Abstract

The 43 police forces in England and Wales have made over 13 million arrests in the last decade. Yet despite this high volume criminal justice system activity, and evidence of substantial health morbidity across the criminal justice pathway, mental health services in police custody have so far only been developed in patches, and the literature in this area is limited. Referrals (n=1092) to a pilot mental health service operating across two police stations in a London borough were examined over an 18-month period in 2012/13. The referred group had high levels of mental health and substance misuse problems (including acute mental illness, intoxication and withdrawal), self-harm, suicide risk and vulnerability, with some important gender differences. Although this work has limitations, the findings are broadly consistent with the small existing literature and they confirm the need for services that are sufficiently resourced to meet the presenting needs.

Abstract word count = 145

Introduction

England and Wales have 43 regional police forces, each of which covers a particular territorial area and is complemented by three national special police forces (the British Transport Police, the Civil Nuclear Constabulary and the Ministry of Defence Police). Over the last decade these forces have made thirteen million arrests, although overall arrest numbers have reduced considerably from almost 1.5 million in 2007 to 950,000 in 2015 (Home Office, 2015). The vast majority of arrestees are male (84%), and around a third of the overall total are for violent crimes against the person, with around a fifth being for theft or handling stolen goods (Home Office, 2015). Although this number of arrests is high, reported crime is even higher, with 4.3 million offences recorded during the year ending September 2015, representing a 6% increase on the previous year (Office for National Statistics, 2016).

Meanwhile, there is considerable evidence that criminal justice system populations present with substantial health morbidities, this excessive morbidity having been demonstrated amongst both prison and court groups (Fazel & Seewald, 2012; Shaw, Creed, Price, Huxley & Tomenson, 1999). These groups initially enter the criminal justice system by being arrested and processed through police custody, and therefore it is not surprising that a more recent and developing
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literature that has focused specifically on detainees in police custody has also found high levels of morbidity across a range of health measures. Complexity and mixed pathology across domains have emerged as key themes (Rekrut-Lapa & Lapa, 2014; McKinnon & Grubin, 2010; Payne-James, Green, Green, McLachlan, Munro & Moore, 2010). High levels of substance use and dependence have been identified, with a wide range of substances (both legal and illegal) being consumed, and serious problems arising in police stations as a consequence of both substance intoxication and withdrawal (Clement, Gerardin, Victorri, Guigand, Wainstein & Jolliet, 2013; Dorn, Ceelen, Buster, Stirbu, Donker & Das, 2014; Coulton, Newbury-Birch, Cassidy, Dale, Deluca, Gilvary, Godfrey, Heather, Kaner & Oyefeso, 2012; Payne-James, Wall & Bailey, 2005; Pearson, Robertson & Gibb, 2000). Substance use also plays an important role in deaths and near miss incidents in police custody suites (Best, Havis, Payne-James & Stark, 2006). Mental health problems are also over-represented amongst police detainees, with studies describing a highly vulnerable group (Baksheev, Thomas & Ogloff, 2012) from which a quarter have a history of psychiatric hospital admission, three-quarters meet the criteria for a diagnosis of mental disorder, and one-third present with mental health and substance misuse co-morbidities (Baksheev, Thomas & Ogloff, 2010). More than half of one sample of 614 detainees (55%) had a history of contact with publicly provided mental health services, and this same group exhibited more psychiatric symptoms while they were in police custody (Ogloff, Warren, Tye, Blaher & Thomas, 2011). Using the Brief Jail Mental Health Screen (Steadman, Redlich, Callahan, Robbins & Vesselinov, 2009) 40% of a randomly selected sample of detainees in police custody in Amsterdam scored positive, requiring further evaluation (Dorn, Ceelen, Buster & Das, 2013) and a further 35% having additional social problems (Buster, Dorn, Ceelen, Das, 2014). However, despite these high levels of morbidity, assessment and referral services in police custody in England and Wales are presently under-developed when compared with other parts of the criminal justice system, with custody officers holding the main responsibility for identifying health needs using a standardised instrument. This tool is applied to all detained individuals, and although it contains questions covering mental health, physical health, substance misuse and withdrawal, and self-harm risks, its effectiveness has been called into question by research (Noga, Walsh, Shaw & Senior, 2015).
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These existing processes are known to miss many cases of mental illness and alcohol withdrawal, as well as missing almost half of those who require the support of an appropriate adult because of underlying vulnerability or mental capacity issues (McKinnon, Srivastava, Kaler & Grubin, 2013). Given these limitations, there have been clear calls for the implementation of better standardised tools to improve the identification of mental health problems in police custody (Baksheev, Thomas & Ogloff, 2010; McKinnon & Grubin, 2012).

