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COMMENTARY**Monkeypox: A challenge for and to geographers****Gavin Brown** 

Department of Geography, The University of Sheffield, Sheffield, UK

CorrespondenceGavin Brown, Department of Geography, The University of Sheffield, Sheffield, UK.
Email: gavin.brown@sheffield.ac.uk**Abstract**

The World Health Organisation declared the 2022 Monkeypox outbreak a ‘Public Health Emergency of International Concern’, following the rapid spread of infections in non-endemic countries. Unlike its usual epidemiology in Africa, most cases reported since May 2022 have been among gay, bisexual, and other men who have sex with men (GBMSM). This commentary provides an overview of the current Monkeypox outbreak and public health responses to it, drawing out their uneven geographies and the contribution geographers could make to understanding this. The empirical focus is on Monkeypox in England, but the challenges posed are relevant to the dynamics of the outbreak in the USA and Europe. The commentary concludes by challenging geographers to collaborate across sub-disciplinary boundaries to undertake research that can understand and explain not only the specific dynamics of Monkeypox but also broader geographical aspects of GBMSM's lives that could underpin effective public health work with these populations.

KEYWORDS

England, gay bisexual and men who have sex with men, geographies of sexualities, health geography, Monkeypox, sexual health

1 | INTRODUCTION

On 23 July, the World Health Organisation (WHO) declared the 2022 Monkeypox outbreak a ‘Public Health Emergency of International Concern’, following the rapid spread of infections in non-endemic countries (WHO, 2022a). The Monkeypox virus was first identified in 1970 and outbreaks are usually confined to West and Central Africa, although small numbers of cases traced to travel from these countries have been periodically reported elsewhere. Since May 2022, more than 71,000 confirmed cases have been reported in at least 107 countries globally, but principally in Europe and the USA (CDC, 2022; WHO, 2022b). Of the 71,096 confirmed cases globally, by 11 October 2022, only 719 cases were confirmed in the seven Central and West African countries where Monkeypox was endemic prior to 2022 (CDC, 2022).

Unlike its usual epidemiology in Africa, most cases reported since May have been among gay, bisexual, and other men who have sex with men (GBMSM; WHO, 2022b). Here, I provide an overview of the current Monkeypox outbreak and the public health response to it, drawing out their geographical aspects. I argue geographers can contribute more nuanced understandings of the spatialities of GBMSM's changing socio-sexual networks capable of informing targeted and more equitable public health interventions. My empirical focus is on the response to Monkeypox in the United Kingdom (and, specifically, England), which is the fifth most affected country during the current outbreak (WHO, 2022b), but I do

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reflect on wider concerns, and my challenge to geographers is relevant to understanding and contextualising Monkeypox internationally. While the epidemiology of the British outbreak appears to be broadly similar to the situation in many other countries in Europe and the Americas, it has not presented the stark racialised inequalities in the rates of infection between Black, Hispanic, and white populations reported in the USA (Kates et al., 2022).

2 | UNDERSTANDING SPATIALITIES OF MONKEYPOX

By 10 October 2022 there had been 3673 cases of Monkeypox in the UK, 95% of them in England (compared to 7 known cases between 2018 and 2021) (UKHSA, 2022a). Of the 3349 confirmed cases in England, 69% have been in London, with significant clusters reported in the South East region (concentrated in Brighton, a small coastal resort with a disproportionately large LGBTQ+ population, which is now effectively part of London's commuter belt) and the North West (mostly in Greater Manchester, the UK's third largest conurbation). Nationally, around 97% of cases appear to be among GBMSM (UKHSA, 2022b). Here the language used to describe those at highest risk from Monkeypox mirrors an older terminology developed through public health responses to HIV. Since the advent of HIV/AIDS, academics, activists, and health practitioners have sought effective ways of describing and engaging 'men who have sex with men' (MSM), but who do not (publicly) identify as gay or bisexual (Glick et al., 1994). However, in the UK at least, very few Monkeypox cases seem to be among men who fit the classic description of MSMs. However, the number of cases among trans women, as well as a small number of cis women who appear to have contracted Monkeypox through sexual contact with bisexual (or even gay-identified) men, suggest that a more precise description of those at heightened risk during the current outbreak might be 'gay and bisexual men and the *people* who have sex with them'.¹

