing for COVID-19 and ultimately a vaccine so quickly. Despite the noted advancements in the biomedical sciences, however, there was still an astute recognition that gay men as a stigmatized group did not motivate the scientific community to work tirelessly to obtain knowledge about the HIV/AIDS virus necessary to save lives as outlined by Murray, age 69:

> And yeah, you wonder, could they have devoted more resources, and looking back at times, we're looking at COVID, and I understand it's a much different disease, uh but having an … and we're also in a different scientific point, but the amount of energy that went into that versus what went into HIV … clearly if it was a white, straight, male disease, it would have been more resources as opposed to just an abandonment for years until governments and entities, you know, really started researching it.

Murray's statement effectively captures the acknowledgment of years of scientific advancements since the HIV/AIDS epidemic that have undoubtedly contributed to the speed and efficacy of technologies to protect the public in the wake of the COVID-19 pandemic. However, he and others drew attention to the reality that HIV/AIDS initially affected a particular group of people who occupy a social location of marked stigma and discrimination, which informed the dearth of scientific focus and mobilization to develop the necessary technologies to save lives during the early days, and throughout the course of, the HIV/AIDS pandemic. Murray, and other participants, argue the quick response to COVID-19 was tied to who was seen as "at risk" of infection. Despite the relatively quick response to COVID-19, that pandemic also reveals inequalities, as research suggests that people of colour and people living in poverty face increased COVID-19 risks (Berkowitz, Gao, Michaels, & Mujahid, 2021; Subbaraman, 2020; Thomas, 2019; Torres & López-Cevallos, 2021).

3.3. Navigating constantly evolving (Mis)Information

In describing their experiences living through two pandemics, participants frequently talked about the implications of day-to-day life amidst constantly evolving information pertaining to a novel virus. Men acknowledged the challenges imposed on the scientific community in terms of being tasked with obtaining knowledge about the transmission and effects of a novel virus on human physiology. In particular, recognition of the scientific process and subsequent trial-and-error as the means to obtaining the essential details to protect the public was highlighted, but also the frustrations that ever-changing knowledge created for navigating life amidst the virus. For many, the initial wealth of unknowns was discussed in relation to the manifestation of fear and the subsequent impact on activities of daily living, namely, what activities remain reasonable. With the emergence of HIV/AIDS in gay communities, several participants recounted the paralyzing fear that men perceived as prompting - particularly in the early days of the pandemic - the development and dissemination of extreme measures for protection. John, a 72-year-old man, recounts the proposal of drastic means to protect oneself in the context of little to no available information on the virus:

> And you know, sometimes the math, the measures that they would suggest, were a bit drastic because they didn't know what the real risk is and how you get it [HIV/AIDS]. Sometimes people wrote things that were patently silly. Looking back in retrospect, silly—about how you prevent it or deal with it. In the same way there's things been said and, about COVID, about how you protect yourself from it

John described how at one point, for example, HIV/AIDS was believed – due to media and community discourses - to be transmitted via fomites, and as such, individuals were encouraged to avoid the use of public toilets or restaurants. These extreme protective measures were likewise experienced during the early days of the COVID-19 pandemic, again pertaining to fomite transmission and proposed means of protection such as wearing gloves when in the community and wiping down all groceries once in the home. As new information became available in the context of both pandemics, these approaches were challenged, revised and altogether abandoned for new strategies informed by new information, creating a confusing and tiring situation for individuals.

Other participants described constantly evolving information in relation to opportunities for multiple and often conflicting interpretations with HIV/AIDS and COVID-19. This was particularly highlighted in the current context, as the rate by which information changed amidst COVID-19 was considerably more rapid than with HIV/AIDS. Men talked about the availability of the internet and the importance of social media and the consequent multiplicity of sources and platforms from which to disseminate the information as contributing to the challenges introduced by rapidly evolving information. Some participants talked about encountering differing perspectives on aspects of COVID-19 as becoming increasingly commonplace, in part fuelled by internet sources communicating diverse messages about the same content, a product of the nature of the internet source (e.g., public health website vs. personal blog space vs. social media). A similar situation was recounted amidst HIV/AIDS, but in the absence of the internet and limited knowledge of the infection, word-of-mouth dominated as the main source of information and consequently led to myriad interpretations of what was being shared about the virus and about what

could be done to prevent infection. Scott, a 60-year-old man, details the challenges of this information nexus:

> With HIV, nobody knew anything at first. So you get all these different interpretations of one specific situation. And it's hard for people to know what to believe. And COVID-19 is a big example of that. You have all sorts of people with all kinds of opinions that are now able to put that information out there for people to read and have a look at and try to make sense of

In this case, Scott recounts how amidst HIV/AIDS, the limited channels of dissemination led to information being overwhelmingly shared amongst community members. With these community discourses came a variety of interpretations, many of which were not substantiated by any evidence. In particular, the absence of any distribution of information by public health infrastructure about HIV/AIDS during pre-HAART – and the dearth of gay health organizations - contributed to rampant distortions of what information made its way to community members via word-of-mouth. Scott reflects on how in the contemporary situation with COVID-19, even with plenty of organized dissemination of information by public health and regional governments, the same issue of diversity of interpretation persists and dissemination of these myriad opinions facilitated by the plethora of social media options available.

Other participants described how constantly changing information amidst HIV/AIDS and COVID-19 spurred the propensity to question, or, in some cases, doubt, the legitimacy of the information. Again, men described the slower evolution of information acquisition during HIV/AIDS - particularly during the first few years - when compared to COVID-19. However, once scientific developments gained momentum in the case of both viruses, the constant revisiting of risk negotiation became commonplace as more information was available about transmission, and subsequently what could be done to prevent transmission. Questioning the credibility of the information about both viruses became a common practice as men pondered the authority of knowledge given the perpetual state of flux combined with their desire for connection. Participants asserted that it was not so much distrust of the source of information, but skepticism because the knowledge never appeared to be static in the case of both pandemics, which raised questions about whether everyday citizens could potentially garner experiential knowledge that was equally relevant as articulated by Gerald, a 69 year old man:

> "… It makes you distrust uh—it's not that you distrust the medical establishment, but you, you know they don't know anything more than we know. Like the whole COVID thing, again, it's like, they're discovering now, oh, yeah, this—this uh, you know, this vaccine doesn't work as well as that vaccine …"

As stated by Gerald, the nature of constantly changing information did not explicitly inform distrust but rather a deep questioning of the legitimacy of knowledge and whether citizens could be equally capable of garnering knowledge through experiential means. Some men shared the propensity amidst HIV/AIDS to adopt a personally curated set of practices practices – e.g., only having sexual intercourse with known individuals, only engaging in oral sex - that served as restrictions to prevent contracting the virus. Adherence to these practices coupled with ongoing negative serostatus supported their personal strategies despite evolving knowledge about transmission from the scientific community. This process of questioning information and adopting personally curated practices was likewise described in the context of COVID-19, but with recognition of social media as playing a key role in making accessible the diversity of interpretations available on COVID-19 content.

As participants demonstrate, both pandemics are characterized by constantly changing information that proved difficult to follow (Chou, Gaysynsky, & Vanderpool, 2021; Gupta et al., 2020). As information was often revised or discarded, participants leveraged their social capital for pandemic information (Borgonovi, Andrieu, & Subramanian, 2021). Due to the constantly evolving information, some participants found it difficult to trust official sources, emphasizing how both pandemics are shaped by skepticism and misinformation.

4. Discussion

This study addressed the following question: how did the HIV/AIDS pandemic shape older, self-identifying gay men's perspectives of COVID-19? We highlight the experiences of gay men situated in a Canadian context where pandemic experience has been limited in comparison to many regions of the globe that are subject to endemic illness and epidemics (Shah, 2016). Here, participants' experiences demonstrate the similarities (and differences) between two pandemics, suggesting that uncertainty, inequality, and (mis)information are enduring characteristics of pandemics. Of note is consideration of the role participation played in acknowledging similarities and differences, as men indicated that having questions posed facilitated making those connections. As we argue, the social dimensions of pandemics (poverty, stigma, discrimination, mental health challenges) are highly consequential but easily obscured by the biomedical dimensions of pandemics (e.g., developing screening tools). Attending to such social issues is important and necessary, particularly in the context where the mental health consequences of pandemics are significant and as we continue to respond to HIV/AIDS and COVID-19, and prepare for future pandemics.