At the same time as these morbidities amongst police custody detainees have increasingly been uncovered by research, there has been a movement within England and Wales to develop criminal justice liaison and diversion services in courts and police stations (Srivastava et al., 2013). Despite their evidential limitations (Scott et al., 2013), there is presently a national intention to introduce and improve services for all people who present with mental health problems in the criminal justice systems using an all-age model which is focused on identifying cases through screening, with subsequent specialist assessment when it is required (NHSE, 2014a). Although these liaison and diversion services existed in England and Wales before the policy landscape shifted, albeit largely based in the lower (Magistrates’) courts (James, 2006), the relatively recent priority that has been attached to their development has arisen from influential national policy reviews and subsequent Government responses (Bradley, 2009; Corston, 2007; Ministry of Justice, 2010). In order to move this new provision forward, ten trial sites received a financial investment of £25 million from 2014 (NHSE website, 2016), with the aim that they would be evaluated and that a standardised service specification would subsequently be introduced nationally (NHSE, 2014b).

This project was developed within that wider policy landscape, and it introduced one pilot mental health service to meet the health needs of detainees in police custody in one London borough. It followed an earlier piece of work in which the unmet needs of this group had been locally identified using a needs-based evaluation (Rapley et al., 2011), and the project was introduced as a grant-funded service response.

The evaluation of this new clinical service aimed to describe the demographic and clinical characteristics of the first consecutive cohort of referrals over an 18-month period, as well as
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examining gender differences amongst the referred group given evidence of the particular health problems faced by women in the criminal justice system (Plugge et al., 2006; Scott et al., 2009) and an earlier national policy review in which a number of specific needs were posited (Corston, 2007).

**Method**

**Setting and service operations**

This pilot criminal justice mental health service (CJMHS) operated in two police stations in one south London borough (representing two of the 140 police stations operated by the Metropolitan Police Service across London). The service operated seven days per week between the hours of 8am and 8pm. It used an ‘open referral system’ approach (meaning that it was available to take referrals from a wide range of individuals or agencies, including non-clinical sources such as police officers and self-referrals), and it accepted referrals in a number of forms in order to facilitate prompt service access (e.g. written, email, or telephone referrals). Initial screening was done on reception by desk sergeants using a standardised process that has been described elsewhere (Noga, Walsh, Shaw & Senior, 2015). Following referral, mental health assessments were undertaken by nursing staff (known as Community Psychiatric Nurses, or CPNs) who were able to access telephone advice from a Consultant Forensic Psychiatrist if it was required, although in reality psychiatric support was only required in cases where diversion to psychiatric hospital was considered. The team operated a target of four hours to assessment, and all referrals were seen the same day given requirements of code C of the Police and Criminal Evidence Act 1984 (PACE), which sets out the requirements for detaining, treating and questioning suspects in custody. Referrals were clinically reviewed in a private space and efforts were made to ensure that the assessment process was not interrupted (although there were some interruptions, for example to request attendance for police interview). The clinical team then discussed these referrals at the subsequent weekly team meeting that was attended by medical, nursing and administration staff.

