Received: 6 August 2019 | Revised: 23 December 2020 | Accepted: 8 March 2021

DOI: 10.1002/cbm.2193

ORIGINAL ARTICLE

WILEY

The prevalence of mental illness and unmet needs of police custody detainees

Chiara Samele[1,2] | Iain McKinnon[3] | Penelope Brown[4] | Samir Srivastava[5] | Aleksandra Arnold[6] | Nicholas Hallett[7] | Andrew Forrester[8]

[1]Department of Forensic and Neurodevelopmental Science, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK

[2]Informed Thinking, London, UK

[3]Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust, Northgate Hospital, Morpeth and Population Health Sciences Institute, Newcastle University, Newcastle Upon Tyne, UK

[4]Department of Forensic and Neurodevelopmental Science, Institute of Psychiatry, Psychology and Neuroscience, King's College London and South London and Maudsley NHS Foundation Trust, London, UK

[5]South London and Maudsley NHS Foundation Trust, London, UK

[6]West London Mental Health NHS Trust, London, UK

[7]Essex Partnership University NHS Foundation Trust, Wickford, UK

[8]Division of Psychological Medicine and Clinical Neurosciences, School of Medicine, Cardiff University, Cardiff, UK

Correspondence
Andrew Forrester, Division of Psychological Medicine and Clinical Neurosciences, School of Medicine, Cardiff University, Cardiff, CF14 4YS, UK.
Email: forrestera1@cardiff.ac.uk

Abstract

Background: Internationally, there is evidence of high rates of mental disorders amongst police custody detainees but this literature is limited, and there has been little research into the unmet needs of police detainees in the UK, or elsewhere. Such research could support better focussed interventions for improving health and recidivism outcomes.

Aim: To examine psychiatric and developmental morbidity amongst police detainees, and ascertain differences in need between morbidity categories.

Method: We used a cross-sectional study design and interviewed a 40% sample of people entering police custody in one South London police station over a 2-week period. A series of standardised measures was administered to screen for the presence of mental illness, general health and social care needs.

Results: A cohort of 134 people was generated, of whom nearly one-third (39, 29%) had current mental illness (major depression and/or psychosis); more had a lifetime diagnosis (54, 40%). Just under a fifth met the threshold for post-traumatic stress disorder (11, 8%). Clinically relevant alcohol or daily cannabis use affected about one quarter of

Funding information
Guy's and St Thomas' Charity, Grant/Award Number: N/A

the sample. Twenty-one percent (or 28) screened positive for personality disorder, 11% (or 15) for attention deficit hyperactivity disorder and 4% (6) for intellectual disability. Nearly one-fifth (24, 18%) were at risk for suicide. Those with psychosis, and those deemed at risk for suicide, had the highest levels of unmet need and, indeed, overall need. The most frequent unmet need was for accommodation.

Conclusion: Our findings not only confirm high rates of mental health problems amongst police detainees but also demonstrate their high risk of suicide and high levels of unmet need, especially as regards accommodation. This underscores the need to provide mental health services in police stations, to help identify and resolve these issues at this early stage in the criminal justice system. Extending accommodation capacity to help some arrestees may help to save lives and interrupt cycling through the criminal justice system.

KEYWORDS
learning disabilities, major depression, police detainees, prevalence, psychotic disorder, suicide risk, unmet needs

1 | INTRODUCTION

The international literature regarding mental health in criminal justice (correctional) systems consistently demonstrates high morbidity levels for a range of mental health conditions across jurisdictions. The prevalence of psychotic illness in prisoners, for example, is reportedly 3.6% for men and 3.9% for women, exceeding that of the general population (Fazel & Seewald, 2012).

Various studies have developed brief screening tools for use by the police to detect levels of mental health problems in people detained in police custody (Noga, Walsh, Shaw & Senior, 2014; Steadman, Scott, Osher, Agnese & Robbins, 2005). While the literature is limited, the prevalence of mental health problems among police detainees has also been investigated and found to be high. In a sample of Australian police detainees, three quarters were found to meet the criteria for a diagnosable mental disorder; anxiety disorders were found to be twice as likely as in the general population, but mood and psychotic disorders 10 times and 15 times more likely, respectively (Baksheev, Thomas & Ogloff, 2010). A study of police detainees in Amsterdam found that of those who received medical attention nearly 50% were diagnosed with mental health problems, compared to 17% of patients attending primary care (Dorn, Ceelen, Buster, Stirbu, Donker & Das, 2014).

These findings also pertain in the UK. A study of 600 detainees found that 39% had a mental health problem, with 8% having probable psychosis and 5% moderate depression (McKinnon & Grubin, 2013). Another London study of 200 detainees found a similar proportion of 32% for any mental health problem (Payne-James et al., 2010). The reported community prevalence of common mental disorders in the UK in 2014 was 17%, and 0.7% for psychotic disorders (McManus, Bebbington, Jenkins & Brugha, 2016). Fewer studies have examined the

prevalence of personality disorder, post-traumatic stress disorder (PTSD) or attention deficit and hyperactive disorder (ADHD) amongst police detainees and these too may be relevant to management, including safety needs or capacity to be interviewed (Craster & Forrester, 2020; Warrington, 2019; Young, Goodwin, Sedgwick & Gudjonsson, 2013).

Substance intoxication and withdrawal also present serious issues in police custody. In some samples, over half of detainees have been found to have used substances (40% in the 24 h before arrest), particularly alcohol (Forrester, Samele, Slade, Craig & Valmaggia, 2017). While detained in police custody, psychiatric symptoms can increase significantly (Ogloff, Warren, Tye, Blaher & Thomas, 2011). Homeless people may present with higher levels of substance use and more immediate care requirements (Hopkin et al., 2020).

