

Critical Discourse Studies



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rcds20

Crime or culture? Representations of chemsex in the British press and magazines aimed at GBTQ+ men

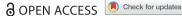
Frazer Heritage & Paul Baker

To cite this article: Frazer Heritage & Paul Baker (2021): Crime or culture? Representations of chemsex in the British press and magazines aimed at GBTQ+ men, Critical Discourse Studies, DOI: <u>10.1080/17405904.2021.1910052</u>

To link to this article: https://doi.org/10.1080/17405904.2021.1910052

9	© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 12 Apr 2021.
	Submit your article to this journal 🗹
dil	Article views: 700
Q ^L	View related articles 🗗
CrossMark	View Crossmark data ☑







Crime or culture? Representations of chemsex in the British press and magazines aimed at GBTQ+ men

Frazer Heritage D and Paul Baker

Department of Linguistics and English Language, Lancaster University, Lancaster, UK

ABSTRACT

Chemsex is a phenomenon in which typically gay, bisexual, trans, gueer, and/or related communities of men (GBTQ+ men) take psychoactive drugs while having sex, often without a condom. The practice can lead to increased rates of HIV transmission, sexual assault, and in extreme cases murder. GBTQ+ men are already a stigmatised group so those who engage in chemsex face multiple stigmas. This study examines the ways that two types of media report on chemsex while negotiating these stigmas. We take a large data set of newspaper articles written for the general British public and a smaller data set of magazines aimed at GBTQ+ men to examine how chemsex is represented in the media. We find that the mainstream press focus on extreme criminal cases involving chemsex, while the media aimed at GBTQ + men focus on counselling services and discuss chemsex in relation to gay culture. Chemsex is unlikely to go away, and so we address how information about it is conveyed in different media and call for more research in this area.

ARTICLE HISTORY

Received 1 December 2020 Accepted 24 March 2021

KEYWORDS

Chemsex; sexual health; corpus linguistics; queer linguistics; media discourse

1. Introduction

In 2019, a Channel 4 documentary reported on a 'silent killer' who 'is killing hundreds of gay men per year'. If this referred to a human being, there would undoubtedly be a hunt to bring them to justice. However, the killer is not human, but Gamma-hydroxybutyrate (GHB), a depressant and psychoactive drug commonly used in 'chemsex'. McCall et al. (2015, p. 1) describe chemsex (sometimes spelt chem sex or hyphenated) as

sex under the influence of psychoactive drugs, mostly among men who have sex with men. It refers particularly to the use of mephedrone, y-hydroxybutyrate (GHB), y-butyrolactone (GBL), and crystallised methamphetamine. These drugs are often used in combination to facilitate sexual sessions lasting several hours or days with multiple sexual partners.

There are a number of concerns around chemsex, though most notable are concerns about high rates of addiction, increased HIV transmission rates, and sexual assault which occurs when people are under the influence of these drugs (see Blomquist et al., 2020; Bourne et al., 2014; Bourne et al., 2015; Bourne & Weatherburn, 2017; Public Health England, 2015; Stevens et al., 2020). After an official review in Novemeber 2020, GHB and GBL were reclassified as class B drugs in March 2021. Under the UK's Misue of Drug's Act 1971, this reclassification now places GHB and GBL in the category of drugs as cannabis and ketamine.

Interview studies have suggested that people who engage in chemsex are often afraid of the stigma they may face if they seek help (see Bourne et al., 2015). In this study, we consider how different forms of media may perpetuate or challenge this stigma. We examine the mainstream British press, in order to determine how chemsex is portrayed to the general British public. Second, given that this practice is mostly enacted by GBTQ+ men, we consider how chemsex is portrayed to such a target audience via an examination of media aimed at GBTO+ men.

We argue for the use of corpus linguistics (see Baker et al., 2020), an approach that uses computer software to examine patterns in language. Following this, we outline our two corpora of news articles, describing how they were gathered and analysed. We examine the collocates and collocational networks of *chemsex* in both corpora, focusing on the concepts and themes that both forms of media associate chemsex with. We then compare the two corpora by identifying keywords (statistically significant frequent words) in each set. This leads to an analysis of keywords relating to crime and sexual health. The paper concludes by discussing the implications of our findings, along with suggestions for further research.

1.1. Previous studies on chemsex

Previous work has examined chemsex from medical, sociological, and socio-medical perspectives. Typically, these studies use qualitative interviews with men who engage in chemsex (Ahmed et al., 2016; Hakim, 2019, 2020; Weatherburn et al., 2017). They have identified a sense of stigma associated with the practice (Pollard et al., 2018) as well as the perception that chemsex is a ubiquitous activity that is overly prevalent in queer communities (see Ahmed et al., 2016; Florêncio, 2021). Some studies have identified narratives associated with chemsex - for example, Milhet et al. (2019) interviewed 33 men who engage in chemsex, finding that while their narratives focused on pleasure, relationship building, and sexual discovery, they simultaneously involved suffering and distress. However, Milhet et al. also draw attention to the fact that their participants faced several stigmas - particularly the stigmatisation of drug use along with the stigma attached to men who have sex with men.

Others have argued that discussions of chemsex are reminiscent of how both drugs and sexuality are represented across different forms of media. For example, Florêncio (2021) notes that queer identities and drug use have been pathologised for years, but also that gueer identities have previously been linked to drug use in different ways, such as in news reports and films (see also, Barrett, 2017). Florêncio draws attention to the duality of chemsex: it is a consumer-subculture which can be life-hindering, but it can also be life-affirming. Hakim's (2019) interview-based study draws attention to the current social culture available to men who have sex with men: ease of access via the internet, neoliberalism in a localised London context, and perceived notions of intimacy among men who have sex with men. Hakim also notes the existence of a moral panic around chemsex, perpetuated by the media, and that interview participants acknowledged media reporting around the topic. An aim of our study is thus to build on

Hakim's research by carrying out a systematic analysis of the discourses around chemsex in the UK media.

1.2. Corpus approaches to healthcare communication

Also relevant to this study is work which has taken a corpus linguistic approach to examine how language is used in large datasets (e.g. collections of news texts) to represent a variety of public health phenomena. The vast majority of this type of research into health(care) communication tends to examine either diseases and syndromes (e.g. Semino et al., 2017) or communication between NHS professionals and service users (e.g. Baker et al., 2019). However, there is a dearth of research which examines practices which pose a risk to public health, such as chemsex, excessive alcohol consumption, or drug (mis)use.