**Participants**
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A total of 1092 detainees were assessed between 06.03.2012 and 31.08.2013, representing 15% of the total arrest volume during this period. From this group, 869 (79.6%) were male (mean age = 36.6, sd = 11.1), 218 (20.4%) were female (mean age 36.7, sd = 11.7), with 4 (0.3%) identified as transgender or transsexual.

Procedure

After receiving referrals, CPNs ranked them in order of their urgency before proceeding to undertake a clinical assessment, prioritising people who had been identified as presenting a risk of self-harm and/or suicide, or who were thought to be acutely mentally unwell (while those who were intoxicated with or withdrawing from alcohol were returned to primary care services for further management). While undertaking the assessment, CPNs had access to NHS clinical information from the local mental health Trust records, and to police records including criminal justice information. The details of this assessment were then recorded on a template that was designed specifically for this project and subsequently uploaded to the electronic clinical record of the providing Mental Health Trust. This document had three main functions: its main aim was to ensure that a high quality standardised clinical record was produced as quickly as possible, given the operational limitations that often arise when attempting to undertaking clinical assessments of people in police custody (McKinnon & Grubin, 2012); its second aim was to ensure a mobile clinical record that could easily be uploaded to existing electronic record systems; and its third aim was to collect information to record the activities and outcomes of the service to enable its evaluation. The template design ensured that information was collected across a number of domains (personal details; referral and response times; arrest information; consent; consciousness and orientation; demographic information; mental health; diagnosis; substance misuse; intellectual disability; self-harm and suicidality). Although personal and demographic information was mainly obtained by self-report, arrest and clinical information was obtained through a mixture of self-report and available records.

Primary and secondary diagnoses were recorded in accordance with information from available clinical records when they were available, and when they were not available it was recorded on the basis of clinical impression. As part of the assessment process, however, a rating
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Scale was used to screen for the presence of intellectual disability in cases where vulnerability concerns were reported, or after individuals had self-reported an intellectual disability (the Learning Disability Screening Questionnaire: McKenzie, Michie, Murray & Hales, 2012). Other validated screening tools were not, however, used because the main priority of the service was to provide timely clinical triage within the requirements of PACE, rather than to undertake a research-based examination of the prevalence of mental disorder. The wider template also included free-text boxes which were available for the assessor to record information regarding mental state, clinical impression, and their assessment of any risks presented (including risks to self, or to others), largely for the purposes of clinical assessment and deriving an opinion.

Analyses

Anonymised data were entered into an Excel database on a rolling weekly basis and were checked for errors and missing data. Once prepared, data were then transferred to a statistical software package to facilitate the project’s overall evaluation. This software package (SPSS, v22) was then used to provide descriptive statistics. Following analysis using a series of Chi-square tests, data tables were prepared to enable the presentation of results.

In addition, a comparison was undertaken regarding arrest offences reported in this evaluation against the official offence rate for 32,923 offences reported within the same London borough during 2013-14 (Metropolitan Police, 2014). As prevalence rates were similar between males and females, the full sample was compared with official rates for the following groups: violent offences (22.3%), sexual offences (1.7%), theft (60.5%) and fraud (0.015%).

Ethics and governance

The clinical project was overseen by a governance board that included representation from the local National Health Service (NHS) mental health Trust that provided clinical staff to the project (South London and Maudsley NHS Foundation Trust), the local authority (Lambeth Council), the Metropolitan Police Service and London Probation Service. The work received local Trust governance approval as a service evaluation project.

Results

Demographic variables
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Almost three-quarters (814; 74%) provided consent to be interviewed (656 (76%) of men and 158 (73%) of women). The vast majority were registered with a General Practitioner for primary care services (86%) and spoke English as their first language (78%). A range of ethnicities were represented in the sample, mainly White (49%) and Black (36%) groups. A large number were single (65%), with much smaller numbers in cohabiting relationships (6%), married or in civil partnerships (5%), separated (3%), or declining to disclose (18%). The largest number lived in rented social housing (43%), with others declining to describe their housing status (22%), living with family or friends (13%), hostel accommodation (13%), or being street homeless (8%). A minority of the sample were in work (14%) and almost half (48%) were described as being in receipt of State benefits. As regards their educational status, the largest group had no qualifications (27%). As outlined in Table 1, there were no significant gender difference on any demographic measures, except that women were significantly more likely to have children.