We built on the extant literature and drew on constructivist grounded theory methods to explicitly situate men's experiences in a Canadian context within the socially and cultural embeddedness of pandemics; that is, highlighting how key processes such as stigma and discrimination pertaining to sexual identity and the ideology of individualism informed prevailing societal perception of HIV/AIDS as well as COVID-19 (Braksmajer & London, 2021; Fesmire, 2021; Oliver-Smith, 2022). In doing so, we emphasize that pandemic processes are driven by social dynamics influenced by prevailing political and ideological thought for which the intersections across place and time shape constructed meanings of infection, inequities imposed upon certain groups, and the direction of public health efforts (Halkitis, 2021; Lupton & Willis, 2021; Tesh, 1988). In this study, living through the first decade of the HIV/AIDS crisis was found to greatly influence how men perceive and address the challenges brought forward by the COVID-19 pandemic through direct and indirect recollections of the public health crisis. These recollections represent a collective consciousness (Keogh, Henderson, Dodds, & Hammond, 2006) and speak to the importance of shared contextual experience in shaping how people perceive and ultimately navigate the challenges imposed by pandemics. Older gay men represent key knowledge holders – public health efforts for future pandemics would benefit from community collaboration and participation. Integrating insights from specific communities draws on the nuances of groups that must be appreciated when developing and implementing meaningful and effective protective measures amidst pandemics as outlined in the literature (Gregson, Nyamukapa, Sherr, Mugurungi, & Campbell, 2013; Marston, Renedo, & Miles, 2020). For example, planning, research and delivery of the most effective health promotion and health care services could be made possible by collaborations between health professionals and older gay men as community representatives. Taking a participatory approach to pandemic response would facilitate identification of stigma, structural barriers, current perspectives on the state of the given pandemic and the development of collective responses (Marston et al., 2020; Veinot, 2010; Yun Gao & Wang, 2007).

The findings also highlight that the contemporary COVID-19 pandemic invoked a variety of memories of HIV/AIDS, which offered (some) benefits and detriments to participants. This finding is noted in the literature as familiarity both with the traumatic aspects of a pandemic and the ability to get through it (Quinn et al., 2021). Reliving such traumas highlights unique psychosocial needs, a finding supported by the literature (Quinn et al., 2021). COVID-19 resulted in many participants re-living the hardships of the HIV/AIDS pandemic, while also leveraging their experience to navigate COVID-19. While previous research has

demonstrated how uncertainty produces distress (e.g., Cortez & Halpin, 2020; Nettleton, Watt, O'Malley, & Duffey, 2005; Timmermans & Buchbinder, 2013) and connected the COVID-19 pandemic to such uncertainty (e.g., Lalot, Abrams, & Travaglino, 2021; Rabi, Samimian-Darash, & Hilberg, 2022), study participants were instead distressed by the familiarity of the pandemic and how it resembled their previous experiences with HIV/AIDS. This finding highlights the importance of psychosocial supports not only during but after a pandemic. The wealth of literature that showcases the rise in mental health challenges brought about due to COVID-19 (Heitzman, 2020; Kumar & Nayar, 2021; Yao, Chen, & Xu, 2020) emphasizes the need for specific psychosocial supports to navigate the anxiety and fear amidst a pandemic but equally important is for these supports to continue after the pandemic has ceased. For older gay men specifically, these supports would benefit from a peer-based design (Nugroho, Erasmus, Zomer, Wu, & Richardus, 2017; Veinot, 2010; Yun Gao & Wang, 2007) to focus on the specificity of having lived through HIV/AIDS and the emotional consequences these traumatic memories pose for navigating a contemporary pandemic along with re-integrating into post-pandemic life.

Our findings also highlight how this group of men experienced the impact of stigma and othering stemming from understandings of a virus greatly shaped by ideology and consequent political inaction (Catlin, 2021; Lupton & Willis, 2021; Tesh, 1988). Men's experiences during HIV/AIDS exemplify how stigma is mobilized against marginalized groups (Hatzenbuehler et al., 2013). Participants described the inequities they observed across the two pandemics; in particular, their observation of the differences in public perception and subsequent responses to HIV/AIDS and COVID-19 in terms of pandemic response, that reveal the reality of social and structural factors that bias and drive pandemic responses (Braksmajer & London, 2021; Tesh, 1988). The observed inequities showcase the critical role of political leadership in ensuring equitable protection of the population amidst a pandemic (Brewis, Wutich, & Mahdavi, 2020; Miller, 2020). Such leadership is rooted in principles of ethics and integrity to protect against the over-representation of illness amongst groups subject to disadvantage due to social dynamics (e.g., discrimination, poverty, limited access to health services, and so forth). Recognition of how political and ideological discourses shape scientific knowledge is essential for meaningful approaches to prevention and mitigating harm.

