The health needs of young people in prison

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Abstract

Introduction: There has been an unprecedented reduction in the number of young people in prison; however, questions remain about the appropriateness and effectiveness of custody, given the high prevalence of health needs, self-inflicted deaths while in custody and high reoffending rates.

Sources of data: Articles relating to the health needs of young people, aged 10–17 years in prison in England and Wales were sourced through PubMed and ISI Web of Knowledge, plus additional key reports were included if deemed relevant.

Areas of agreement: Young people in prison have much higher rates of multiple and complex health problems compared with young people in the general population. However, many of their health-care needs are unrecognized and unmet.

Areas of uncertainty/research need: There is an urgent need for up-to-date and robust prevalence data of all health needs across the age ranges in England and Wales. Research has neglected physical health and neurodevelopmental disorders and the quality of research for females and Black and Minority Ethnic group’s requires improvement. There is a dearth of high-quality evaluations of health interventions with robust and sensitive short- and long-term outcome measures.

Key words: young people, prison, physical health, mental health, substance misuse, neurodevelopmental disorders

Introduction

International research evidence suggests that young people in prison are often characterized by poor physical health, psychiatric disorders and substance use disorders, with higher prevalence rates than for young people in the general population.1–6

In England and Wales the youth justice system is different and largely separate from the adult justice...
system, and is overseen by the Youth Justice Board (YJB, see Table 1). The YJB is responsible for placing 10–17 year olds, remanded or sentenced into custody. The establishment a young person is sent to is based on their age, individual needs, risk and personal circumstances. There are currently three different types of custodial establishment: Young Offenders Institutions (YOIs); Secure Training Centres (STCs) and Secure Children’s Homes (SCHs). SCHs accommodate the youngest and most vulnerable children. See Table 1 for more details.

The last 10 years has seen an unprecedented reduction in the number of under-18 year olds in custody in England and Wales, with a 49% reduction since 2002/03. As of June 2014 there were 1104 under 18s in custody (738 in YOIs, 261 in STCs and 105 in SCHs). Forty per cent are from a Black or minority ethnic population (BME) and the majority (95%) are boys. There are a number of factors contributing to this reduction, such as the strategic work of the YJB, a focus on diverting young people into community alternatives to custody, although it is not possible to attribute a direct cause to any factor in particular.

Despite the declining custodial population there are ongoing concerns that England and Wales is failing to use custody for under-18 year olds as a ‘last resort’ in line with the United Nations Convention on the Rights of the Child. Questions remain about the appropriateness and effectiveness of custodial regimes as a response for children. Especially, given the evidence of high levels of multiple health and social inequalities, the level of complexity (e.g. offence history, health needs) is increasing and very high re-offending rates within 12 months of release from custody (72%), much higher than the adult prison population. While in the secure estate, there is a range of different state agencies each with their own duty of care to young people in custody. Besides the YJB, other public bodies have formal responsibilities, including the institutions themselves; youth offending teams; children’s social care services and health services. However, there have been a number of deaths in custody and subsequent inquests which have highlighted where safeguarding arrangements have failed. The Prison Reform Trust and INQUEST reviewed the inquests and investigations into the deaths of children and young people in prison between 2003 and 2010 and found a number of similarities; including:

- young people had had significant interaction with community agencies before entering prison yet in many cases there were failures in communication

### Table 1 Important terms and definitions

<table>
<thead>
<tr>
<th>Term</th>
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<tr>
<td>Youth Justice Board (YJB)</td>
<td>An executive non-departmental public body. Its board members are appointed by the Secretary of State for Justice. The YJB oversees the youth justice system in England and Wales; works to prevent offending and reoffending by children and young people under the age of 18 and ensures that custody for them is safe, secure and addresses the causes of their offending behaviour</td>
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<td>Young Offenders Institution (YOI)</td>
<td>There are currently six YOIs managed by the National Offender Management Service (NOMS) or Private Providers (G4S, Serco) that accept 15–17 year olds who are on remand or sentenced. Generally, large prison design establishments. These can be juvenile only (15–17 year olds) establishments, e.g. HMYOI Werrington or mixed juvenile and adult (18+ years olds) establishments, e.g. HMYOI Feltham</td>
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<td>Secure Training Centres (STC)</td>
<td>There are currently four STCs all privately managed (G4S, Serco) for 12–17 year olds who are on remand or sentenced. Purpose built smaller establishments, with a higher staff to young person ratio than YOIs</td>
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<td>Secure Children’s Homes (SCH)</td>
<td>There are currently nine SCHs all managed by the local authority within the social care system for 10–17 year olds who are on remand or sentenced. These are the smallest establishments with a more therapeutic, homely feel and the highest staff to young person ratio</td>
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and information exchange between prisons and those agencies;
• despite their vulnerability, they had not been diverted out of the criminal justice system at an early stage and had ended up remanded or sentenced to prison;
• were placed in prisons with unsafe environments and cells;
• experienced poor medical care and limited access to therapeutic services in prison and;
• had been exposed to bullying and treatment such as segregation and restraint.11