Initially, the UK Health Security Agency (UKHSA) only provided a breakdown of cases at a regional level. In mid-August, for the first time, a more detailed breakdown by Upper Tier Local Authority (UTLA) was released, providing a more granular analysis of the distribution of cases. Here I report figures from 11 October, the latest at the time of writing (UKHSA, 2022c). Of the 25 local authorities with the largest number of reported cases (between 34 and 330 cases each), 19 are London Boroughs, with the highest caseloads concentrated in inner London. In contrast, there are 56 local authorities that have reported fewer than five cases. Lambeth, in inner South London, has the highest number of cases at 330 (just under 10% of the total cases in England). The 9th highest number of cases is in Brighton and Hove (with 88 cases). The presence of Surrey (21st place, 44 cases) and Hertfordshire (24th place, 37 cases), both counties that border Greater London, suggests that the outbreak in Brighton is a combination of its large and concentrated gay population but also its proximity to the capital. These figures suggest that London's gay male population is still concentrated in the heavily gentrified areas of inner London (which is not to suggest that all the gay men living in those areas are 'gentrifiers'), but that the supergentrification of inner London has also made gay life in some outer London boroughs, like Waltham Forest, Ealing, Barnet, and Croydon (18th, 19th, 20th and 25th place, respectively), more attractive and affordable. The pressures of the London housing market, as well as changing social attitudes, probably also explain the presence of Surrey and Hertfordshire on the list. What the figures also suggest is that the density of GBMSM's socio-sexual networks focused on inner London draws in participants from a periphery that extends regionally beyond the formal boundaries of Greater London. Beyond the immediate reach of London, Manchester has the 16th highest number of cases (62), with neighbouring Salford appearing in 22nd position (with 42 cases). The only local authority in the 'top 25' that is not directly associated with the London/Brighton and Greater Manchester clusters is Birmingham, the UK's second largest conurbation (17th place, 57 cases).

Monkeypox is not classified as a sexually transmitted infection, but it is mostly spread through close, prolonged, skin-to-skin contact, and the current outbreak appears to be spreading through GBMSM's sexual networks, especially among men who enjoy group sex and have multiple sexual partners (Iglesias et al., 2022). Not only is this epidemiology substantially different to what has previously been reported where the virus is endemic, it has also driven new symptoms that have seldom been recorded in African contexts (Mulka & Cassell, 2022).

Several months into the outbreak, UKHSA added proctitis (rectal pain, bleeding, and discharge, as well as severe discomfort defecating) to the list of screening symptoms for Monkeypox (Mulka & Cassell, 2022; UKHSA, 2022d). Many of those who have been hospitalised in the UK during this outbreak have been admitted for pain management associated with proctitis or penile oedema (a build-up of fluid causing the penis to swell). Acknowledging the specific epidemiology of Monkeypox, to ensure public health responses reach those at highest risk, without fuelling stigma and prejudice around gay men's sexual practices is a serious challenge. While GBMSM are disproportionately at higher risk from this Monkeypox outbreak, that does not mean that all GBMSM are at equally heightened risk. As Craddock (2000) explored in

relation to HIV/AIDS, focusing either on risk groups or risk behaviours in isolation can be insufficient. There is an interaction between the two, which also has place-specific dynamics. In the UK, during the current outbreak of Monkeypox, those most at risk of contracting the virus have been gay and bisexual men who are part of densely connected networks of men who have multiple sexual partners, usually in the context of sex clubs, saunas, or private parties. This largely accounts for the geographical clusters of cases, where those socio-sexual networks are densest.

That London, Brighton, and Manchester are the centres of the Monkeypox outbreak in the UK should not be a surprise to many people. Geographers and others have studied the concentration of LGBTQ+ people and queer spaces in these cities for decades (Binnie, 1995; Browne & Bakshi, 2013; Quilley, 1997). However, studies of gay migration (Gorman-Murray, 2007; Lewis, 2014) and mobility (Knopp, 2004) highlight that although cities with a concentration of queer venues and specialist services can be a pole of attraction for queer people, relocation to live in those cities is only part of the story. Many more people will visit those places for pleasure and a break from the routine of their lives than will ever move there. The sexual networks of GBMSM located in those cities are not self-contained but connect with places around the country and beyond. Indeed, several of the earliest cases in (mainland) Spain, Germany, and the UK were among gay men who had attended gay pride in Gran Canaria in May 2022 and similar clusters traced to a gay fetish festival in Antwerp (Bragazzi et al., 2022).