The high levels of mental health problems detected in police detainees have prompted concerns about the health needs of this population, and how best to detect and meet these needs, especially because police custody is the first point of contact in the criminal justice system (Bradley, 2009; Forrester & Hopkin, 2019). A number of studies have examined the health needs of police detainees (Brooker, Tocque, Mitchell & Pearce, 2018; Sirdfield & Brooker, 2012) but, to date, only two have described the range of unmet needs. Harty, Jarrett, Thornicroft & Shaw (2012) found that almost half of the needs identified in prisoners receiving *prison* mental health in-reach services were unmet needs; relating mostly to daytime activities, psychotic symptoms, psychological distress and accommodation. Baksheev et al.'s (2010) study in Australia, the only one of its kind, examined the unmet needs of police detainees, and found that those who met the criteria for a mental illness had both significantly greater needs and unmet needs when they were compared to those without a mental illness. The main unmet needs recorded were psychological distress and safety to self.

We therefore aimed to investigate the nature and extent of psychiatric and developmental morbidity, and the level of unmet need, among police custody detainees, and to ascertain any differences in need between the different morbidity categories. Specific questions were as follows.

1. What is the prevalence of a current or lifetime psychotic disorder, major depression, learning disability or other neurodevelopmental problems, including ADHD and personality disorder, or of reaching a screening threshold for PTSD among detainees in police custody in South London?
2. What is the prevalence of current suicide risk?
3. What is the level of unmet needs amongst detainees with an identified mental illness or neurodevelopmental disability compared to those without?

2 | METHOD

2.1 | Ethical approval

The study obtained a favourable ethical opinion by a London Ethics Committee as part of the National Research Ethics Service (REC reference no.: 13/LO/0947).

2.2 | Design

Using a cross-sectional study design, we sought to interview all eligible detainees entering police custody in one South London Police Station over a 2-week period (2–15 October 2014). This period was agreed because it best met the requirements of the police custody directorate, and the availability of researchers.

All detainees entering police custody were checked for eligibility, in the first instance via police electronic records accessed by a Designated Detention Officer (DDO) assisting the research team.

The inclusion criteria were as follows.

1. People newly arrested whose detention was authorised by a police custody officer under the auspices of the Police and Criminal Evidence Act (PACE, 1984).
2. Aged 18 or over.

The exclusion criteria were:

1. Insufficient proficiency in the English language (due to lack of interpreter).
2. Lacking capacity to give informed consent.
3. Refusal to take part in the study.

2.3 | Procedure

Upon arrival, police station detainees are usually booked in by the custody officer(s) on duty, who records brief demographic information and the reasons for, and circumstances of, the arrest. An initial police screen is also conducted to identify any health problems of note, although limits to the effectiveness of this screen have been described (McKinnon & Grubin, 2013; Young et al., 2013). Once detained, a person can spend up to 96 h in police custody (PACE, 1984).

During this time, if a detainee was eligible to participate in the study, he or she was initially approached by the DDO who explained the purpose of the study. If willing to participate, the detainee was then approached by a researcher who provided more information about the study. Interviews with consenting detainees took place in a suitable space where confidential issues could be discussed. We used standard rules of confidentiality. However, we would report any serious matters disclosed by a detainee (e.g. suicidal ideation or a serious crime) to an appropriate professional.

Participating detainees were interviewed using a structured interview and a series of standardised measures administered to screen for the presence of mental disorder (including mental illness or learning disability) and any health and social care needs. The study was required to fit around normal police activities and, given the limited time available to the researchers, measures were prioritised in order of agreed importance listed below. Researchers conducting the interviews were trained to administer all measures.

2.4 | Measures

A semistructured questionnaire was used to gather demographic information including gender, date of birth, educational qualifications, marital status and ethnic group (based on CENSUS categories; ONS, 2015). Information was also collected on current and previous contact with psychiatric services, physical health problems and medication. The following standardised measures were then employed.

1. Selected modules from the Mini International Neuropsychiatric Interview (version 5.0) were used to detect current major depressive episode (4 items), suicidality (9 items) and psychosis (14 items) (Sheehan et al., 1998).
2. The Learning Disability Screening Questionnaire (LDSQ) was used to screen for learning disabilities and some speech, language and communication needs. It comprises seven questions (McKenzie & Paxton, 2005).
3. The Camberwell Assessment of Need (CANFOR version) was used to measure met and unmet needs. This is a semistructured interview schedule assessing need in 22 domains, including psychological, social and clinical needs (Phelan et al., 1995).

4. Drug dependence was measured using the Severity of Dependence Scale for drug use which contains five items concerned with psychological components of drug dependence, such as impaired control and anxieties about drug use (Gossop et al., 1995).
5. The Alcohol Use Disorder Identification Test, a 10-item screening instrument to identify hazardous and harmful alcohol use by covering three main domains—alcohol consumption, drinking behaviour and alcohol-related problems (Saunders, Aasland, Babor, de la Fuente & Grant, 1993).
6. PTSD was screened using the Trauma Screening Questionnaire, a 10-item questionnaire to detect symptoms of current PTSD and future risk of PTSD (Brewin et al., 2002).
7. Personality disorder (PD) was screened using the Standardised Assessment of Personality: Abbreviated Scale; a very brief, eight-item screening interview for personality disorder to identify the likelihood of a personality disorder in general, rather than specific types of PD (Moran et al., 2003).
8. Attention deficit and hyperactivity disorder (ADHD) was screened using the ADHD Self-Report Scale; an 18-item questionnaire to screen for symptoms of ADHD in adults (Adler et al., 2006).

2.5 | Police information on detainees

Additional information was collected by the DDO from police records for all detainees entering custody during the data collection period. This provided detainees' basic demographic and arrest information and was used to establish how representative those who participated in the study were compared to those who did not.