Our findings also stress the role of community mobilization amidst pandemics and the utility that community mobilization and social capital offer in terms of disease prevention and psychosocial support (Act Up, 1987; Aizenman, 2019; Crimp, 2011; El-Sadr, 2020; Epstein, 1996). The role of community discourse was paramount in the dissemination of information pertaining to HIV/AIDS as well as navigating the ongoing evolution of knowledge pertaining to the virus (El-Sadr, 2020; Forstein, 2013; Oppenheimer, 1988; Shultze, 2015). Similarly, the men in this study navigated rapidly changing knowledge pertaining to COVID-19 by sharing collective knowledge and experience and discoursing with community members to navigate infection as with HIV/AIDS. Further, the concept of relative risk was operationalized amidst HIV/AIDS, as men sought ways to seek intimacy while avoiding infection and often did so through strategies derived via the intersections of public health guidelines and personal experience (Forstein, 2013). A similar scenario was noted in the context of COVID-19, with participants engaging once again in negotiations of relative risk largely informed by the unique social dynamics of communities and individual needs. The critical importance of engaging communities as an infection control strategy is well-substantiated in the peer-based literature (Nugroho et al., 2017; Veinot, 2010; Yun Gao & Wang, 2007). This finding forefronts three key pandemic strategies; namely 1) collaborating with communities to disseminate and explain health information rather than simply relying on mass media presentations that are not tailored to specific audiences and do not leverage community resources, 2) accuracy of information is as important as the speed of dissemination, as revising pandemic information resulted in skepticism, and 3) developing strategies to navigate misinformation, which participants connected to both pandemics.

There are several limitations to this study. First, the perspectives captured in this study are reflective of experiences situated in predominantly urban areas, with minimal representation of rural settings and, consequently, how rurality potentially informs views and experiences. Further, the sample was comprised predominantly of well-educated White men. Given the relevance of social dynamics to pandemic experiences, additional research that forefronts racially diverse perspectives is needed to fully appreciate the role of stigma and discrimination in pandemic trajectories. Lastly, the role of this investigation to alerting men to similarities and differences across the two pandemics is notable, and we query the role of grief and loss associated with HIV/AIDS memories as possibly hindering readily drawing connections between the two experiences.

5. Conclusion

In conclusion, this investigation situated older gay men's COVID-19 experiences within the broader social and cultural dynamics of society to highlight how virus perception is socially and politically informed. The insights gained in this investigation, i.e., key processes that gay men have drawn on to navigate the challenges of COVID-19, substantiate that viruses are greatly informed by social and structural factors. Although governments and health officials largely failed gay men during the HIV/AIDS pandemic, gay men represent an important source of pandemic information and their experiences have much to offer health professionals and policymakers. Gay men, having lived through one inherently politicized pandemic, maintain a collective consciousness (Keogh et al., 2006) and subsequent resilience that can be employed to inform public health efforts for future pandemics at the individual and community level, to equitably promote and protect the health of the public.

Ethics approval

The project was approved by the University of British Columbia Harmonized Ethical Review Board H21-01363.

CRediT authorship contribution statement

Ingrid Handlovsky: Conceptualization, Methodology, Data curation, Data curation, Formal analysis, Writing – original draft. **Tessa Wonsiak:** Formal analysis, Conceptualization, Writing – review & editing. **Anthony T. Amato:** Formal analysis, Writing – review & editing. **Michael Halpin:** Conceptualization, Writing – review & editing. **Olivier Ferlatte:** Methodology, Writing – review & editing. **Hannah Kia:** Methodology, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements:

This project was funded by two internal research grants awarded by The University of Victoria: #51965–54200 and #10000-71798.

References

Act Up. (1987). *ACT UP action (first flyer). ACT UP Historical Archive*. Retrieved from https://actupny.org/documents/1stFlyer.html.

Aizenman, N. (2019). *How to demand a medical breakthrough: Lessons from the AIDS fight [Radio broadcast]*. National Public Radio.

Al Hourani, M. A. K. (2021). COVID-19 and the social construction of reality in Jordan. *Comparative Sociology, 20*(6), 718–740. https://doi.org/10.1163/15691330-bja10045

Berkowitz, R. L., Gao, X., Michaels, E. K., & Mujahid, M. S. (2021). Structurally vulnerable neighbourhood environments and racial/ethnic COVID-19 inequities. *Cities & Health, 5*(1). https://doi.org/10.1080/23748834.2020.1792069. S59–S62.