*Insert table 1 here*

**Criminal justice process and offences**

The majority of detainees had initially been reviewed using the standardised police reception screen (93%), and a minority of this number had subsequently been reviewed by a primary care nurse (32%), an arrest referral worker (14%), or a Forensic Medical Examiner (19%). The majority (81%) had already been found fit for police interview after being reviewed by a custody officer and, in some cases where doubts arose regarding their fitness for interview a healthcare practitioner had also been consulted. A wide range of alleged offences were represented in the sample (including violent, sexual, acquisitive, drug-related and other alleged offences). A minority (17%) were on bail at the point of arrest, or had outstanding warrants (10%). Most of the referred group had a history of convictions (81%), of which the majority were for violent offences (52%). As outlined in Table 2, there were no significant gender differences on the majority of measures, although men were more likely than women to have a criminal record and to have prior convictions for violent offences.

When the sample was compared with official rates for offences in the same London borough, violent sexual and fraud offences were found to be over-represented (violence Chi² =
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42,443, p < 0.001; sexual offences $\chi^2 = 1236.47$, p < 0.001; fraud $\chi^2 = 1886.5$, p < 0.001) while theft offences were under-represented ($\chi^2 = 1385.69$, p < 0.001).

*Insert table 2 here*

Clinical variables

The vast majority presented in clear consciousness (93%), although a small but important number presented with reduced consciousness (7%), with substance intoxication playing an important role (6%). Additionally, there was evidence of current drug or alcohol withdrawal in a small number (6%). All such cases were referred back to primary care medical services for further management. Most referrals were already registered on the local mental health information system (68%), or were actively engaged with services (64%), with many having a history of admission to in-patient mental health services (61%) or being engaged under the care of a community mental health team (CMHT: 48%). The majority reported a history of alcohol or drug use (60%), with men being significantly more likely to have such a history (see Table 3). A substantial number used substances in the 24-hours prior to their arrest (42%), and although detainees described using a range of substances, alcohol was the main substance identified (45%). Despite these high levels of alcohol and substance use, less than a fifth (16%) were known to substance misuse services. A small but important number (6%) were identified as having an intellectual disability, while a larger number (35%) reported previous suicide attempts, or a history of self-harm (33%). As outlined in Table 3, women were significantly more likely than men to present with a history of self-harm or of suicide attempts. Over a tenth of respondents (13%) reported current suicidal ideas, with almost a fifth being clinically assessed as presenting a suicide risk (19%). Women were significantly more likely to be in this suicide risk group. Of this group, almost a tenth had already harmed themselves (9%). From the overall sample, just under a tenth required diversion to psychiatric hospital (8%), with men being significantly more likely to require hospitalisation.

*Insert table 3 here*

Most of the sample (66.8%) had established mental health problems, of which almost a tenth (8.3%) were acutely unwell, over a further quarter (26.8%) presented with some symptoms, almost a third (29.8%) were stable and there was uncertainty regarding a further fifth (19.9%).
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Large numbers presented with primary problems in respect of drugs or alcohol (21.2%), psychotic illnesses such as schizophrenia (20.1%), affective disorders such as depression (16.6%) or bipolar affective disorder (8%), or were reported as not applicable/having no mental disorder (15%). Smaller numbers were identified as presenting with primary personality disorders (8.2%), anxiety disorders including post-traumatic stress disorder (5.4%), with smaller numbers presenting with primary neurodevelopmental disorders such as intellectual disability or attention deficit hyperactivity disorder.