2.6 | Sample size

In order to establish an appropriate sample size, we determined how precise an estimate of prevalence could be obtained given data from previous studies, combined with a judgement of how many participants could be recruited. The prevalence of mental disorders in a similar prevalence study in London was 39% overall (McKinnon & Grubin, 2013).

The margin of error was calculated using the Sample Size for Estimation function in Minitab (Minitab 17, 2010) using a binomial distribution. With a planning proportion of 39% and a proposed sample size of 90 detainees (a number it was a priori postulated it would be reasonable to recruit), the margin of error for the estimate was ±11%, which was judged to be tolerable. To account for potential attrition, an additional 50% of detainees was added to this required sample size, bringing the total number of research participants to be recruited to 135. Using this as a total sample size, the margin of error around the planning proportion fell to ±8.5%.

2.7 | Location

This study was set in a South London police station that serves the London borough of Lambeth. This borough contains over 300,000 residents, with the 4th youngest profile in London; the median age of residents is 31, with 51% of the population aged between 20 and 44. It is densely populated, with 113 people per hectare, making it the fifth most densely populated area in the UK. Around 40% of residents are from a White UK background, and the total White population is around 59%, while the Black population is 25%, of which the largest group is Black African (11.5%), followed by Black Caribbean (10%), and mixed ethnic and Asian populations are both around 7%. The borough is considered the 11th most diverse place in the UK (Lambeth Council, 2015).

The police station had recently undergone a complete refurbishment, increasing the number of available single occupancy police cells to 36. Every detainee had been arrested on suspicion of having committed a crime; people who were detained under Section 136 of the Mental Health Act 1983, because they were thought to have a mental illness and to be in immediate need of care or control, were not detained there but, instead, were sent to a nearby place of safety at a local hospital.

2.8 | Statistical analysis

Data from completed measures were entered into a database and analysed using the statistical software package (SPSS version 24). They were first checked for accuracy and quality, then descriptive statistics were prepared to summarise the data and cross-tabulations used to describe sample characteristics, prevalence of mental illness and needs scores.

Chi Square and Fisher's exact tests were used for categorical data (e.g. gender) where appropriate. Data for age were not normally distributed so the Mann–Whitney *U* test was performed to detect any significant differences between interviewed and noninterviewed groups regarding age, and other comparisons concerning presenting psychiatric state and needs. Tests of significance were kept to a minimum given the limited sample size to perform any subgroup analyses.

Means and standard deviations were calculated for the number of unmet and total number of needs for all detainees identified with a current or lifetime mental illness, specifically major depression and/or psychotic disorder, at risk of suicide, personality disorder, PTSD, ADHD, learning disability and those who did not.

3 | RESULTS

During the study period, 338 detainees were identified as eligible to participate. Of these, 134 (40%) provided consent and were interviewed. Figure 1 charts the flow from eligibility to inclusion, with reasons for nonparticipation. The most common reason was being missed, or released from police custody before researchers were able to approach or interview them (43%). Just 59 (17%) refused to participate.

Table 1 lists the characteristics of detainees interviewed. Most of the detainees interviewed were men (93%). The majority reported being single (80%). Just under half of the detainees were unemployed (48%) and only one-third in paid employment. Interviewed detainees were predominantly from Black, Asian and Minority Ethnic Groups (BAME), including those of mixed heritage (72 vs. 56 detainees recorded as White British or White other) (see Table 1).

In order to check the representativeness of the sample of detainees interviewed, comparisons between those interviewed and all other adults detained in the period who were not interviewed showed no statistically significant differences for gender (χ^2 = 1.308; *df* 1; p = 0.265); ethnicity (χ^2 = 0.898; *df* 1; p = 0.343); or employment status (χ^2 = 1.837; *df* 4; p = 0.803). Interviewees as a group were about 2 years younger than those not interviewed (31.2, *SD* 10.4 vs. 33.9, *SD* 10.9, respectively; Mann–Whitney U = 13255.5; p = 0.021).

4 | ALLEGED OFFENCES

The majority of detainees interviewed had been arrested for nonviolent offences (n = 89, 66%) (see Table 1). Violent offences included alleged murder, threats, affray, common assault and actual or grievous bodily harm. Further comparisons to check the representativeness between detainees who were interviewed, and those who