Borgonovi, F., Andrieu, E., & Subramanian, S. V. (2021). The evolution of the association between community level social capital and COVID-19 deaths and hospitalizations in the United States. *Social Science & Medicine, 278*, Article 113948. https://doi.org/10.1016/j.socscimed.2021.113948

Braksmajer, A., & London, A. S. (2021). 'It's history in the making all around us': Examining COVID-19 through the lenses of HIV and epidemic history. *Culture, Health and Sexuality, 23*(11), 1500–1515. https://doi.org/10.1080/13691058.2021.1933184

Brewis, A., Wutich, A., & Mahdavi, P. (2020). Stigma, pandemics, and human biology: Looking back, looking forward. *American Journal of Human Biology, 32*(5), Article e23480. https://doi.org/10.1002/ajhb.23480

Catlin, J. (2021). When does an epidemic become a 'crisis'? Analogies between COVID-19 and HIV/AIDS in American public memory. *Memory Studies, 14*(6), 1445–1474. https://doi.org/10.1177/17506980211054355

Centers for Disease Control and Prevention. (2021). *Science brief: SARS-CoV-2 and surface (fomite) transmission for indoor community environments*. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/surface-transmission.html.

Charmaz, K. (1990). 'Discovering' chronic illness: Using grounded theory. *Social Science & Medicine, 30*(11), 1161–1172. https://doi.org/10.1016/0277-9536(90)90256-R

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London, UK: Sage.

Chin, J., & Gillies, A. (2007). *The AIDS pandemic - the collision of epidemiology with political Correctness*. CRC Press. https://doi.org/10.1201/9781315378695

Chou, W. Y. S., Gaysynsky, A., & Vanderpool, R. C. (2021). The COVID-19 misinfodemic: Moving beyond fact-checking. *Health Education & Behavior, 48*(1), 9–13. https://doi.org/10.1177/1090198120980675

Cortez, D., & Halpin, M. (2020). Uncertainty and certain death: The role of clinical trials in terminal cancer care. *Sociology of Health & Illness*, *42*(*Suppl.* 1), 130–44. https://doi.org/10.1111/1467-9566.13059[AA1] [AA1]Author et al.

Crimp, D. (2011). *Before occupy: How AIDS activists seized control of the FDA in 1988. The Atlantic*. Retrieved from https://www.theatlantic.com/health/archive/2011/12/before-occupy-how-aids-activists-seized-control-of-the-fda-in-1988/249302/.

D'cruz, M., & Banerjee, D. (2020). 'An invisible human rights crisis': The marginalization of older adults during the COVID-19 pandemic–An advocacy review. *Psychiatry Research, 292*, 363–369. https://doi.org/10.1016/j.psychres.2020.113369

Dionne, K. Y., & Turkmen, F. F. (2020). The politics of pandemic Othering: Putting COVID-19 in global and historical context. *International Organization, 74*(1), E213–E230. https://doi.org/10.1017/s0020818320000405

El-Sadr, W. M. (2020). What one pandemic can teach us in facing another. *AIDS, 34*(12), 1757–1759. https://doi.org/10.1097/qad.0000000000002636

Epstein, S. (1996). *Impure science: AIDS, activism, and the politics of knowledge*. Berkley and Los Angeles, CA: University of California Press.

Fesmire, W. T. (2021). *The social construction of COVID-19 through historical comparisons to SARS and other epidemics in news media coverage (Master's thesis*. Nashville, Tennessee: Vanderbilt University. Retrieved from https://ir.vanderbilt.edu/bitstream/handle/1803/16661/FESMIRE-THESIS-2021.pdf?sequence=1&isAllowed=y.