A commonality running through research into health(care) communication is that the press are able to normalise attitudes towards people with certain health conditions. The press also tend to focus on the negative elements of health conditions, such as poor behaviours from those suffering with mental health conditions, or the cost of healthcare to the taxpayer (see Baker et al., 2020; Balfour, 2019; Brookes et al., 2018). Baker et al. (2020) carried out a diachronic analysis on a 35-million-word corpus of newspaper articles about obesity from 2008 to 2017. They argued that over time obesity was increasingly represented as the responsibility of the individual, while the focus on the role of social factors contributing to obesity (such as government policy) decreased. Linked to this sense of personal responsibility was stigmatisation of obese people, for example, through dehumanising and reductive labels or representations of obese people as sinful, criminals, or figures of fun.

1.3. Sexuality and healthcare communication

While the health(care) issues addressed above impact on a wide range of people from different identity groups, this section now turns to health(care) issues relating to sexual identities specifically. One such area where corpus approaches have been particularly adept is in the study of sexual health information, and how they represent sexual identity. For example, Oakley (2016) argues that manuals aimed at British teenagers between the years 1950 and 2014 oriented themselves and others towards sexuality-based norms. Carr and Bednarek's (2019) analysis of diachronic changes in Dolly (a magazine aimed at Australian girls) demonstrated that there was a shift in focus on the health advice offered: from sexual health in the 1990s to mental health in the 2010s.

GBTQ+ men have been the subject of stigma in the media for decades. Baker (2005) showed how tabloids have represented gay men as criminal, promiscuous, ubiquitous, proselytising children and politically militant. Some representations appear to be contradictory, such as one which views gay men as repressed and secretive while another characterises them as flamboyant and shameless.

A number of corpus-assisted studies have focussed on the immune-deficiency virus HIV which can cause AIDS, both in terms of how safe-sex advice is given and how people (typically GBTQ+ men) with HIV or AIDS are represented. An example of the former study is Baker's (2005) analysis of British safe sex documents aimed at GBTQ+ men, written in the early 2000s. He noted that the texts used colloquial language,

emulating formats like holiday guides or queer magazines as a way of encouraging readers to engage with the message. Language around HIV tended to involve reduction of risk and implied non-intentional transmission (e.g. pass on rather than give) and advice was often indirect, avoiding imperatives but instead normalising safe-sex behaviours by referring to the practices of other men. In some articles, the reader was positioned as someone who was likely to use drugs or engage in anonymous sex, e.g. with texts giving advice on how to find outdoor cruising areas or advising readers that 'drugs in this part of the country are particularly strong (cocaine especially) so don't get piggy.'

In a similar vein, Jones and Collins (2020) examined the representation of PrEP (Preexposure prophylaxis) in the British Press. PrEP is a HIV prevention drug, prominently used in communities of GBTQ+ men. In their corpus study of how this drug was represented, both left and right leaning British newspapers focused on men who have sex with men. However, while left-leaning newspapers focused on the human benefit of PrEP, most right-leaning papers took a moralistic stance to the drug, focussing on it as a 'promiscuity pill' (p.203). These newspapers typically represented PrEP as a burden on the National Health Service. While these studies demonstrate some intersections between sexuality and health(care) communication, they have focused on portrayals related to HIV itself, or prevention of HIV, rather than sexual practices.

Chemsex is markedly different to such representations, because it is an action which is deemed 'risky' and a factor in the transmission of HIV, rather than the virus itself. Barrett (2017) draws attention to the fact that drug taking among GBTQ+ men has previously been discussed in different ways: as ubiquitous and problematic from a public-health perspective (similar to the discussion offered by Florêncio, 2021). However, Barrett (2017, pp. 120-21) also notes that some journalists raised concerns over the normalisation of such actions. Barrett highlights how magazines aimed at men who take drugs at gay circuit parties provide tips (such as how to avoid overdosing) and advice on having anonymous sex (pp.127-130).

Barrett (2017, pp. 147-180) also reports on GBTQ+ men who have sex without condoms. Most of these men are HIV positive, but he notes a small number who are HIV negative that actively seek to become positive. Such 'bugchasers' (p.154) have been sensationalised by the mainstream press. Barrett draws attention to the fact that many people who construct their identity as a 'barebacker' (i.e. someone who has unprotected sex) negotiate different moral stances with regards to HIV transmission.

Research into how chemsex is represented thus requires consideration of values associated with moral panics about healthcare, risk taking, drug (mis)use, crime, and sexuality. It should be noted that other scholars (for example, Lovelock, 2018) have argued that British tabloids are able re-package the same homophobic discourses about moral decay and HIV into discussion of chemsex. A thread linking much of the research in GBTQ+ representation is negativity, more specifically, the stigmatisation and criminalisation of this group, with their activities represented as unhealthy, dangerous, and criminal.

As with the above studies, we also wish to acknowledge the range of media available to people who might engage in such behaviours. A fundamental underpinning of work in register studies is that language, and by extension representations, will differ depending on the audience of a text (see, Halliday, 1989). Hence, our focus on texts aimed at GBTQ+ men and at a more general audience because the differences in audience will create differences in the patterns of language used to represent chemsex.

2. Materials and methods

In order to build a corpus of general UK news articles, we used the newspaper database LexisNexis. We collected articles containing the terms 'chemsex' and/or 'chem sex' from January 2015 until August 2020 (when the data collection began). The search also produced all cases of the hyphenated form chem-sex. From the articles generated, we removed newswires and sources where LexisNexis detected a high similarity with another article as well as manually removing texts with identical headlines. This resulted in a corpus of 648 articles (608,612 tokens) which we refer to as the Mainstream Corpus.

To build the corpus of texts aimed at GBTQ+ men, we first identified GBTQ+ magazines in circulation in the UK. A definitive list does not exist, so we used multiple methods, including online searches which led us, for example, to a Wikipedia page that listed publications aimed at LGBTQ+ people. Having identified a list of magazines, we located their online sites and used the same search terms ('chemsex' and 'chem sex') to retrieve all articles containing those terms. The articles were from both print forms of the magazines which had been digitised and online-only articles. We only searched for articles which were published in the same time period as those from the Mainstream Corpus. Many of the periodicals did not refer to chemsex in any of their publications, and so were not included. One source, FS magazine (produced by the charity GMFA – Gay Men Fighting AIDS), contained a high number of articles (543) which mentioned chemsex. In order to build a more representative corpus, we limited the number of articles from FS magazine to 25 (because otherwise this would have skewed the corpus). This resulted in a corpus of 123 articles totalling 112,818 tokens. Throughout this paper we refer to this corpus as the GBTQ+ Corpus.