*Insert table 4 here*

Discussion

Despite the limitations of the existing literature regarding criminal justice liaison and diversion services (Scott, McGilloway, Dempster, Browne & Donnelly, 2013), experimental research methods have demonstrated the effectiveness of a mental health court model in the USA (Steadman, Redlich, Callahan, Robbins & Vesselinov, 2011). Evidence for the liaison and diversion model that is preferred in England and Wales (a model that does not explicitly include aspects of therapeutic jurisprudence) is, however, more limited (Scott, McGilloway, Dempster, Browne & Donnelly, 2013; Srivastava, Forrester, Davies & Nadkarni, 2013). Similarly, although diversion at an early point in the criminal justice pathway, from police custody, has been seen as necessary and achievable (Birmingham, 2001; James, 2010), the literature presently contains few descriptions of such services. Where services have been reviewed, they have described an effective service delivery model, with appropriate identification of mental health problems, and a highly morbid referral group from which many required admission to psychiatric hospital (James 2000; McGilloway & Donnelly, 2009; Scott, McGilloway & Donnelly, 2015). Similarly, this project has demonstrated that a mental health service delivery model can be applied within police custody, and that it can be effective in assessing people who present there with mental health problems, identifying a highly morbid group. This particular service started to receive a high number of referrals from its outset (taking 1092 referrals over a 17 month period, approximately 64 referrals per month), suggesting that it quickly filled an existing service gap. A relatively high number of referrals were registered with a General Practitioner (85%), this number being higher than found in
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other studies (James, 2000), but this is at least partially explained by the fact that many (68%) were already known to local services. Broadly in keeping with other literature in the field, a range of ethnicities were represented, the majority were single, a range of accommodation types were described (with over a third living in temporary or hostel accommodation, or being homeless), and almost half were in receipt of State benefits.

The team operated an open referral process, but the majority of referrals had initially been reviewed by the police reception screen, with a number seeing other services (e.g. primary care) before being referred onto the mental health team. Although the use of a clinical screen at point of reception would have been preferred, this was not in keeping with nationally agreed police processes (Noga, Walsh, Shaw & Senior, 2015) and it could not be introduced for that reason. Although the majority had been declared fit to be interviewed, an important number (7%) presented with reduced consciousness, often because they were intoxicated with alcohol or substances (6%), and a group (6%) presented with features of withdrawal. These findings, and the high levels of substance misuse and intellectual disability which have been described in the sample, are also consistent with the existing literature (e.g. Baksheev, Thomas & Ogloff, 2010; McKinnon, Srivastava, Kaler & Grubin, 2013; Young, Goodwin, Sedgwick & Gudjonsson, 2013), and they confirm a need for rapid access to medical services to review comorbidities, and to prevent serious deterioration, or mortality, arising from alcohol withdrawal in particular (Mirijello, D'Angelo, Ferrulli, Vassallo, Antonelli, Caputo, Leggio, Gasbarrini & Addolorato, 2015). In other jurisdictions where people who are severely intoxicated with alcohol are no longer held in police custody, there has been a substantial (75%) reduction in deaths (Aasebo, Orskaug & Eriksen, 2016); there is an argument for a similarly vigilant approach in England and Wales.

A high number of referrals were registered on local mental health databases (68%), known to services (64%), had previously been admitted (61%) or were actively under the care of a community team (48%). Although these high numbers are in keeping with earlier literature that has demonstrated high levels of psychiatric morbidity in police custody (e.g. Baksheev, Ogloff & Thomas, 2012), they do indicate that these particular police stations were assuming some of the functions that are meant to be provided by community mental health services, and operating, at
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least in part, as mental health assessment and triage centres. The fact that almost a tenth of the group were acutely unwell or required admission to hospital further supports this argument, and raises questions about the nature of existing community services, and their ability to contain and manage some individuals with mental health problems. The major primary diagnostic categories identified (mental disorder related to drug and alcohol use, psychotic illnesses such as schizophrenia and affective disorders such as depression and bipolar disorder) were in keeping with the wider literature. The referred group was vulnerable, and the finding that a small but important number (6%) screened positive for intellectual disability was also in keeping with existing literature showing a similar proportion (6.7%) in a screened sample (Young, Goodwin, Sedgwick & Gudjonsson, 2013). This finding supports the need for coordinated safeguarding procedures in police custody, including the use of appropriate adults (Medford, Gudjonsson & Pearse, 2003).

