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HIGHLIGHTS

- People who inject drugs (PWID) in England/Northern Ireland are at risk of COVID-19.
- Patterns of psychoactive drug use have shifted over the course of the pandemic.
- Of particular concern, access to essential services for PWID have been restricted.

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ABSTRACT

Objective: To describe the impact of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic on people who inject drugs (PWID) in England, Wales and Northern Ireland

Study design: Cross-sectional unlinked anonymous monitoring (UAM) Survey of PWID

Methods: People who had ever injected psychoactive drugs were recruited to the UAM Survey by specialist drug/alcohol services in England, Wales and Northern Ireland. From June 2020, in addition to providing a dried blood spot sample and completing the UAM behavioural questionnaire, participants were asked to complete an enhanced coronavirus disease (COVID-19) questionnaire. Preliminary data are presented to the end of October and were compared to data from the 2019 UAM Survey, where possible.

Results: Between June and October, 288 PWID were recruited from England and Northern Ireland. One in nine (11%; 29/260) PWID reported testing positive for SARS-CoV-2 or experiencing COVID-19 symptoms. Fifteen percent (26/169) reported injecting more frequently in 2020 compared to 2019; cocaine injection in the preceding four weeks increased from 17% (242/1,456) to 25% (33/130). One in five PWID (22%; 35/188) reported difficulties in accessing HIV and hepatitis testing and one in four (26%; 47/179) reported difficulties in accessing equipment for safer injecting.

Conclusions: Our preliminary findings suggest that PWID have experienced negative impacts on health, behaviours and access to essential harm reduction, testing and treatment services due to the COVID-19 pandemic. Continued monitoring through surveillance and research is needed to understand the subsequent impact of COVID-19 on blood-borne virus transmission in this population and on health inequalities.

MANUSCRIPT

People who inject drugs (PWID) are potentially more vulnerable to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and coronavirus disease (COVID-19) than other groups, due to a high prevalence of underlying health conditions and lifestyle risk factors[1-4]. However, research on the extent to which PWID have been affected by the pandemic is limited thus far.

In June 2020, the Unlinked Anonymous Monitoring (UAM) Survey of PWID in England, Wales and Northern Ireland introduced an enhanced questionnaire to understand the impact of the COVID-19 pandemic. The UAM Survey is an annual cross-sectional survey that has been running across England and Wales since 1990 and Northern Ireland since 2002. Methods of the survey have been described elsewhere[5]; briefly, people who have ever injected psychoactive drugs are recruited through specialist drug agencies to self-complete an anonymous, unlinked demographic and behavioural questionnaire and provide a dried blood spot sample for HIV, hepatitis B and hepatitis C (HCV) testing. The survey has ethical approval from Public Health England and the London Research Ethics Committee (98/2/051).

We describe preliminary data, collected between June and October 2020, on the burden of COVID-19, changes in risk behaviours and access to services among PWID. We also compare PWID recruited to the UAM Survey in 2020 who completed the enhanced COVID-19 questionnaire to PWID recruited in 2019. Pearson chi-squared tests were used to compare differences in proportions (statistical significance $p<0.05$). Analyses were conducted using Stata v15 (StataCorp, College Station, US).

Characteristics of participants

By the end of October 2020, 288 enhanced COVID-19 questionnaires had been received from 16 of the 137 participating sites from seven of the 11 regions (North East: 117, London: 51, Yorkshire and Humber: 47, South West: 41, East Midlands: 14, East of England: 9, Northern Ireland: 9); no responses had been received from Wales, the South East, North West or the West Midlands.

In general, the demographic profile of the 288 people completing the enhanced questionnaire in 2020 was broadly similar to that of the people participating in the UAM Survey in 2019, in terms of median age at recruitment and region of birth (Table 1). A higher proportion of 2020 participants were men (78% vs. 71%; $p=0.015$) and reported homelessness in the last year (61% vs. 42%; $p<0.001$). Of those homeless in 2020, 51% (75/147) reported being provided with accommodation at either a hotel, hostel, or council/housing association property through the pandemic response.

[INSERT TABLE 1 HERE}

Burden of COVID-19

Overall, 22% (62/279) of respondents completing the enhanced questionnaire reported being tested for SARS-CoV-2 in 2020, with 2% (1/52) testing positive, 94% (49) testing negative and 4% (2) awaiting their test result at the time of questionnaire completion.