Once the two corpora were gathered, we used the corpus tool #Lancsbox (Brezina et al., 2015) to examine the data. We started by examining collocates and collocational networks of the term *chemsex* (to take into account the multiple spelling forms, we worked with versions of the corpora where we had changed chem-sex and chem sex to chemsex). We then compared the two corpora by identifying keywords (words which occur statistically significantly more frequently in one corpus when compared against a second corpus). To calculate keywords, we compared frequency lists of the two corpora against one another to identify the 50 words in each corpus where word frequencies showed the highest disparities. Keywords were then grouped by hand into categories to identify themes and then we selected a small number of representative keywords for qualitative analysis by examining concordance lines in order to provide a more detailed picture of how chemsex is characterised in the two corpora. However, our analysis begins with a consideration of collocates of the word chemsex which occurs 1,732 times in the Mainstream Corpus and 516 times in the GBTQ+ Corpus.

3. Results

3.1. Collocational network analysis

A collocational network is a visual representation of multiple relationships between words in a corpus, using lines to indicate which words frequently occur near or next to one another (Brezina et al., 2015). Using the tool #Lancsbox 2.0, collocational networks of chemsex were created for the Mainstream and GBTQ+ corpora separately. This was

done by first searching for collocates of chemsex, then identifying the 'second-order' collocates (see Baker, 2016). To illustrate, for the Mainstream Corpus we initially identified 13 collocates of chemsex which included words like drug-fuelled and parties. In order to create a network which shows links between multiple words we looked for further collocates of drua-fuelled and parties as well as the other 11 collocates. This resulted in 'second order' collocates like sex - which did not collocate with chemsex but did collocate with both drug-fuelled and parties. Additionally, this process revealed that drug-fuelled and parties collocated with one another, as well as with the word *chemsex*.

We used the Mutual Information (MI) statistic to identify collocates (a measure which prioritises words that often occur near one another but rarely appear apart). Following Durrant and Doherty (2010, p. 145) we indicated that a word pair would need to have a MI score of 6 or above to count as a 'psychologically meaningful' collocate. We also set a minimum frequency for collocates (e.g. the number of occurrences of the pair in the corpus that needed to be found before we could consider it). As the sizes of the corpora were different, using the same minimum frequency resulted in a vastly overcrowded network for the Mainstream Corpus and a tiny network for the GBTQ+ Corpus, Instead, we aimed to obtain around 10 collocates for both networks – enabling us to focus on a manageable number of relatively frequent and salient collocates. Fixing the minimum collocational frequency at 6 for the GBTQ+ Corpus and 25 for the Mainstream Corpus resulted in 13 collocates of chemsex for each corpus. The networks are presented in Figures 1 and 2.

Figure 1 indicates that in the Mainstream Corpus chemsex is discussed within the context of drugs (the words drug, drugs and drug-fuelled appear in the network). As noted above, chemsex, drug-fuelled and parties all collocate with one another. In Figure 1 they form a triangle and appear in strongly negative contexts like 'fears drug-fuelled "chemsex" parties are spreading diseases' and 'drug-fuelled chemsex party survivor'.

The collocate so-called indicates authorial distance from the word chemsex in the mainstream press (in the examples shown below, collocates, keywords and other words of analytical relevance are shown in bold).

(1) He then supplied it to gay men involved in the so-called 'chem sex' scene, where partygoers engage in lengthy orgies fuelled by large quantities of illegal narcotics.

Indeed, single or double scare quotes around chemsex occur in 496 out of 1,732 cases (28.48%) in the Mainstream Corpus as opposed to 24 out of 516 (4.65%) in the GBTQ+ Corpus, indicating that the mainstream articles are more likely to signal that *chemsex* is either an unfamiliar term and/or one which the author wishes to signal distance from.

Chemsex is also discussed in relation to crime in the Mainstream Corpus, not just in terms of the legality of the drug itself but in two related news stories. The first involves a drug dealer called Gerald Matovu, who had given Eric Michels (an actor who had appeared in a James Bond film), a fatal dose of GHB, then stolen his bank card details and other belongings. Matovu also supplied GHB to Stephen Port, a serial killer who had used the drug to rape and kill four men. These stories explain the presence of most of the collocates at the top of the network in Figure 1: James, Bond, Stephen, serial, actor, drug and dealer.

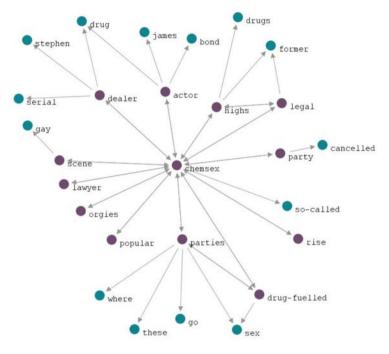


Figure 1. Collocational network of *chemsex* in the Mainstream Corpus.

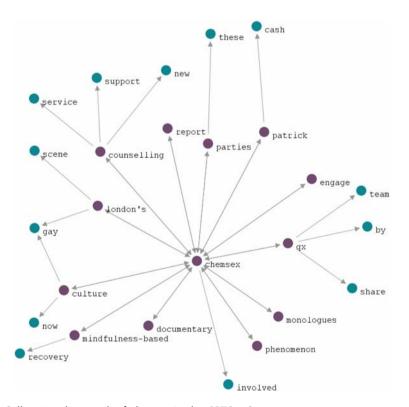


Figure 2. Collocational network of *chemsex* in the GBTQ+ Corpus.

(2) **SERIAL** killer **Stephen** Port's **drug dealer** has been caged for life over the chemsex murder of a **Bond actor** he targeted on Grindr.

The collocate *lawyer* is related to another high-profile story involving the court case surrounding a lawyer whose boyfriend had died of a drug overdose – this case is mentioned in 43 articles in the Mainstream Corpus.

(3) CHEMSEX DEATH LAWYER LET OFF: NO JAIL DESPITE 60 DRUG BAGS

In a similar vein to the previously discussed networks which demonstrate the relationship between chemsex and the law, there appears to be a relationship between *legal*, *highs*, *former* and *chemsex*. This is due to a number of articles which relate to a government crackdown on drugs.

(4) 'Chemsex' drugs and former legal highs targeted in government crackdown

Other collocates relate to sexual health. For example, *rise* is used to indicate increases both in the number of people engaging in chemsex (example 5) and also in sexually transmitted infections as a result of chemsex (example 6).

- (5) The **rise** of gay 'chemsex' parties involving libido-enhancing drugs
- (6) The bizarre case comes amid repeated warnings from concerned health officials that chemsex is fueling a rapid **rise** in cases of STIs.

Elsewhere, while *gay* is not a direct collocate of *chemsex* in the Mainstream Corpus, it is a 'second order' collocate via the relationship *chemsex-scene* and *scene-gay*.