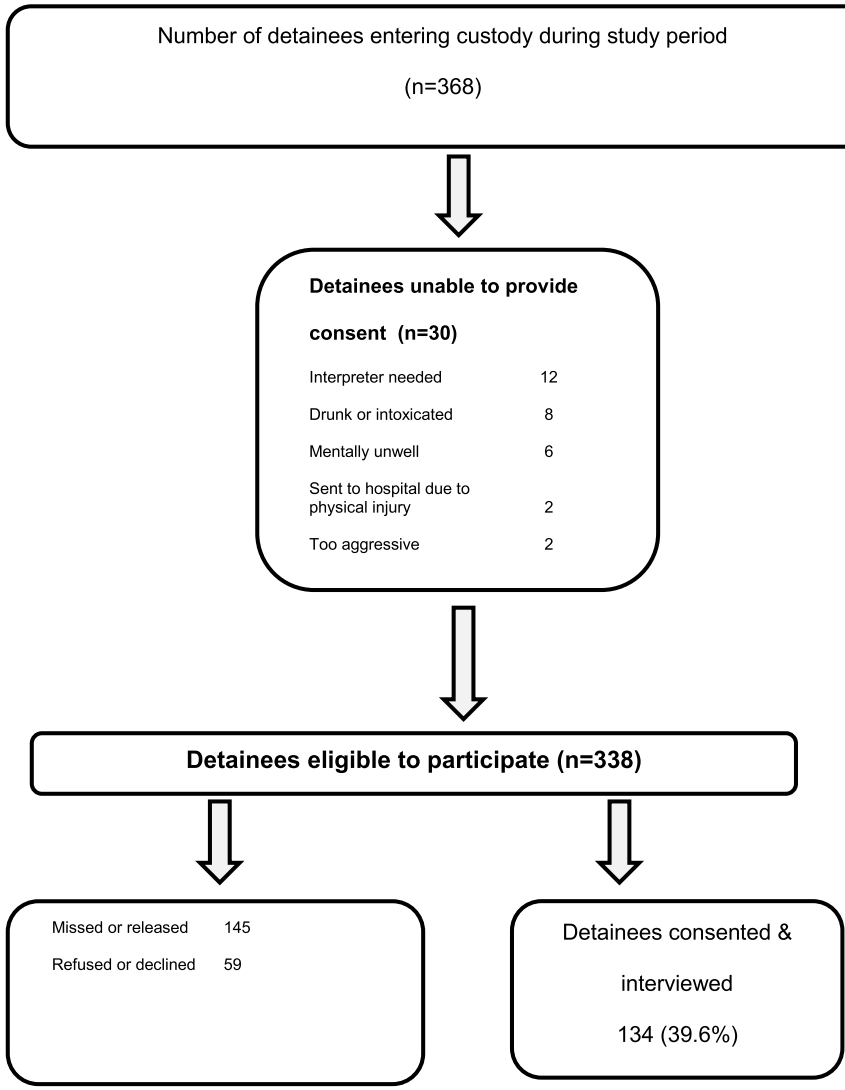

FIGURE 1 Flowchart of eligible detainees, those interviewed, excluded and missed/released

were not, revealed no significant differences for alleged offence ($\chi^2 = 4.268$; *df* 4; $p = 0.375$); or day of the week arrested ($\chi^2 = 10.281$; *df* 6; $p = 0.113$). A difference was found between these groups, however, for arrival time into police custody ($\chi^2 = 6.756$; *df* 2; $p = 0.034$), which suggests a slightly higher number of detainees arrested late at night or in the early hours were missed.

4.1 | Previous contact with psychiatric services

A quarter of the 134 detainees interviewed reported having had prior contact with a psychiatrist or community mental health team; 16% had had a previous psychiatric inpatient admission. At the time of interview, just 17% reported taking psychotropic medication.

TABLE 1 Demographic and alleged offence characteristics of interviewed detainees ($n = 134$)

	n	Percentage
Gender		
Male	125	93.3
Female	9	6.7
Age in years (mean, *SD*)	31.2 (10.4)	
Marital status		
Single	107	79.9
Married/cohabiting	16	11.9
Divorced/separated	7	5.2
Other/NK	4	99.9
Ethnicity		
White British	38	28.4
White other	18	13.4
Black British	14	10.4
Black African	15	11.2
Black Caribbean	28	20.9
Asian/Asian British	3	2.2
Mixed	12	9.0
Other/NK	6	4.5
Educational qualifications		
GCSEs or equivalent	66	49.3
A levels	21	15.7
Degree	6	4.5
Higher degree	2	1.5
None	39	29.0
Employment status		
Unemployed	64	47.8
Employed	46	34.3
Student	8	6.0
Not known	16	11.9
Alleged offence		
Violent	45	33.6
Sexual	1	0.7
Illicit drugs	30	22.4
Acquisitive	24	17.9
Other	34	25.4
Total	134	100

Abbreviation: NK, Not Known.

5 | PREVALENCE

The prevalence of mental illness, suicide risk and detainees with a learning disability is listed in Table 2.

5.1 | Diagnostic interview

Based on the structured diagnostic interview, nearly one-third of the interviewees (39, 29%) screened positive for a current mental illness (either major depression and/or psychotic disorder), with more indicating lifetime experience of these disorders (54, 40%). The largest illness group had depression (58, 43%), whether current or lifetime. Just under one-fifth (26, 19%) had a lifetime diagnosis of psychosis, although only nine (7%) were psychotic at the time of interview. Nearly one-fifth (24, 18%) indicated some current suicide risk.

5.2 | Symptom questionnaires

Findings from the individual disorder symptom questionnaires indicated that 21% reached the threshold for personality disorder, 8% for PTSD and 11% for ADHD.

Over 60% (or 81) of all detainees interviewed reported current substance use. Over a quarter (35, 26%) of detainees reached the threshold for hazardous or harmful levels of alcohol consumption and 31 (23%) reported using cannabis daily. Current crack cocaine use was identified in 10 (7%) detainees, with 25 (19%) having used this in the past. Few detainees (5, 4%) were current heroin users, although 16 (12%) reported previous use.

Just six interviewees reached the threshold for learning disability on the LDSQ.

5.3 | Prevalence of mental illness by ethnicity

Given the high proportion of BAME detainees included in the study, we examined presenting psychiatric state by ethnicity. No significant differences were found for BAME versus White British/White other detainees for any of the mental illnesses assessed, except for current suicide risk where White British/White other detainees were found to be more likely to be at risk (5 vs. 14 respectively, $\chi^2 = 5.34$; *df* 1; $p = 0.021$).

6 | UNMET AND TOTAL NEEDS

The 134 detainees had, between them, 432 needs across all 22 domains. The most frequently recorded unmet need was accommodation (29, 22%), followed closely by welfare benefits (26, 20%).

Table 3 compares mean scores (and standard deviations) for detainees' unmet needs and total needs according to their presenting psychiatric state. The highest level of unmet needs was among those identified with a current psychotic disorder (4.0, *SD* 3.2) and detainees presenting as suicidal the next highest (3.5, *SD* 2.5).