In the late 1990s and early 2000s, geographers of sexuality and others invested considerable effort in understanding the spatialities of 'public sex' venues and environments used by GBMSM (Binnie, 2001; Tattelman, 1999). However, this work has been less common recently (Andersson, 2011). This is a mistake, given how the advent of new treatments for HIV and PrEP as a pharmaceutical prophylaxis to prevent HIV transmission (Brown & Di Feliciano, 2022), as well as smartphone technologies (Koch & Miles, 2021), the rise of certain drugs used to enhance pleasure and disinhibition in sexualised spaces (Andersson, 2022; Pienaar et al., 2020), and other factors have changed GBMSM's socio-sexual cultures (Race, 2018).

There is an urgent need for geographers to understand these changes, and not to restrict our studies to their densest expression in major metropolitan centres, but to consider how they are experienced intersectionally and how they are entangled with other locations too. For 30 years, most work in the field of geographies of sexualities has utilised qualitative methodologies. These are important, and can help provide deep, contextual understanding of the experience of these socio-sexual spaces and the meanings attached to them (Brown, 1995). Despite long-standing critiques that quantitative modelling (in isolation) can reduce gay men's bodies merely to vectors of infection, there is a demonstrable need for better quantitative data about where GBMSM live, where they socialise and travel to, how and where they access (sexual) health services, and the patterns and reach of their socio-sexual networks.

3 | TREATING MONKEYPOX

Given that the current Monkeypox outbreak was identified in relation to GBMSM's sexual networks, since May 2022 people with Monkeypox symptoms have been directed to contact their local sexual health clinic for testing and treatment. Sexual health services, which in many places are already under considerable strain, have been given no additional resources to fund this case load.

The strain on sexual health services comes from a perfect storm of recurring funding cuts, a serious shortage of new nurses and doctors training to work in the area, and the retirement of the generation of clinicians who specialised in sexual health in response to the urgency of the HIV pandemic in the 1980s and 1990s. While it has become commonplace for queer theorists to describe the significant shifts in social attitudes towards homosexuality and the increase in formal legal equalities for many LGBTQ+ people as an expression of 'the sexual politics of neoliberalism' (Duggan, 2002), there is still too little work that has examined the impact of austerity on LGBTQ+ people (Di Feliciano & Brown, 2015) and our socio-sexual cultures. It is certainly the case that the ecosystem of specialist LGBTQ+ sexual health charities and voluntary sector service providers, which developed in response to HIV in the 1980s and 1990s, has been decimated by funding cuts. This is amplified outside London and Manchester, with large parts of England no longer covered by LGBTQ+ sexual health charities embedded in their local communities. The longer-term sustainability of several of those charities that have survived to date also looks increasingly precarious.

The good news is that there is an effective vaccine (the MVA Smallpox vaccine) which reduces the risks of Monkeypox infection (WHO, 2022a). The bad news is that this vaccine is only produced in one location globally and there have been significant supply chain issues. The vaccine is not routinely used for public health interventions, even in those regions of Africa where Monkeypox is endemic, and until the 2022 outbreak was mostly produced to be stockpiled by the military as

a contingency against chemical warfare attacks (Arita, 2005). Initially, in England, about 80% of available vaccine doses were reserved for use in London, as the centre of the outbreak (NHS England, 2022). Given the concentration of cases in the capital, this makes some sense from a public health perspective, as it focused vaccination on those communities at most immediate risk.

The initial supply of vaccines enabled some London sexual health clinics to offer walk-in vaccinations to people deemed at highest risk (especially where the local NHS trust was able to redirect the capacity of their remaining COVID vaccination teams). This model largely allowed these services to vaccinate men who self-declared as being at heightened risk from Monkeypox. In abstract, this is not a problem, as a proportion of men embedded in the socio-sexual networks that are at greatest risk will not necessarily have a recent history of engagement with sexual health services. However, in practice, without a significant investment in a health promotion campaign raising awareness of the availability of the MVA vaccine and clearly targeting those at heightened risk, the availability of walk-in vaccine centres initially largely circulated through gay men's own social networks, mediated through social media and hook-up apps. Anecdotal evidence from London suggests that the circulation of information through these (relatively closed) networks may have amplified classed and racialised inequalities among GBMSM groups.