- (7) The "chemsex" **scene** is associated with some **gay** men who use substances like crystal meth, mephedrone and GHB to have lengthy sex sessions.
- (8) He was targeted by detectives who have been investigating the burgeoning 'chemsex' **scene** within the **gay** community of south London.
- (9) This film focuses specifically on one extreme subculture on the London gay scene.
- (10) Prosecutor Martyn Bowyer said: 'It is accepted this defendant bought in bulk for use in what is known as the **gay** chemsex **scene**...'

Example 7 indicates that it is some, rather than all gay men who are involved in the chemsex scene while example 8 views the chemsex scene as existing 'within' the gay community of south London, although also claims it is a scene that is burgeoning. Example 9 positions chemsex as an 'extreme subculture' on the London gay scene while example 10 combines the gay and chemsex scenes by referring to the 'gay chemsex scene'. There are 25 cases of this phrase in the Mainstream Corpus. Thus, in various ways, chemsex is linked to gay men and is represented as part of the gay scene. The examples highlight a tension between the view that the chemsex scene is a practice limited to a small group within the gay community, and one that sees it as becoming more widespread, and thus more dangerous.

Moving on to the GBTQ+ Corpus, chemsex is much less often discussed directly in reference to drugs (one article in the GBTQ+ Corpus explicitly negates the relationship, headlined 'Chemsex is not a drug problem – it's a sex problem'). However, while the distancing strategies in the mainstream press indicate that chemsex is an unfamiliar term, there are collocates in Figure 2 which indicate that this is also the case for the GBTQ+ press. For example, the collocate phenomenon is used to explain chemsex in a relatively neutral way.

(11) Chemsex is the **phenomenon** refers [sic] to the use of drugs in a sexual context, often referring to group sex that can last for days at so-called 'parties' or 'chill-outs'.

The above article uses group sex, a relatively descriptive term, whereas the 'explanatory' article (example 1 earlier) cited from the Mainstream Corpus employed the term orgies, a word which is also a collocate of *chemsex* in that corpus and brings to mind Ancient Greek and Roman rituals and suggests a more frenzied and uncontrolled event. Within the Mainstream Corpus, the collocate orgies is associated with crime, violence and disease e.g.

- (12) Then there is all this about **orgies** and drugging and raping
- (13) Cruising, bathhouses, **orgies**, crabs and hepatitis are all here
- (14) deputy head indulged in drug-fuelled paedophile sex orgies

Coming back to the GBTQ+ Corpus, in Figure 2 the collocates engage and involved do not express judgement about the practice. In the British National Corpus (1994 edition), collocates of the phrase engag* in indicate it is used in a wide range of contexts (banter, warfare, dialogue, farming etc), suggesting no clear positive or negative associations with it, while involv* in has a similar wide range of collocates.

- (15) If you are going to **engage** in chemsex, make sure you know what you're doing.
- (16) Everybody knows somebody who is **involved** in chemsex.

Example 15 is from an article entitled 'Chemsex is actually "a bit boring"' where the author interviews a man who works at an art museum, a librarian, and an administrator about their experiences of chemsex. The article paints a low-key picture of chemsex parties where the mood is often subdued and people drink cups of tea and talk about their lives. At the end of the article, the author advises readers not to compromise their personal safety and to use protection. Example 16 is a quote from an interview with James Wharton, a former soldier who has written a book about his experiences with chemsex. He is also quoted as saying that 'chemsex is absolutely one of the things that define us as a community today in this country' and that 'Chemsex culture is so firmly rooted and embedded in today's gay culture'. The interviewer asks Wharton to defend a claim he made that 'chemsex culture is now gay culture', arguing that this is a controversial stance which is likely to offend a lot of people. Wharton replies that references to drugs are ubiquitous on the GBTQ+ hook-up app Grindr and that the drugs can be easily sourced.

Culture is thus another collocate of chemsex with the word pairing being used in a way which suggests that the practice is widespread among GBTQ+ men.



- (17) Though ultimately not making any succinct statement on the chemsex culture which is quickly becoming endemic within the queer scene, Tumulus is a compelling piece of theatre
- (18) Our sexual health workers are more aware than ever before of the chemsex culture
- (19) Chemsex is social: there are parties, there are chillouts. Chemsex as a culture is the opposite of alienation. It is community-(almost) literally-on steroids.

While example 17 appears to view chemsex culture as problematic, referring to it as endemic, example 18 is more neutral, although the phrase 'more aware than ever' also indicates that the practice is growing or widespread. Example 19 presents chemsex more positively, as both a culture and a community: 'the opposite of alienation'.

The collocates report, documentary and monologues all refer to forms of media (a news report, a documentary film, and a play respectively) which have chemsex as the central focus in the GBTQ+ Corpus.

- (20) Mobeen Azhar: My **report** into London's gay chemsex scene
- (21) Highly anticipated VICE documentary, Chemsex, hits UK cinemas this week
- (22) The Chemsex **Monologues** is essential viewing.

The GBTQ+ media thus position readers as being likely to want to engage with different forms of media which discuss chemsex, whether to learn more about it, see it from a different perspective, or connect with other's experiences. Indeed, the existence of plays, film documentaries, and books on the topic implies that for some GBTQ+ men, chemsex is already seen as part of their cultural world. One reason for such inclusion could also be that the writers acknowledge that some of their readers may already engage in chemsex (or know someone who does engage in it), and so the readers may want to see similar issues that they encounter, or are familiar with, represented in different mediums.

Other collocates like *counselling* and *mindfulness-based* relate to articles referring to therapies which are aimed at helping people who engage in chemsex, implying that the practice is problematic although focussing on support.

- (23) There's a groundbreaking new chemsex **counselling** service for gay men
- (24) Mindfulness-Based Chemsex Recovery (MBCR) is a new programme launching in May in Soho

Thus, the mainstream newspapers distance themselves from chemsex, foregrounding the drug-taking aspect along with associated dangers of crime and harm. The GBTQ+ magazines tend to avoid referring to chemsex as taking drugs but instead engage in debate about whether chemsex is the same as queer culture, positioning chemsex as a topic of cultural interest via books and plays but also providing information about counselling and recovery services that readers may want to access.



3.2. Keyword analysis

As well as focussing directly on collocates of *chemsex*, we compared the two corpora, in order to identify words which were distinctive of each one when compared against the other. Table 1 shows the top 50 keywords that were obtained when frequency lists of each corpus were directly compared against one another (using log-likelihood tests). To identify themes in order to facilitate further analysis, we categorised the keywords into groups based on their grammatical and semantic features. There will always be a level of imprecision when carrying out this kind of categorisation as some words can fit into multiple categories, and some categories could be merged or split. Many of the words in the crime category, for example, could be categorised as social actors but after analysing concordance lines of them, we identified that they were always used in stories about crime, so deemed this to be the more useful categorisation. When a single word existed in a category on its own, we moved it into a category called 'Others'.