Detainees who were identified as presenting a current suicide risk also had the highest total number of needs (mean 6.5, *SD* 3.1). Half of them reported these needs regarding accommodation (12 of the 24 detainees identified as a current suicide risk), while lower proportions reported needs regarding welfare benefits (10 of 24) and psychological distress (9 of 24). A significant difference was found for detainees who were identified as presenting a current suicide risk (compared to those not presenting a risk) for

TABLE 2 Prevalence of identified mental illness and learning disability in detainees (n = 134)

	N	Percentage	(95% CIs)
Current mental illness/suicide risk			
Current major depressive episode (of 2 weeks or more)			
Yes	30	22.4	(0.16–0.31)
No	103	76.9	(0.69–0.84)
Not known	1	0.7	–
Current psychotic disorder			
Yes	9	6.7	(0.03–0.12)
No	124	92.5	(0.87–0.97)
Not known	1	0.7 Total is 99.9 not 100	–
Current suicide risk			
Yes	24	17.9	(0.12–0.26)
No	108	80.6	(0.74–0.88)
Not known	2	1.5	–
Lifetime/past mental illness			
Lifetime depressive episode (of 2 weeks or more)			
Yes	28	20.9	(0.15–0.29)
No	102	76.1	(0.70–0.85)
Not known	4	3.0	–
Recurrent major depressive episode			
Yes	24	17.9	(0.13–0.28)
No	98	73.1	(0.72–0.87)
Not known	12	9.0	–
Lifetime psychotic disorder			
Yes	26	19.4	(0.13–0.27)
No	107	79.9	(0.73–0.87)
Not known	1	0.7	–
Probable mental illness			
PTSD (threshold score of 6 and above)			
Yes	11	8.2	(0.53–0.18)
No	95	70.9	(0.82–0.95)
Not known	28	20.9	–
Personality disorder (threshold score of 4 and above)			
Yes	28	20.9	(0.16–0.32)
No	92	68.7	(0.68–0.84)
Not known	14	10.4	–

TABLE 2 (Continued)

	N	Percentage	(95% CIs)
ADHD (threshold score of 4 and above)			
Yes	15	11.2	(0.06–0.18)
No	109	81.3	(0.80–0.93)
Not known	10	7.5	–
Learning disability			
Yes	6	4.5	(0.02–0.09)
No	122	91.0	(0.90–0.98)
Not known	6	4.5	–

Abbreviations: ADHD, attention deficit and hyperactive disorder; PTSD, post-traumatic stress disorder.

TABLE 3 Mean (*SD*) comparisons of unmet and total needs scores between detainees with and without an identified mental illness (MI) ($n = 134$)

		Unmet needs Means (*SD*)		Total needs Means (*SD*)	
	n	With MI	No MI	With MI	No MI
Current major depression	30	2.6 (2.2)	1.1 (1.9)	5.2 (3.2)	2.8 (2.9)
Lifetime major depression	28	**2.8 (2.4)**	**1.0 (1.8)**	5.2 (3.2)	2.7 (2.9)
Current psychotic disorder	9	**4.0 (3.2)**	**1.2 (1.8)**	6.4 (4.1)	3.1 (2.9)
Lifetime psychotic disorder	26	2.7 (2.5)	1.1 (1.8)	5.8 (3.3)	2.8 (2.8)
Current suicide risk	24	**3.5 (2.5)**	**0.9 (1.7)**	**6.5 (3.1)**	**2.6 (2.6)**
Personality disorder	26	**3.0 (2.3)**	**0.9 (1.7)**	5.2 (2.8)	2.7 (2.8)
PTSD	11	2.0 (1.6)	1.5 (2.2)	4.4 (2.2)	3.3 (3.2)
ADHD	14	3.3 (2.6)	1.2 (1.9)	6.0 (3.2)	3.1 (2.9)
Learning disability	6	1.2 (1.9)	1.5 (2.1)	3.0 (3.0)	3.4 (3.2)

Note: Figures in bold highlight the relatively large mean scores for needs in detainees with and without an identified mental illness.

Abbreviations: ADHD, attention deficit and hyperactive disorder; PTSD, post-traumatic stress disorder.

accommodation (12 vs. 17, $\chi^2 = 13.4$; *df* 3; $p = 0.004$). Detainees presenting with a current psychotic disorder had a similar order of needs (mean 6.4, *SD* 4.1), as did those meeting the threshold for ADHD (mean 6.0, *SD* 3.2).

The lowest level of unmet needs recorded was for detainees with learning disability (mean 1.2, *SD* 1.9).

7 | DISCUSSION

We found high levels of current and lifetime mental disorders across the board. The highest prevalence for current mental illness included detainees with a major depressive episode (22% overall). While figures for current illness are similar to those reported in other studies (Baksheev, Ogloff & Thomas, 2012; McKinnon & Grubin, 2013, 2014; McKinnon, Srivastava, Kaler & Grubin, 2013), as is the figure for learning disability (McKinnon, Thorp &

Grubin, 2015; Young et al., 2013), our study identified higher figures for a lifetime prevalence of psychosis (19%) and personality disorder (21%). Our figure for current suicide risk (18%) is also higher than reported in previous literature. Forrester et al.'s (2017) study of 1092 referrals to a London police custody mental health liaison and diversion service, found 20.1% with schizophrenia/psychosis, 16.6% with depression, 8.2% with a personality disorder, 5.4% with acute stress reaction/anxiety/OCD/PTSD and 2.4% with ADHD/conduct disorder (Forrester et al., 2017). Screened rates for personality disorder and ADHD were considerably higher in our study at 20.9% and 11.2%, respectively. One possible explanation for this disparity is that the current study set out to screen specifically for these disorders, whilst in contrast routine data from Liaison and Diversion services may have a bias towards mental illnesses, perhaps as the latter are seen more as "core" work. Furthermore, this study aimed to interview all detainees arriving in custody, whereas liaison and diversion samples include those referred by the police or another health professional to be included in the data. One therefore might expect estimates from this study to be lower than the preselected diversion samples, but this was not the case. The prevalence of mental illness in police detainees is in stark contrast to rates found in the general population where a rate of 0.7% is reported for psychotic disorder (McManus et al., 2016; Public Health England, 2015).