Forstein, M. (2013). Aids: A history. *Journal of Gay & Lesbian Mental Health, 17*(1), 40–63. https://doi.org/10.1080/19359705.2013.740212

Gregersen, N. H. (2020). The corona crisis unmasks prevailing social ideologies. *VDE dialog. Zeitschrift für VDE-Mitglieder, 59*(2), 68–70. https://doi.org/10.1111/dial.12558

Gregson, S., Nyamukapa, C. A., Sherr, L., Mugurungi, O., & Campbell, C. (2013). Grassroots community organizations' contribution to the scale-up of HIV testing and counselling services in Zimbabwe. *AIDS, 27*(10), 1657. https://doi.org/10.1097/QAD.0b013e3283601b90

Gupta, L., Gasparyan, A. Y., Misra, D. P., Agarwal, V., Zimba, O., & Yessirkepov, M. (2020). Information and misinformation on COVID-19: A cross-sectional survey study. *Journal of Korean Medical Science, 35*(27), E256. https://doi.org/10.3346/jkms.2020.35.e256

Halkitis, P. N. (2021). Managing the COVID-19 pandemic: Biopsychosocial lessons gleaned from the AIDS epidemic. *Journal of Public Health Management and Practice, 27*(1), S39–S42. https://doi.org/10.1097/phh.0000000000001267

Halpin, M. (2018). Science and suffering: Genetics and the lived experience of illness. *Social Problems, 65*(3), 360–376. https://doi.org/10.1093/socpro/spw057.

Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health, 103*(5), 813–821. https://doi.org/10.2105/AJPH.2012.301069

Heitzman, J. (2020). Impact of COVID-19 pandemic on mental health. *Psychiatria Polska, 54*(2), 187–198. https://doi.org/10.12740/PP/120373

Jones, D. S. (2020). COVID-19, history, and humility. *Centaurus, 62*(2), 370–380. https://doi.org/10.1111/1600-0498.12296

Keogh, P., Henderson, L., Dodds, C., & Hammond, G. (2006). *Morality, responsibility and risk: Gay men and proximity to HIV. Sigma research*. https://researchonline.lshtm.ac.uk/id/eprint/20913/1/report2006b.pdf.

Kumar, A., & Nayar, R. (2021). COVID-19 and its mental health consequences. *Journal of Mental Health, 30*(1), 1–2. https://doi.org/10.1080/09638237.2020.1757052

Lalot, F., Abrams, D., & Travaglino, G. A. (2021). Aversion amplification in the emerging COVID-19 pandemic: The impact of political trust and subjective uncertainty on perceived threat. *Journal of Community & Applied Social Psychology, 31*(2), 213–222. https://doi.org/10.1002/casp.2490

Lebrasseur, A., Fortin-Bédard, N., Lettre, J., Raymond, E., Bussières, E. L., Lapierre, N., … Routhier, F. (2021). Impact of the COVID-19 pandemic on older adults: Rapid review. *JMIR Aging, 4*(2), Article E26474. https://doi:10.2196/26474.

Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 80–94. https://doi.org/10.2307/2626958

Lupton, D. (1994). *Moral threats and dangerous desires: AIDS in the news media*. London, UK: Taylor & Francis.

Lupton, D., & Willis, K. (2021). *The COVID-19 crisis: Social perspectives*. Routledge. https://doi.org/10.4324/9781003111344

Markel, H., & Stern, A. M. (2002). The foreignness of germs: The persistent association of immigrants and disease in American society. *The Milbank Quarterly, 80*(4), 757–788. https://doi.org/10.1111/1468-0009.00030

Marston, C., Renedo, A., & Miles, S. (2020). Community participation is crucial in a pandemic. *The Lancet, 395*(10238), 1676–1678. https://doi.org/10.1016/S0140-6736(20)31054-0

Miller, E. D. (2020). The COVID-19 pandemic crisis: The loss and trauma event of our time. *Journal of Loss & Trauma, 25*(6–7), 560–572. https://doi.org/10.1080/15325024.2020.1759217

Murphy, D., Ellard, J., Maher, L., Saxton, P., Holt, M., Haire, B., … Prestage, G. (2022). How to have sex in a pandemic: The development of strategies to prevent COVID-19 transmission in sexual encounters among gay and bisexual men in Australia. *Culture, Health and Sexuality*, 1–16. https://doi.org/10.1080/13691058.2022.2037717

Nettleton, S., Watt, I., O'Malley, L., & Duffey, P. (2005). Understanding the narratives of people who live with medically unexplained illness. *Patient Education and Counseling, 56*(2), 205–210. https://doi.org/10.1016/j.pec.2004.02.010

Nugroho, A., Erasmus, V., Zomer, T. P., Wu, Q., & Richardus, J. H. (2017). Behavioral interventions to reduce HIV risk behavior for MSM and transwomen in Southeast asia: A systematic review. *AIDS Care, 29*(1), 98–104. https://doi.org/10.1080/09540121.2016.1200713

Oliver-Smith, A. (2022). The social construction of disaster: Economic anthropological perspectives on the COVID-19 pandemic. *Economic Anthropology, 9*(1), 167–171. https://doi.org/10.1002/sea2.12236

Oppenheimer, G. M. (1988). In the eye of the storm: The epidemiological construction of AIDS. In E. Fee, & D. M. Fox (Eds.), *Aids: The burdens of history* (pp. 267–300). Berkeley and Los Angeles, CA: University of California Press.