The table shows some notable differences. For example, the third person pronouns in the Mainstream Corpus tend to position the reader of the articles as overhearing stories about other people, whereas the first and second person pronouns in the GBTQ+ Corpus indicate direct address to the reader or involve dialogues between journalists and interviewees, indicating a more immediate and involved aspect to these articles. The Mainstream Corpus is more likely to use standard terms to refer to drugs e.g. *drug*, *GHB* whereas the GBTQ+ Corpus uses the in-group term *chems*, as well as containing more explicit references to sex (*porn*, *fucking*). However, the analysis below focusses on words from two categories: those relating to crime, which were key in the Mainstream Corpus, and words relating to sexual health, which were key in the GBTQ+ Corpus.

3.3. Crime

The Mainstream Corpus contains numerous keywords related to crime (*police*, *court*, etc) whereas there are no words relating to crime that were frequent enough to be keywords in the GBTQ+ Corpus. Some of the keywords in this category refer to men who have been

Table 1. Top 50 keywords of the mainstream and GBTQ+ corpora when compared against each other.

Category	Key in the Mainstream Corpus	Key in the GBTQ+ Corpus
Crime	police, Port, court, Brizzi, jailed, officers, Cuckson, supply, Sinaga, Hiran, victim, Buck, accused, murder, PC, Semple, victims, killer, class, Matovu, death, quilty, investigation, legal, crown	
Sexual health		HIV, PREP, bareback, Dean, GMFA, negative, condoms, support, hep, undetectable, positive
Sex/sexuality		sex, gay, porn, fucking
Verb/processes	said, told, found, heard	think, get, want, talk
Social actors	Mr, family	guys, someone
Drugs	drug, meth, GHB	chems
Culture		monologues, play
Pronouns	his, he, her, she, him	you, I, we, your, our, my, us, me
Other grammatical words	was, had, after, of, in, were, the, by	can, it, if, that, about, do, 've, us, are, 're, or, 't, 'm, what, so, and, don, like
Others	flat, year, four	

convicted or accused of rapes or causing/contributing towards deaths in cases where chemsex drugs have been involved (Stephen Port, Stefano Brizzi, Neil Cuckson, Reynhard Sinaga, Ed Buck, Gerald Matovu) or their victims (Hiran Chahan, Gordon Semple). A guestion arises as to whether the two corpora differ only in terms of the frequency of reference to crime or whether there are further differences relating to how the crime itself is reported. Notably, most of these keywords did not occur in the GBTQ+ Corpus. The most frequent crime keyword in the GBTQ+ Corpus was Matovu which occurred only 18 times across three articles (it appeared 413 times across 37 articles in the Mainstream Corpus). Below we focus on how Matovu's crime was reported across both corpora.

In the Mainstream Corpus one story about Matovu foregrounds his sexuality as *qay* in the first word of the headline.

(25) **Gay** drug dealer 'killed James Bond actor with huge overdose of chemsex date rape drug as he and his lover stole phones, bank cards and cash from a dozen men they met on Grindr'

Some of the Mainstream Corpus articles engage in sensationalism, providing particularly horrific details of the crime that emerged during the court case. For example, three articles describe the victim, Eric Michels, as having 'dried blood and green bile near his lips' while one details how another victim's naked unconscious body was burned with a blow torch and left by bins outside on the street. The articles in the Mainstream Corpus also provide a high amount of detail about Michels, giving information about his age, occupation, the name of his wife, the year he divorced her, whether it was an amicable split, and how many children he had. Several articles describe him as engaging in a number of actions prior to his murder, for example, as having 'gone out to gay bars in Soho, Central London'. He is also described as 'making contact with Matovu through Grindr', 'going on Grindr, where he found Matovu', 'messaged Matovu on the app' or having 'contacted Matovu'. Additionally the articles describe how the man 'invited Matovu to his home in Chessington, south-west London, for sex', 'He invited Matovu to his home for sex', he 'invited him home for sex' or 'The pair agreed to go to Michels' home in south-west London'.

These pieces are information are not present in the GBTQ+ Corpus. Eric Michels is only named in one of the three articles about Matovu, where he is described as a 'businessman and Skyfall actor'. In this article it is stated that Matovu drugged Michels 'with the chemsex drug and robbed him with their then-boyfriend Brandon Dunbar, 24, while Michels visited London'. In another GBTQ+ article, Matovu and his accomplice are described as having 'targeted 12 gay men by using the hook-up app, Grindr'. There is no mention of the victim having visited Soho, using Grindr or inviting Matovu to his home. However, one of the articles in the GBTQ+ Corpus contains a lengthy quote from a Detective Inspector who was involved with the case. Towards the end of the quote he says:

(26) Matovu and Dunbar are to blame for what happened to these men and the crimes they committed against them. But as with any situation, there are things people can do to help protect themselves when meeting people online, such as talking as much as possible before agreeing to meet, being careful not to share too many details

about yourself, telling a friend or relative what you are planning to do and being generally cautious and vigilant.

Thus, the mainstream articles provide more information of this crime (sometimes in grisly detail), as well as presenting Michels as having made a number of decisions prior to his death. While none of these decisions are explicitly linked to his death, one reading of the narrative constructed around the crime is that it is framed as a cautionary tale (e.g. this is what happens to people who look for sex on internet apps), something which is absent from the GBTQ+ Corpus. Instead, in the GBTQ+ Corpus, a quote from a Detective Inspector clearly blames Matovu and his accomplice for what happened and provides advice on how men who meet others for sex through online apps can protect themselves, without detailing how Michels came into contact with Matovu. This arguably shows the importance of considering the target audience, because GBTQ+ men are more likely to use online apps like Grindr in comparison to the assumed target audience of the articles in the Mainstream Corpus.

3.4. Sexual health

Another area where the GBTQ+ Corpus and the Mainstream Corpus differ is in the representation of sexual health. All words relating to sexual health in Table 1 can be found in both corpora (although they are not statistically key in the Mainstream Corpus, some are still quite frequent). Here, we focus on the keyword HIV, the most frequent sexual health keyword in both corpora, as well as the sexual health keyword that co-occurs most often with the word *chemsex* in both corpora (21 times in the Mainstream Corpus and 11 times in the GBTQ+ Corpus). Although HIV is actually more frequent in the Mainstream Corpus compared to the GBTQ+ Corpus (732 vs 485 cases), we should bear in mind that the Mainstream Corpus is over 5 times as large as the GBTQ+ Corpus so proportionally speaking, the word is more frequent in the GBTQ+ Corpus.