7.1 | Black and Asian minority ethnic populations

Our study included a high proportion of BAME detainees, 72 (or 54%) in total including those of mixed heritage. Interestingly, no significant differences were found for presenting psychiatric state and ethnicity, except for current suicide risk, which was identified mostly in White British/White other groups. There were no differences between ethnic groups for current or lifetime psychotic episode in the present study, and contrary to previous findings which have consistently shown an excess of psychosis (both incidence and prevalence) in Black Caribbean and Black African ethnic groups in the general population (Fearon et al., 2006; Qassem et al., 2015). Again, this may reflect differences in sample selection whereby we potentially included all detainees and did not confine study to those referred by liaison and diversion services.

7.2 | Unmet needs and psychiatric services

Detainees identified with a current psychotic disorder and a suicide risk were found to have the highest mean number of unmet needs. For the latter group, accommodation was flagged as a key area of concern. Previous research has found suicide ideation amongst detainees to be associated with a history of self-harm, previous suicide attempts, depression, PTSD, personality disorder and recent substance use (Forrester et al., 2016). This underlines the importance of ensuring that psychiatric services are accessible quickly following entry into police custody. Addressing housing issues, alongside those concerning mental health issues, are crucial to reducing/preventing reoffending and the likelihood of courts remanding to prison detainees that are homeless and mentally ill. In an attempt to reduce reoffending, the UK Government recently announced a £70 million investment to provide accommodation and other support for those leaving prison (Ministry of Justice, 2021). It would make sense to extend this initiative to police detainees to address or prevent early on any mental health and housing issues that somehow lead people into the criminal justice system.

From an international perspective, Baksheev et al. (2010) found a higher overall mean average for unmet needs in their Australian sample of police detainees compared to ours (Baksheev et al., 2012). However, when examined by type of mental illness, our findings for total and unmet needs are relatively high.

Whilst our results demonstrate that there are greater unmet needs among those with compared to those without mental disorder, it should be considered that there might be a bidirectionality in the relationship at play here (i.e., mental disorder leads to unmet needs, but unmet needs may exacerbate pre-existing psychiatric and

developmental problems). Although it is not possible to establish the direction of causation from our data, the message is clearly that people detained in custody are at greater risk of unmet need across a range of categories. This is an area meriting further research.

7.3 | Learning disability

The prevalence of learning disability is also raised amongst police detainees. Expected prevalence in the wider community would be 2%–3%; however, we found 4.5%. The prevalence in two London studies were 6.7% (Young et al., 2013) and 2.3% (McKinnon et al., 2015). In samples referred to a criminal justice liaison and diversion service located within a police station, prevalence rates of 4% and 6% have been reported (Forrester et al., 2017; McKenna et al., 2018).

By contrast, detainees identified with a learning disability reported fewer needs, including unmet needs. This is an unexpected finding as previous studies show those with a learning disability detained in police custody often have complex mental health needs (Gendle & Woodhams, 2005; Scott, McGilloway & Donnelly, 2006). Our finding is not explained by contact with psychiatric services, but it is possible that detainees with a learning disability were in contact with other health or social support services that met their requirements. It may, however, also be possible that they under-reported their needs.

7.4 | Improving mental health services for police detainees

Our study highlights the importance of understanding the type and range of unmet health and social needs in detainees presenting with mental illness in police custody. Those with the highest unmet needs were detainees identified with a current psychiatric disorder. Those deemed a current suicide risk had the highest total number of needs. This adds further weight to existing calls to improve the safety and wellbeing of detainees and healthcare provision in police custody (Payne-James, 2017). This would involve consistent health commissioning arrangements that work throughout the criminal justice pathway (Forrester et al., 2016); together with more standardised forms of collaboration between the police and healthcare professionals across the UK (Public Health England, 2018). Improvements have been made in England and Wales in recent years through the development of liaison and diversion services, although further research is needed to understand their effectiveness (Cresswell, 2020; Disley et al., 2016; Forrester & Hopkin, 2019; Kane, Evans, Mitsch & Jilani, 2020). Part of improving healthcare within police custody also includes an integrated health promotion service, and understanding how this might work most efficiently (Rekrut-Lapa & Lapa, 2014).

7.5 | Study limitations

Only 40% of eligible detainees identified during the study period were interviewed, which appears low, but is not unusual for a busy inner city London police station. McKinnon, Srivastava, et al. (2013), for example, interviewed 38% of their eligible detainees in a similar London police station (McKinnon & Grubin, 2013), but were able to increase this to 53% at a police station with lower detainee throughput (McKinnon & Grubin, 2014). Interviewed detainees were similar in terms of their demographic and offence profiles when compared to those not interviewed; and so appeared likely to be representative of all those eligible to participate. It should be noted that many of the detainees who could not participate because they lacked capacity, may have done so as the result of underlying psychiatric or developmental problems, so our reported prevalence of disorder and needs are likely to underestimate the true figures.

It would have been desirable to conduct this research over a longer period with a larger sample size, but we were limited by the constraints of police procedures and access to the custody suite, and the availability of clinicians to undertake research interviews. Nonetheless, we did have a sample size that met our minimum required calculation.

Only one site was represented in this study, and in a particularly densely populated and ethnically diverse part of London with a unique population demographic, so it may not be possible to extrapolate to more rural or less diverse areas.