Quinn, K. G., Walsh, J. L., John, S. A., & Nyitray, A. G. (2021). I feel almost as though I've lived this before": Insights from sexual and gender minority men on coping with COVID-19. *AIDS and Behavior, 25*(1), 1–8. https://doi.org/10.1007/s10461-020-03036-4

Rabi, M., Samimian-Darash, L., & Hilberg, E. (2022). Encapsulation: Governing actual uncertainty in the coronavirus pandemic. *Sociology of Health & Illness, 44*(3), 586–603. https://doi.org/10.1111/1467-9566.13436

Rosenberg, C. E. (1989). What is an epidemic? AIDS in historical perspective. *Dædalus, 18*(2), 278–292. https://doi.org/10.1017/cbo9780511666865.014

Roth, E. (2020). Epidemic temporalities: A concise literature review. *Anthropology Today, 36*(4), 13–16. https://doi.org/10.1111/1467-8322.12590

Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science, 8*(3), 27–37. https://doi.org/10.1097/00012272-198604000-00005

Santo, N. (2021). Reflections on the HIV/AIDS crisis, COVID-19, and resilience in gay men: Ghosts of our past, demons of our present. In C. Tosone (Ed.), *Shared trauma, shared resilience during a pandemic: Social work in the time of COVID-19* (pp. 127–133). Springer. https://doi.org/10.1007/978-3-030-61442-3_14.

Shah, S. (2016). *Pandemic: Tracking contagions from cholera to ebola and beyond*. New York, NY: Farrar, Straus and Giroux.

Shultze, H. (2015). *Surviving AIDS. Cultural trauma among middle-aged gay men in New York City. Publikationen der Deutschen Gesellschaft für Soziologie*. Retrieved from https://publikationen.soziologie.de/index.php/kongressband_2014/article/view/131.

Subbaraman, N. (2020). How to address the coronavirus's outsized toll on people of colour. *Nature, 581*(7809), 366–368. https://doi.org/10.1038/d41586-020-01470-x

Tesh, S. (1988). *Hidden arguments: Political ideology and disease prevention policy*. New Brunswick, NJ: Rutgers University Press.

Thomas, K. J. A. (2019). *Global epidemics, local implications: African immigrants and the Ebola crisis in Dallas*. Baltimore, MD: Johns Hopkins University Press.

Timmermans, S., & Buchbinder, M. (2013). *Saving babies? The consequences of newborn genetic screening*. Chicago, IL: The University of Chicago Press.

Torres, I., & López-Cevallos, D. (2021). In the name of COVID-19: Legitimizing the exclusion of community participation in Ecuador's health policy. *Health Promotion International, 36*(5), 1324–1333. https://doi.org/10.1093/heapro/daaa139

USA Today. (2020). *Fact check: Is the coronavirus being spread 'quickly' via gas pumps?*. Retrieved from https://www.usatoday.com/story/news/factcheck/2020/03/28/coronavirus-fact-check-covid-19-spreading-via-gas-pumps/2910985001/.

Veinot, T. C. (2010). We have a lot of information to share with each other." Understanding the value of peer-based health information exchange. *Information Research, 15*(4). Retrieved from http://InformationR.net/ir/15-4/paper452.html.

Wrigley-Field, E. (2020). US racial inequality may be as deadly as COVID-19. *Proceedings of the National Academy of Sciences of the United States of America, 117*(36), 21854–21856. https://doi.org/10.1073/pnas.2014750117

Yao, H., Chen, J.-H., & Xu, Y.-F. (2020). Patients with mental health disorders in the COVID-19 epidemic. *The Lancet Psychiatry, 7*(4), e21. https://doi.org/10.1016/S2215-0366(20)30090-0

Yun Gao, M., & Wang, S. (2007). Participatory communication and HIV/AIDS prevention in a Chinese marginalized (MSM) population. *AIDS Care, 19*(6), 799–810. https://doi.org/10.1080/09540120601114832