The articles in the corpora paint the intersection between HIV and chemsex in different ways. The GBTQ+ Corpus focuses more on the relationship between chemsex and HIV testing, diagnosis, and counselling. This happens in all 11 instances where chemsex and HIV co-occur. For example:

(27) 56 Dean Street and Dean Street Express offer the full range of STI and HIV testing, support for PrEP, **chemsex counselling** and many other services.

In the GBTQ+ Corpus, 27 out of 123 articles (22%) refer to Dean Street and 18 (15%) mention the charity GMFA. However, in the Mainstream Corpus only 19 out of 648 articles (3%) refer to the clinics at Dean Street while 2 (0.3%) refer to GMFA.

Instead, articles in the Mainstream Corpus tend to focus on chemsex as one of the leading contributors towards an increase in rates of HIV transmission (comprising 14 out of 21 instances where HIV collocates with chemsex):

- (28) Last week the British Medical Journal warned that London's 'chemsex' parties are causing HIV rates to soar.
- (29) **Rising** popularity of gay 'chemsex' orgies prompts HIV warning

This difference is made clear in the above examples through testing and counselling (example 27) in comparison to rising (example 29). There is a stronger focus in the Mainstream Corpus about quantifiable statistics related to HIV transmission rates and chemsex - which is only reported once in the GBTQ+ Corpus. The mainstream press attribute rising rates of HIV transmission to people who engage in chemsex, a representation which is not made as explicit in the GBTQ+ Corpus (perhaps due to pre-existing community knowledge), although references to HIV testing, diagnosis and counselling alongside mentions of chemsex more weakly implies that the two concepts are seen as linked.

One issue with examining the collocation between chemsex and HIV is that sometimes references to HIV might be discussed in a story about chemsex but the two terms might occur outside of the 5L-5R window. In order to account for this, WordSmith 7 (Scott, 2016) was used to generate a random sample of 100 concordance lines in both corpora for the search term HIV. These concordance lines were extended and examined in more detail. In this random sample, HIV was used in relation to chemsex, or people who had engaged in chemsex 6 times in the GBTQ+ Corpus and 43 times in the Mainstream Corpus.

The 6 occurrences in the GBTQ+ Corpus could be divided into three groups: risk factors (3 cases), court cases (2), and mental health (1). The Mainstream Corpus could be divided into four different groups: HIV rates (19 cases), court cases (12), prevention (5), and drug (mis)use (4). For the GBTQ+ Corpus, we focus on risk factors and court cases, while for the Mainstream Corpus we focus on HIV rates and court cases.

In terms of risk, when discussing the potential risk that chemsex can have in terms of becoming HIV positive, articles in the GBTQ+ Corpus tend to offer advice. For example:

(30) If you are going to slam, do not share equipment and needles as this is very high risk for the transmission of HIV and hep C.1

Thus, articles in the GBTQ+ Corpus appear to offer support and advice – especially with regards to sexual practices which might be viewed as risky. This kind of advice and support is not present in the Mainstream Corpus.

While we have already discussed HIV rates earlier, more discourses emerged when examining the concordance lines for HIV. Of the 19 concordance lines in the Mainstream Corpus where HIV transmission rates are linked to chemsex, one common way to discuss chemsex as a factor in acquiring HIV was to reference them as either parties or orgies. For example:

- (31) It has been claimed that these **parties**, which can last longer than a day, have been linked to the spread of HIV infections and could lead to a public health crisis.
- (32) Chemsex orgies and 'Russian roulette' romps with HIV positive partners: Bleak reality of life inside a UK sexual health clinic

Throughout these concordance lines, there is also a strong link to public health – notably through referencing a 'public health crisis' and a 'sexual health clinic'. The use of romps (example 32) was identified in previous research on tabloid representations of queer men, indicating a trend towards viewing their relationships as transient and thus unimportant (Baker, 2005). Example 32 also frames HIV transmission as 'Russian roulette',



implying that becoming HIV positive is still a death sentence rather than a condition that can be managed with medication.

By contrast, in the GBTQ+ Corpus, when discussing HIV transmission as it relates to chemsex as a public health issue, the focus tends to be on individual responsibilities and how readers can (and should) protect themselves, such as:

(33) It can be very difficult to care about **HIV** and STIs when you're **high and horny**. It's not an excuse though. Know how to dose properly and **try to be as safe** as possible.

Both sets of articles include discussion of high-profile court cases which relate to chemsex and contain people who are HIV positive who have either engaged in chemsex or become HIV positive because they have engaged in chemsex. The GBTQ+ Corpus appears to only focus on one court case where HIV is brought to the fore. This story relates to Tim Varchmin, a banker who was accused of possessing more than 100 indecent images of children, who argued that men he invited over for chemsex were responsible for the images. As part of his defence, Varchmin claimed he started engaging in chemsex after he was diagnosed with HIV. It is reported in the GBTQ+ Corpus as follows:

(34) [Varchmin] said that he and his former boyfriend were both diagnosed with a drugresistant strain of HIV. Speaking to the court, Varchmin said: 'It is a life-changing event ...'

The Varchmin case is also discussed in the Mainstream Corpus – where similar phraseology is used for Varchmin's discussion of his HIV diagnosis. However, generally speaking, the news articles in the Mainstream Corpus appear to focus on a wider range of court cases related to HIV and chemsex, such as reporting on the actions of Stefano Brizzi:

(35) [Brizzi] invited Gordon to a 'sleazy session' at his Peabody Estate flat near London Bridge on April 1, 2016. HIV-positive crystal meth addict Brizzi, who chopped up his victim's body ...

This article's reporting on Stephen Brizzi's court case is arguably problematic in terms of how it represents those who are HIV positive. Stephen Brizzi, who is HIV positive, murdered people whom he engaged in chemsex with. The phrase 'HIV-positive crystal meth addict' creates an association between the two states. Notably, both HIV and chemsex do not co-occur with Brizzi within a 5L-5R window in the GBTQ+ Corpus, and an extensive search of the expanded concordance lines showed that neither term (or terms denoting a similar concept) were used around Brizzi. This difference probably occurs due to the different readerships of each news outlet - whereby the combination of being HIV-positive and drug-taking is associated with something insalubrious and undesirable for a mainstream audience. However, given that the readership of the articles in the GBTQ+ Corpus are likely to be GBTQ+ men, a group which has a high rate of HIVpositive members, drawing attention to a murderer's shared feature might be viewed in an unfavourable way.