8 | CONCLUSION

We found high levels of screened mental disorders amongst police custody detainees, with additional high levels of suicide risk, alcohol and substance use, and unmet needs, in a diverse urban area. These results underscore the importance of ensuring that mental health services are located within police stations and work in collaboration with the police to identify and resolve these issues at this early stage in the criminal justice system.

ACKNOWLEDGEMENTS

This study was supported by the Guy's and St Thomas' Charity. The authors would like to thank members of staff who assisted the research team and all participants who took part.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Penelope Brown https://orcid.org/0000-0001-8487-7106

Andrew Forrester https://orcid.org/0000-0003-2510-1249

REFERENCES

Adler, L. A., Spencer, T., Faraone, S. V., Kessler, R. C., Howes, M. J., Biederman, J., & Secnik, K. (2006). Validity of pilot adult ADHD Self- Report Scale (ASRS) to rate adult ADHD symptoms. *Annals of Clinical Psychiatry*, *18*, 145–148.

Baksheev, G. N., Ogloff, J., & Thomas, S. (2012). Identification of mental illness in police cells: A comparison of police processes, the brief jail mental health screen and the jail screening assessment tool. *Psychology, Crime & Law*, *18*, 529–542.

Baksheev, G. N., Thomas, S. D. M., & Ogloff, J. R. P. (2010). Psychiatric disorders and unmet needs in Australian police cells. *Australian and New Zealand Journal of Psychiatry*, *44*, 1043–1051.

Bradley, K. (2009). *The Bradley report: Lord Bradley's review of people with mental health problems or learning disabilities in the criminal justice system*. London, UK: Department of Health.

Brewin, C. R., Rose, S., Andrews, B., Green, J., Tata, P., McEvedy, C., Turner, S., & Foa, E. B. (2002). Brief screening instrument for post-traumatic stress disorder. *British Journal of Psychiatry*, *181*, 158–162.

Brooker, C., Tocque, K., Mitchell, D., & Pearce, M. (2018). Police custody in the north of England: Findings from a health needs assessment in Durham and Darlington. *Journal of Forensic and Legal Medicine*, *57*, 91–95.

Craster, L., & Forrester, A. (2020). The early identification of people with personality disorder in the criminal justice system. *Medicine, Science & the Law*, *60*, 294–300.

Cresswell, M. (2020). Rise in the use of section 136 of the Mental Health Act 1983 in England and Wales: A viewpoint on Loughran (2018). *Medicine, Science & the Law*, *60*(2), 140–146.

Disley, E., Taylor, C., Kruithof, K., Winpenny, E., Liddle, M., Sutherland, A., & Francis, V. (2016). *Evaluation of the offender Liaison and diversion trial schemes*. Cambridge, UK: Rand Europe.

Dorn, T., Ceelen, M., Buster, M., Stirbu, I., Donker, G., & Das, K. (2014). Mental health and health-care use of detainees in police custody. *Journal of Forensic and Legal Medicine*, *26*, 24–28.

Fazel, S., & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: Systematic review and meta-regression analysis. *British Journal of Psychiatry*, *200*, 364–373.

Fearon, P., Kirkbride, J. B., Morgan, C., Dazzan, P., Morgan, K., Lloyd, T., Hutchinson, G., Tarrant, J., Lun Alan Fung, W., Holloway, J., Mallett, R., Harrison, G., Leff, J., Jones, P. B., Murray, R. M., & AESOP Study Group. (2006). Incidence of schizophrenia and other psychoses in ethnic minority groups: Results from the MRC AESOP study. *Psychological Medicine*, *36*, 1541–1550.

Forrester, A., & Hopkin, G. (2019). Mental health in the criminal justice system: A pathways approach to service and research design. *Criminal Behaviour and Mental Health*, *29*, 207–217.

Forrester, A., Samele, C., Slade, K., Craig, T., & Valmaggia, L. (2016). Suicide ideation amongst people referred for mental health assessment in police custody. *Journal of Criminal Psychology*, *6*, 146–156.

Forrester, A., Samele, C., Slade, K., Craig, T., & Valmaggia, L. (2017). Demographic and clinical characteristics of 1092 consecutive police custody mental health referrals. *Journal of Forensic Psychiatry and Psychology*, *28*, 295–312.

Forrester, A., Valmaggia, L., & Taylor, P. J. (2016). Healthcare services in police custody in England and Wales. *British Medical Journal*, *353*, i1994. https://doi.org/10.1136/bmj.i1994

Gendle, K., & Woodhams, J. (2005). Suspects who have a learning disability. *Journal of Intellectual Disabilities*, *9*, 70–81.

Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity Of Dependence Scale (SDS): Psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction*, *90*, 607–614.

Harty, M., Jarrett, M., Thornicroft, G., & Shaw, J. (2012). Unmet needs of male prisoners under the care of prison Mental Health Inreach Services. *Journal of Forensic Psychiatry & Psychology*, *23*, 285–296.

Hopkin, G., Chaplin, L., Slade, K., Craster, L., Valmaggia, L., Samele, C., & Forrester, A. (2020). Differences between homeless and non-homeless people in a matched sample referred for mental health reasons in police custody. *International Journal of Social Psychiatry*, *66*, 576–583.

Kane, E., Evans, E., Mitsch, J., & Jilani, T. (2020). Are liaison and diversion interventions in policing delivering the planned impact: A longitudinal evaluation in two constabularies? *Criminal Behaviour and Mental Health*, *30*(5), 256–267.