There were 29 people (11%) that reported developing a high temperature or a new continuous cough, common symptoms of COVID-19, at any point in 2020. A third (32%; 9/28) of this group reported attending hospital for these symptoms; of those attending hospital, 88% (7/8) went to A&E and 58% (4/7) were admitted. Of those admitted, half (50%; 2/4) were placed in intensive care (7% (2/28) of those attending hospital).

Impact on drug use

The majority of PWID completing the enhanced questionnaire reported their frequency of drug injection had remained the same or reduced (85%; 143/169) in 2020 compared to 2019, with only 15% (26) injecting more frequently. Over a quarter reported smoking drugs more frequently (27%; 64/237). However, 23% (50/213) of participants reported their primary drug or drug combination had changed. Compared to UAM Survey respondents in 2019, people participating in 2020 completing the COVID-19 questionnaire reported higher levels of cocaine (25% vs. 17%; p=0.011) and amphetamine (17% vs. 11%; p=0.034) injection in the last month (Table 1); the increase in amphetamine injection was not significant when comparing to 2019 participants recruited from the same centres. Higher levels of non-injecting use of cocaine (30% vs. 21%; p<0.001), amphetamines (14% vs. 7.0%; p<0.001), methamphetamine (3.6% vs. 1.3%; p=0.003) and pregabalin (28% vs. 19%; p<0.001) were also noted (Table 1). Direct sharing of needles, syringes and other injecting paraphernalia among participants who had injected during the last month increased slightly across years (46% vs. 37%; p=0.038) (Table 1); however, this increase was not significant when comparing to 2019 participants recruited from the same centres. Overall, a quarter of respondents (25%; 43/174) reported drinking alcohol more frequently.

Impact on service access

Over a third (35%; 77/220) of participants completing the enhanced questionnaire reported that drug/alcohol services were more difficult to access in 2020 than in 2019, with one in five (19%; 35/188) reporting difficulties accessing blood-borne virus (BBV) testing. One in four PWID (26%; 47/179) reported difficulty accessing equipment for safely using and/or injecting drugs. There were also difficulties reported in accessing substitute drug treatment (22%; 45/202), other medicines and healthcare (34%; 72/210) and naloxone (15%; 27/183). More

people recruited outside London reported difficulties in accessing injecting equipment (30% (44/149) vs. 10% (3/30); p=0.027), BBV testing (21% (33/155) vs. 6% (2/33); p=0.041) and naloxone (18% (26/146) vs. 3% (1/37); p=0.021) compared to those in London. Nine percent (10/106) of participating PWID indicating a need for HCV treatment reported some form of disruption between June and October 2020, either missed doses or treatment not being available.

Discussion

Our findings demonstrate that PWID in England and Northern Ireland are at risk of SARS-CoV-2 infection and hospitalisation due to COVID-19. One in nine UAM Survey participants reported testing positive or experiencing COVID-19 symptoms. This is similar to estimates among people who use drugs from Norway; 13% of the 226 survey respondents reported currently experiencing COVID-19 symptoms (fever/change in taste/smell) in May/June and 12% reported a cough[6]. However, both these estimates of the burden of infection are based on self-reported data. Validation is currently underway to explore the potential for testing UAM Survey dried blood samples for SARS-CoV-2 antibodies to quantify seroprevalence among PWID.

These data also indicate that over the course of the pandemic there has been a shift in patterns of psychoactive drug use alongside a reduction in access to services for PWID, such as BBV testing and injecting equipment. This is consistent with reports of increased cocaine injecting and amphetamine use in regions of England, as well as increased use of, and harm linked to, benzodiazepines and pregabalin[7,8]. The fact that there has been a disruption to services for PWID across England, Wales and Northern Ireland has also been well-documented[7,9,10]. In the North West of England, needle and syringe programme (NSP) coverage was found to have halved between March and April[9]. Continued monitoring is needed to understand the full and potentially lasting impact of these changes in drug use and reduced access to harm reduction on injection practices and BBV transmission, as well as on national HIV/HCV elimination efforts.

To the best of our knowledge, this is the largest study describing the burden of COVID-19 among PWID and the impact on access to health and harm reduction services. However, our study has a number of limitations. These data are preliminary and analyses only include enhanced questionnaires collected between June and October; some geographical regions were not represented. Given the limited sample size, we were not able to carry out further analysis to determine predictors of infection or service access. However, data from the COVID-19 questionnaire will continue to be collected in 2021, allowing for more in-depth analysis in future.