The gender differences found in this evaluation were also broadly in keeping with the existing literature: the women were more likely to have children, and less likely to have a criminal record, or to have prior convictions for violent offences (Corston, 2007). Women were also more likely to present with a history of self-harm, in keeping with the prison literature (Hawton, Linsell, Adeniji, Sariaslan & Fazel, 2014), but in this sample they were less likely to require hospital diversion. The fact that over a third of the overall sample had a history of suicide attempts, that over a tenth reported active suicidal ideas, and that almost a fifth were assessed as presenting a suicide risk is clinically alarming, and it indicates a need for services that are able to identify and manage the resulting risks (including the provision of observations when they are needed). The finding that almost a tenth of referrals had already harmed themselves, given the known link between self-harming behaviour and subsequent suicide (Hawton, Linsell, Adeniji, Sariaslan & Fazel, 2014), suggests a need for a coordinated response to self-harming behaviour within police custody that is similar in its approach to the multi-agency response that was introduced by the prison service to address safety issues in the prison estate (Ministry of Justice, 2013). Population-based work has confirmed that criminal justice populations are at high risk of suicide, with over a tenth being in the criminal justice system in the period before their death (King, Senior, Webb,
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Millar, Piper, Pearsall, Humber, Appleby & Shaw, 2015), and to some extent it should therefore not be surprising to encounter such high levels of clinical risk in police custody.

This work was undertaken as an evaluation and it therefore presented a number of limitations. Evaluations, by their nature, do not answer questions under experimental research conditions, but instead provide information regarding specific programmes, are often undertaken within conditions that are subject to local changes, and are generally focused on key stakeholder questions (Twycross & Shorten, 2014). The service reviewed a referred sample, rather than screening the whole group, and no form of randomisation or case selection was used because there was an operational priority regarding service delivery. Although it would have been preferable to select referrals using an initial validated clinical screen, given evidence that the police screen which is currently used can miss morbidity (McKinnon & Grubin, 2012), it was not possible to do so because the police service uses a nationally agreed standardised approach (Noga, Walsh, Shaw & Senior, 2015). Although there were good response rates, we did not record reasons for non-response (although a variety of factors were applicable, including reduced consciousness, intoxication, language barriers and clear refusals). Further, although we intended to collect primary and secondary diagnoses, the latter were not reliably recorded and therefore could not be analysed. The evaluation took place in only two police stations in one London borough, and was therefore not multi-site in its nature. Further, some of those who were approached did not fully engage in assessment, resulting in inevitable information gaps with some under-reporting. Nonetheless, within the terms of the evaluation we were able to collect at least some information on all 1092 referrals to the service, ensuring as full a dataset as possible.

Yet despite these limitations, the main strength of this work is that it does provide a real-time evaluation of a pilot service at a time when services such as this are being considered for national development, and the findings in respect of this relatively large and consecutive sample are likely to be useful in informing onward service design. It demonstrates that a mental health service can operate effectively in police custody and deal with a high-volume referred sample that presents with some important gender differences. It also indicates that such services should expect to encounter, and be sufficiently resourced to manage, high levels of complexity and co-morbidity,
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with mental health and substance misuse problems (including both intoxication and withdrawal), vulnerabilities including intellectual disability, and high levels of self-harm and suicide risk. A number of those who are assessed will also require transfer to hospital for their further management.

References:


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Young, S., Goodwin, E., Sedgwick, O., & Gudjonsson, G. (2013). The effectiveness of police custody assessments in identifying suspects with intellectual disabilities and attention deficit hyperactivity disorder. *BMC Medicine, 11*(1), 248.