Lambeth Council. (2015). *State of the borough report*. https://moderngov.lambeth.gov.uk/documents/s80062/FINAL%20Appendix%20One-%20Summary%20of%20Lambeths%20demographics%200803.pdf

McKenna, D., Murphy, H., Rosenbrier, C., Soulsby, A., Lyall, A., Keown, P., Reid, K., & McKinnon, I. (2018). Referrals to a mental health criminal justice Liaison and diversion team in the North East of England. *Journal of Forensic Psychiatry and Psychology*, *30*, 301. https://doi.org/10.1080/14789949.2018.1544266

McKenzie, K., & Paxton, D. (2005). *Learning disability screening questionnaire*. GCM.

McKinnon, I. G., & Grubin, D. (2013). Health screening of people in police custody--evaluation of current police screening procedures in London, UK. *The European Journal of Public Health*, *23*, 399–405.

McKinnon, I. G., & Grubin, D. (2014). Evidence-based risk assessment screening in police custody: The Help-PC study in London, UK. *Policing*, *8*, 174–182.

McKinnon, I. G., Srivastava, S., Kaler, G., & Grubin, D. (2013). Screening for psychiatric morbidity in police custody: Results from the HELP-PC project. *Psychiatrist*, *37*, 389–394.

McKinnon, I. G., Thorp, J., & Grubin, D. (2015). Improving the detection of detainees with suspected intellectual disability in police custody. *Advances in Mental Health and Intellectual Disabilities*, *9*, 174–185.

McManus, S., Bebbington, P., Jenkins, R., & Brugha, T. (Eds.), (2016). *Mental health and wellbeing in England: Adult psychiatric morbidity survey 2014* (Vol. *26*). NHS Digital.

Ministry of Justice. (2021). *£70 million to keep prison leavers off the streets and cut crime. Press release*.

Minitab. (2010). *Statistical software*. State College, PA: Minitab, Inc.

Moran, P., Leese, M., Lee, T., Walters, P., Thornicroft, G., & Mann, A. (2003). Standardised Assessment of Personality-Abbreviated scale (SAPAS): Preliminary validation of a brief screen for personality disorder. *British Journal of Psychiatry*, *183*, 228–232.

Noga, H. L., Walsh, E. C. L., Shaw, J. J., & Senior, J. (2014). The development of a mental health screening tool and referral pathway for police custody. *The European Journal of Public Health*, *25*, 237. https://doi.org/10.1093/eurpub/cku160

ONS. (2015). *Harmonised concepts and questions for social data sources primary principles*. Ethnic Group, Office for National Statistics. https://gss.civilservice.gov.uk/wp-content/uploads/2016/03/P3-Ethnic-Group-June-16-1.pdf

Ogloff, J., Warren, L., Tye, C., Blaher, F., & Thomas, S. (2011). Psychiatric symptoms and histories among people detained in police cells. *Social Psychiatry and Psychiatric Epidemiology*, *46*, 871–880.

PACE. (1984). *Police and Criminal Evidence Act*.

Payne-James, J. J. (2017). Healthcare and forensic medical services in police custody—To degrade or to improve?. *Clinical Medicine*, *17*, 6–7.

Payne-James, J. J., Green, P. G., Green, N., McLachlan, G. M. C., Munro, M. H. W. M., & Moore, T. C. B. (2010). Healthcare issues of detainees in police custody in London, UK. *Journal of Forensic and Legal Medicine*, *17*, 11–17.

Phelan, M., Slade, M., Thornicroft, G., Dunn, G., Holloway, F., Wykes, T., Strathdee, G., Loftus, L., McCrone, P., & Hayward, P. (1995). The Camberwell assessment of need: The validity and reliability of an instrument to assess the needs of people with severe mental illness. *British Journal of Psychiatry*, *167*, 589–595.

Public Health England. (2015). *Health and justice health needs assessment guidance: Police custody. Part 3 of the health and justice health needs assessment toolkit for prescribed places of detention*. Public Health England.

Public Health England. (2018). *Policing and health collaboration in England and Wales. Landscape review*. Public Health England.

Qassem, T., Bebbington, P., Spiers, N., McManus, S., Jenkins, R., & Dein, S. (2015). Prevalence of psychosis in black ethnic minorities in Britain: Analysis based on three national surveys. *Social Psychiatry and Psychiatric Epidemiology*, *50*, 1057–1064.

Rekrut-Lapa, T., & Lapa, A. (2014). Health needs of detainees in police custody in England and Wales. Literature review. *Journal of Forensic and Legal Medicine*, *27*, 69–75.

Saunders, J. B., Aasland, O. G., Babor, T. F., de la Fuente, J. R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption-II. *Addiction*, *88*, 791–804.

Scott, D., McGilloway, S., & Donnelly, M. (2006). The mental health needs of people with a Learning Disability detained in police custody. *Medicine, Science & the Law*, *46*, 111–114.

Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., & Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM- IV and ICD-10. *Journal of Clinical Psychiatry*, *59*(Suppl 20), 22–33.

Sirdfield, C., & Brooker, C. (2012). Detainees in police custody: Results of a health needs assessment in Northumbria, England. *International Journal of Prisoner Health*, *8*, 60–67.

Steadman, H. J., Scott, J. E., Osher, F., Agnese, T. K., & Robbins, P. C. (2005). Validation of the brief jail mental health screen. *Psychiatric Services*, *56*, 816–822.

Warrington, C. (2019). Repeated police mental health act detentions in England and Wales: Trauma and recurrent suicidality. *Ijerph*, *16*(23), 4786.

Young, S., Goodwin, E. J., Sedgwick, O., & Gudjonsson, G. H. (2013). The effectiveness of police custody assessments in identifying suspects with intellectual disabilities and attention deficit hyperactivity disorder. *BMC Medicine*, *11*, 248.

How to cite this article: Samele C, McKinnon I, Brown P, et al. The prevalence of mental illness and unmet needs of police custody detainees. *Crim Behav Ment Health*. 2021;1–16. https://doi.org/10.1002/cbm.2193