Walk-in vaccination clinics have not been possible in most areas outside London (and in the few places where this has been possible, they have been on a far more limited scale, with higher levels of triage before vaccination). Initially, this was because the number of vaccine doses allocated outside the London, Brighton, and Manchester hotspots was very small (in some cases, no more than an initial allocation of 20 vaccine doses for cities with populations in excess of 400,000 people). When a larger volume of vaccines became available in late September 2022, many sexual health clinics outside London still did not significantly scale up their vaccination programmes – usually because they lacked staff capacity for this without jeopardising other services. In practice, most regional sexual health clinics have offered a combination of opportunistic vaccination to eligible GBMSM who have presented in clinic for other reasons and/or attempted to call in those men already in contact with their services whose clinical records suggest they might be at heightened risk from Monkeypox. Some clinics are being more proactive than others and obtaining clear information about how to access vaccination in each area can be tricky. In the absence of an adequately funded and targeted communication strategy, this undoubtedly means that outside the largest English cities, many gay and bisexual men are still waiting for vaccines. This is likely to exaggerate and reproduce existing social and regional health inequalities among GBMSM. The experience of PrEP rollout in England suggests that the triage system favours those men who understand the eligibility criteria and are willing to tell stories of their sexual risk behaviour that will help them secure treatment. While this neoliberal individual 'responsibility' for disease abatement has been widely critiqued, the peer-to-peer sharing of information about harm reduction during the Monkeypox outbreak deserves further study to understand what other dynamics are at play (Trnka & Trundle, 2014).

4 | WHAT CAN GEOGRAPHERS CONTRIBUTE?

The current global Monkeypox outbreak poses many questions of interest to geographers and where geographical knowledge can make a useful contribution and impact. But the current situation also highlights some of the ways in which the congealing of sub-disciplinary boundaries within Geography have also limited geographers' capacity to utilise our knowledge in ways that are useful. Geographers of sexualities have previously produced a sizeable body of work that has analysed the drivers that created dense concentrations of GBMSM in cities like London and Manchester. However, there is a palpable sense that this work has been done and so there is relatively little work that has kept pace with how these residential patterns are changing in response to changes in housing, employment, and social attitudes. Similarly, although geographers have researched many of the individual social, biomedical, and technological changes that have reconfigured GBMSM's socio-sexual cultures in the last 15 years, there has been very little work that has synthesised the cumulative impact of these changes. This means that geographers of sexualities have largely failed to keep pace with recent changes in the spatial and cultural dynamics of GBMSM's socio-sexual networks and practices, and how they vary geographically. Better modelling of the distribution of the GBMSM population and intelligence about how (and when) their socio-sexual networks stretch beyond place of residence could have helped inform more equitable vaccine distribution and more effective public health messaging.

Monkeypox also challenges geographers to collaborate with one another across sub-disciplinary silos, and there is a case for new collaborations between geographers of sexualities, health geographers, the emerging field of pharmaceutical geographies, population geographers, and social geographers of austerity. Thinking across (sub)disciplinary boundaries

could help weave together better understandings of the geographical distribution of GBMSM populations in the UK, with rich ethnographic understandings of their socio-sexual cultures and relationships to sexual health services. Thinking about these interactions in relation to contemporary trends in global migration and the political economy/geopolitics of vaccine access would allow for a 'worlding' of Monkeypox that thinks about the health and social inequalities (re) produced by the virus across multiple locations and spatial scales. Whether this Monkeypox outbreak is contained in the next few months or Monkeypox becomes endemic outside Africa, these challenges will remain and be central to addressing the social and health needs of GBMSM over the coming period.

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DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created for this commentary.

ORCID

Gavin Brown  <https://orcid.org/0000-0001-9881-8350>

ENDNOTE

¹ Thanks to Alex Sparrowhawk from the British HIV charity THT who I first heard make this observation.

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