4. Discussion

The analysis indicates the challenges faced by the mainstream and GBTQ+ press when discussing chemsex. The mainstream press need to avoid accusations of homophobia, something which they have been accused of in past representations about GBTQ+ men (Baker, 2005; Bartley & Benitez-Castro, 2016). Indeed, the mainstream articles did not overtly criticise GBTQ+ men for engaging in chemsex, although it could be argued that framing the practice in terms of crime and legality paints it in an extremely negative light. Additionally, the mainstream press need to juggle the concerns of different audiences - most of the readers of these articles will not be gueer and be unfamiliar with chemsex. However, other readers will be gueer and may know about chemsex or have had first-hand experience of it. On the other hand, the GBTQ+ articles can assume a more knowledgeable audience, although readers will still have different amounts of knowledge...

However, articles from the GBTQ+ Corpus need to also acknowledge different perspectives around chemsex (e.g. some people see it as an acceptable practice while others view it as problematic), along with providing information about the potential risks of being involved in a criminal activity, being targeted by criminals, accidental overdosing, or becoming HIV positive. As a result, articles in the GBTQ+ Corpus tended to provide a non-judgemental perspective which de-emphasises the criminal aspects of chemsex, instead focussing more on providing sources of information relating to sexual health. While this approach is welcomed, some might argue that some parts of the GBTQ+ press could perhaps focus more on the risks associated with chemsex (similar to the criticisms of circuit parties discussed in Barrett, 2017). As Florêncio (2021) notes, chemsex can be life-affirming, but it can also be life-hindering and can pose risks to physical and mental well-being. The media aimed at GBTQ+ men thus must strike a fine balance between being seen to promote or normalise chemsex but also need to be careful to not stigmatise those who do find affirmation by engaging in it. Articles in the Mainstream Corpus emphasised the dangers associated with chemsex, although they tended to focus on giving lurid details of relatively rare but shocking cases which involved small numbers of men who were victims of serial killers. Such cases, while avoiding overt victimblaming, provided information that could be interpreted in different ways. In cases where articles in the Mainstream Corpus did refer to risks relating to sexual health, information relating to support groups tended not to be present. Additionally, we did not find many examples of articles in the Mainstream Corpus giving direct quotes from 'ordinary' men engaged in chemsex, perhaps because the main audience of these newspapers would not be assumed to be GBTQ+ and such stories would contradict the more shocking narratives around the subject.

Chemsex is a challenging topic for journalists to report on and for academics to research. If it is accepted that the practice should be discouraged as dangerous (a position which would immediately alienate some of those involved in it), how should this be done without further stigmatising an already vulnerable group? Both the mainstream and GBTQ+ press appeared to discourage the activity rather than judging those involved, although this was achieved in different ways. The mainstream press represented chemsex as a criminal act where those involved were divided into victims and offenders, while the focus on sexual health and safety advice in the GBTQ+ press more indirectly characterised chemsex as problematic without stigmatising people who engaged in it. As such, our findings into the representation of this topic can possibly lay the groundwork for policy makers within different media institutions, and hopefully will encourage discussion about how to deal with such topics.

A potential criticism of this research is that we grouped all mainstream newspapers together into one set and a future research direction could involve a study which compared different types of newspapers (such as liberal vs conservative or tabloid vs broadsheet) or examine change over time in a longitudinal corpus. It is also worth further considering people who engage in chemsex in order to ascertain their understandings about chemsex via different sources of information like the media, prior to engaging in it, and the extent to which they perceive that their experiences relating to the practice are accurately covered within different media outlets.

Chemsex is unlikely to go away in the near future and the reclassification of GHB as a Class B drug could drive those involved further underground. It is important to ensure that those who engage in it are given support so it can be practiced as safely as possible. However, it is also important that those involved with chemsex are made fully aware of the risks involved. Media reporting on the topic is thus crucial and must find a balance between articulating the potential dangers without stigmatising those involved.

Note

1. 'slam[ming]' is a slang term for injecting oneself with drugs while having sex. It can thus be considered a 'type' of chemsex.

Acknowledgements

The research reported in this paper was undertaken within the ESRC Centre for Corpus Approaches to Social Science (CASS) at Lancaster University (Grant reference ES/R008906/1).The author(s) would also like to thank the double-blind peer reviewers and the editor for their feedback.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Public interest statement

Chemsex is a phenomenon in which gay, bisexual, trans, queer, and/or related communities of men (GBTQ+ men) take psychoactive drugs while having sex, often without a condom. The practice can lead to increased rates of HIV transmission, sexual assault, and in extreme cases murder. This study examines the ways that chemsex is written about in national British newspapers and GBTQ+ magazines. The former focusses on criminal cases involving chemsex, while the latter emphasises counselling services, discussing chemsex in relation to gay culture. The media face the challenge of reporting on the topic without stigmatising or normalising the practice. The findings of this paper could be used to inform policy makers in constructing media guidelines around public health issues, especially ones that could stigmatise vulnerable groups.



Notes on contributors

Frazer Heritage completed his PhD in the Department of Linguistics and English Language at Lancaster University. He is currently an Assistant Lecturer in the Department of Psychology at Birmingham City University. His area of interest are (critical) discourse analysis and corpus approaches to the representation of identity, with a focus on gender and sexuality. He is interested in the representation of gender and sexuality across different forms of media, including both digital media and print media. Frazer is currently the secretary for the British Association of Applied Linguist's Language, Gender, and Sexuality Special Interest Group (BAAL's LGaS SIG).

Paul Baker is a Professor of Linguistics and English Language in the Department of Linguistics and English Language at Lancaster University. His research interests include corpus linguistics, language and identities and (critical) discourse analysis. He has authored/co-authored 20 books, including: Obesity in the News: Language and Representation in the Press (2020), Fabulosa! The Story of Polari, Britain's Secret Gay Language (2019), Using Corpora to Analyse Gender (2014), Discourse Analysis and Media Attitudes (2013), Corpus Linguistics and Sociolinguistics (2010), Sexed Texts: Language, Gender and Sexuality (2008), Using Corpora in Discourse Analysis (2006), Public Discourses of Gay Men (2005) and Polari: The Lost Language of Gay Men (2002). He is also the commissioning editor for the journal Corpora.

ORCID

Frazer Heritage http://orcid.org/0000-0002-2788-3208 *Paul Baker* http://orcid.org/0000-0001-6743-4020

References

Ahmed, A.-K., Weatherburn, P., Reid, D., Hickson, F., Torres-Rueda, S., Steinberg, P., & Bourne, A. (2016). Social norms related to combining drugs and sex ("chemsex") among gay men in South London. International Journal of Drug Policy, 38(1), 29-35. https://doi.org/10.1016/j. drugpo.2016.10.007

Baker, P. (2005). Public discourses of gay men. Routledge.