AUTHOR STATEMENTS

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Competing interests

The authors have no competing interests to declare.

Ethical approval

The UAM Survey of PWID has ethical approval from Public Health England and the London Research Ethics Committee (98/2/051).

Contributions

All authors contributed to the design of the study, interpretation of the data, commented on the manuscript and approved the final draft. SC wrote the manuscript, incorporated author comments and was responsible for the final draft. EE, CE and AI designed the data processing. MB, CE, JN, AI, EE, EH and SC were involved in data collection and implementing the UAM Survey in 2020. EH, VH and EP contributed to the study conception and questionnaire design. VH and EP inputted important intellectual content to the methodology, discussion and conclusions.

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Table 1: Characteristics and behaviours of people participating in the UAM Survey of PWID: England, Wales and Northern Ireland, 2020 vs. 2019

		Participants in the 2020 UAM Survey completing the COVID questionnaire			All participants in the 2019 UAM Survey			p value [a]
		n	%	95% CI	n	%	95% CI	
Total		**288**			**3,258**			-
Gender	Men	223	78%	72%-82%	2,302	71%	69%-72%	0.015
	Women	64	22%	18%-28%	944	29%	28%-31%	
Median age (years) [IQR]		41 [34-48]			41 [35-47]			0.789
Region of birth	United Kingdom	262	92%	88%-95%	2,903	92%	91%-93%	0.916
	Abroad	23	8.1%	5.2%-12%	261	8.2%	7.3%-9.3%	
Region of recruitment	London	51	18%	13%-23%	456	14%	13%-15%	0.085
	Outside London	237	82%	77%-87%	2,802	86%	85%-87%	
Ever exchanged goods or money for sex	Never	222	80%	75%-85%	2,625	86%	84%-87%	0.058
	Yes, but not in the last year	31	11%	7.8%-16%	257	8.4%	7.4%-9.4%	
	Yes, in the last year	23	8.3%	5.4%-12%	180	5.9%	5.1%-6.8%	
Ever homeless	No	48	17%	13%-22%	779	25%	23%-26%	<0.001
	Yes, but not in the last year	62	22%	17%-27%	1,039	33%	31%-35%	
	Yes, in the last year	170	61%	55%-66%	1,338	42%	41%-44%	
Recent initiates to injecting drug use [b]		13	4.7%	2.6%-8.0%	270	8.6%	7.7%-9.7%	0.026
Injected in the last year		170	62%	56%-68%	2,035	65%	63%-67%	0.359
Injected in the last month		133	52%	45%-58%	1,492	47%	45%-49%	0.207
Drugs injected in the last month	Heroin	119	92%	85%-96%	1,352	93%	91%-94%	0.579
	Crack	64	49%	40%-58%	837	57%	55%-60%	0.069
	Cocaine	33	25%	18%-34%	242	17%	15%-19%	0.011
	Amphetamine	22	17%	11%-24%	157	11%	9.2%-12%	0.034
	Other	1	0.76%	0%-4.2%	61	4.2%	3.2%-5.3%	0.017
Non-injecting drug use in the last month	Heroin	107	38%	32%-44%	1,330	42%	40%-44%	0.203
	Crack	137	49%	43%-55%	1,569	50%	48%-51%	0.805
	Cocaine	83	30%	24%-35%	648	21%	19%-22%	<0.001
	Amphetamine	40	14%	10%-19%	221	7.0%	6.1%-7.9%	<0.001
	Methamphetamine	10	3.6%	1.7%-6.5%	42	1.3%	0.96%-1.8%	0.003
	Pregabalin	78	28%	23%-34%	600	19%	18%-20%	<0.001
	Other	94	33%	28%-39%	1,258	40%	38%-42%	0.035
Direct sharing of needles/syringes [c]		36	28%	20%-36%	294	20%	18%-23%	0.051
Direct and indirect sharing of injecting equipment [d]		60	46%	37%-55%	532	37%	34%-39%	0.038

CI=confidence interval; COVID=coronavirus disease; IQR=interquartile range; UAM=unlinked anonymous monitoring

[a] *χ^2 test*

[b] *People who reported to have begun injecting in the last three years*

[c] *Sharing of needles/syringes among those who had last injected in the four weeks preceding participation in the survey.*

[d] *Sharing of needles/syringes, mixing containers, or filters among those who had last injected in the four weeks preceding survey participation.*

Data source: Unlinked Anonymous Monitoring Survey of People Who Inject Drugs