Baker, P. (2016). The shapes of collocation. International Journal of Corpus Linguistics, 21(2), 139-164. https://doi.org/10.1075/ijcl.21.2.01bak

Baker, P., Brookes, G., Atanasova, D., & Flint, S. W. (2020). Changing frames of obesity in the UK press 2008–2017. Social Science & Medicine, 264, 113403. https://doi.org/10.1016/j.socscimed.2020.

Baker, P., Brookes, G., & Evans, C. (2019). The language of patient feedback: A corpus linguistic study of online health communication. Routledge.

Balfour, J. (2019). 'The mythological marauding violent schizophrenic': Using the word sketch tool to examine representations of schizophrenic people as violent in the British press. Journal of Corpora and Discourse Studies, 2(1), 40-64. https://doi.org/10.18573/jcads.10

Barrett, R. (2017). From drag queens to leathermen. Oxford University Press.

Bartley, L., & Benitez-Castro, M. (2016). Evaluation and attitude towards homosexuality in the Irish context: A corpus-assisted discourse analysis of appraisal patterns in 2008 newspaper articles. Irish Journal of Applied Social Studies, 16(1), 1-20. http://doi.org/10.21427/D7XH8S

Blomquist, P. B., Mohammed, H., Mikhail, A., Weatherburn, P., Reid, D., Wayal, S., Hughes, G., & Mercer, C. H. (2020). Characteristics and sexual health service use of MSM engaging in chemsex: Results from a large online survey in England. Sexually Transmitted Infections, 96(8), 590–595. https://doi.org/10.1136/sextrans-2019-054345

Bourne, A., Reid, D., Hickson, F., Torres-Rueda, S., Steinberg, P., & Weatherburn, P. (2014). The chemsex study: Drug use in sexual settings among gay and bisexual men in Lambeth, Southwark & Lewisham. Sigma Research, London School of Hygiene & Tropical Medicine.



- Bourne, A., Reid, D., Hickson, F., Torres-Rueda, S., & Weatherburn, P. (2015). "Chemsex" and harm reduction need among gay men in South London. *International Journal of Drug Policy*, 26(12), 1171–1176. https://doi.org/10.1016/j.drugpo.2015.07.013
- Bourne, A., & Weatherburn, P. (2017). Substance use among men who have sex with men: Patterns, motivations, impacts and intervention development need. *Sexually Transmitted Infections*, *93*(5), 342–346. https://doi.org/10.1136/sextrans-2016-052674
- Brezina, V., McEnery, T., & Wattam, S. (2015). Collocations in context: A new perspective on collocation networks. *International Journal of Corpus Linguistics*, 20(2), 139–173. https://doi.org/10.1075/iicl.20.2.01bre
- Brookes, G., Harvey, K., Chadborn, N., & Dening, T. (2018). "Our biggest killer": multimodal discourse representations of dementia in the British press. *Social Semiotics*, *28*(3), 371–395. https://doi.org/10.1080/10350330.2017.1345111
- Carr, G., & Bednarek, M. (2019). Beyond risk and safety? Identifying shifts in sex education advice targeted at young women. *Discourse & Society*, *30*(3), 225–247. https://doi.org/10.1177/0957926519828029
- Durrant, P., & Doherty, A. (2010). Are high frequency collocations psychologically real? Investigating the thesis of collocational priming. *Corpus Linguistics and Linguistic Theory*, 6(2), 125–155. https://doi.org/10.1515/cllt.2010.006
- Florêncio, J. (2021). Chemsex cultures: Subcultural reproduction and queer survival. *Sexualities*. Advance online publication. https://doi.org/10.1177/1363460720986922
- Hakim, J. (2019). The rise of chemsex: Queering collective intimacy in neoliberal London. *Cultural Studies*, 33(2), 249–275. https://doi.org/10.1080/09502386.2018.1435702
- Hakim, J. (2020). Work that body: Male bodies in digital culture. Rowman & Littlefield.
- Halliday, M. A. K. (1989). Spoken and written language. Oxford University Press.
- Jones, L., & Collins, L. (2020). PrEP in the press: A corpus-assisted discourse analysis of how users of HIV-prevention treatment are represented in British newspapers. *Journal of Language and Sexuality*, 9(2), 202–225. https://doi.org/10.1075/jls.20002.jon
- Lovelock, M. (2018). Sex, death and austerity: Resurgent homophobia in the British tabloid press. *Critical Studies in Media Communication*, *35*(3), 225–239. https://doi.org/10.1080/15295036. 2018.1442013
- McCall, H., Adams, N., Mason, D., & Willis, J. (2015). What is chemsex and why does it matter? *BMJ*, 351, h5790. https://doi.org/10.1136/bmj.h5790
- Milhet, M., Shah, J., Madesclaire, T., & Gaissad, L. (2019). Chemsex experiences: Narratives of pleasure. Drugs and Alcohol Today, 19(1), 11–22. https://doi.org/10.1108/DAT-09-2018-0043
- Oakley, L. (2016). An investigation into the representations of sexuality in sex education manuals for British teenagers, 1950–2014 [Unpublished doctoral dissertation]. University of Birmingham.
- Pollard, A., Nadarzynski, T., & Llewellyn, C. (2018). Syndemics of stigma, minority-stress, maladaptive coping, risk environments and littoral spaces among men who have sex with men using chemsex. *Culture, Health & Sexuality*, 20(4), 411–427. https://doi.org/10.1080/13691058.2017.1350751
- Public Health England. (2015). Substance misuse services for men who have sex with men involved in chemsex. United Kingdom Government.
- Scott, M. (2016). WordSmith Tools version (Version 7.0) [computer software]. Lexical Analysis Software.
- Semino, E., Demjén, Z., Hardie, A., Payne, S., & Rayson, P. (2017). *Metaphor, cancer and the end of life: A corpus-based study*. Routledge.
- Stevens, O., Moncrieff, M., & Gafos, M. (2020). Chemsex-related drug use and its association with health outcomes in men who have sex with men: A cross-sectional analysis of antidote clinic service data. *Sexually Transmitted Infections*, *96*(2), 124–130. https://doi.org/10.1136/sextrans-2019-054040
- Weatherburn, P., Hickson, F., Reid, D., Torres-Rueda, S., & Bourne, A. (2017). Motivations and values associated with combining sex and illicit drugs ('chemsex') among gay men in South London: Findings from a qualitative study. *Sexually Transmitted Infections*, 93(3), 203–206. https://doi.org/10.1136/sextrans-2016-052695