Method
In view of variations in criminal justice systems/populations and health provision internationally, the large international literature (particularly on mental health and young people in prison and extant reviews4,5) and to ensure clinical practice relevance this review focuses on research conducted in England and Wales. Articles dating from the year 2000 to present (July 2014) relating to the health of young people, aged 10–17 years in custody in England and Wales were sourced through PubMed and ISI Web of Knowledge. In addition, citations published outside the review scope, i.e. international were considered if they were deemed to be of importance, or relevant to give an overall clinical context.

Prevalence
The largest survey of the health of young people in prison in England and Wales was conducted in 1997 by Lader et al.12 A two-stage approach was used in the survey. All respondents who agreed to take part participated in an initial interview and, if they gave consent, data were also collected from their medical records. Initial interviews were conducted with 590 (93%) of the 632 young people selected to take part. Interviews consisted of a range of clinical assessments to assess psychiatric morbidity, e.g. Structured Clinical Interview for DSM-IV (SCID-II).

The study found that rates of psychosis and neurotic disorders were significantly higher than the respective rates of 0.2 and 7–14% (14% for females) in the general population (see Table 2). Rates of personality disorder were very high; antisocial personality disorder was detected in 69% of male remands, 71% of sentenced males and 49% of sentenced females. Ten per cent of male remands and 8% of female remands reported having suicidal thoughts in the week prior to interview; the rate for the sentenced population was 7% for males and 5% for females. Young people also had high rates of lifetime histories of attempted suicides. Twenty per cent of male remands reported having attempting suicide at least once, for sentenced males the rate was 16% and the figure for females was 13% (remand) and 32% (sentenced). High rates of problematic drug and alcohol use was also identified in 62% of male remands and 72% of sentenced males. Fifty-one per cent of sentenced females screened positive for hazardous drinking prior to coming into custody. The survey also reported on physical health conditions. Overall, about a quarter of males and a third of females reported a long-standing physical complaint.

The UK prevalence data12 are now out-dated and does not reflect the recent and significant changes within the youth justice population. The study had a narrow focus on psychiatric morbidity and did not assess the broader health morbidity rates of this group. In addition, the clinical assessments used were adult assessments and therefore may not have been suitable for young people. Also young people from all sectors of the secure estate were not sampled and the data included those aged over 18. The data may not be generalizable to the whole youth custodial population and there is an urgent need for robust representative prevalence data on the morbidity

<table>
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<th>Male remand (%)</th>
<th>Male sentenced (%)</th>
<th>Female sentenced (%)</th>
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<tbody>
<tr>
<td>Functional psychosis</td>
<td>8</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Probable personality disorder</td>
<td>88</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>Neurotic disorder</td>
<td>52</td>
<td>42</td>
<td>68</td>
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<tr>
<td>Depression</td>
<td>51</td>
<td>36</td>
<td>51</td>
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<tr>
<td>Drug dependency</td>
<td>57</td>
<td>52</td>
<td>58</td>
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Table 2 Prevalence rates from psychiatric morbidity among young offenders in England and Wales12
of all children and young people within the secure estate.

**Health needs**

The reliance on prevalence rates, especially in national studies, can be of limited value in planning health services for young people in custody. This is because the prevalence of a disorder does not necessarily equate with the level of services required, as this is influenced by a number of factors, including the availability of effective interventions. In addition, many young people may not reach threshold for a disorder but still present with symptoms requiring support. Therefore, needs assessments can be a more useful and meaningful measure of health problems. To date there have a few small-scale studies in England and Wales which has assessed the health needs of children and young people in custody.

Kroll et al.\textsuperscript{13} conducted a prospective longitudinal study that measured needs (using the Salford Needs Assessment Schedule for Adolescents [SNASA]) and psychiatric morbidity (using the Kiddie Schedule for Affective Disorders and Schizophrenia [K-SADS]) of children before they entered SCHs and again at 3 months into their placement. Ninety-seven boys with a mean age of 14.9 years (SD = 1.0) were interviewed. Before admission the boys had high rates of mental health, social and educational needs. Seventy-two per cent were aggressive, 64% misused drugs or alcohol and 41% were depressed. Seventy per cent had difficulties with social relationships and 74% had serious educational problems, mainly due to having dropped out of school. Three months after admission there was a reduction in need in several domains, with improvements in aggression (47%), drug or alcohol misuse (15%), relationships (44%) and education (16%). However, there were some domains where the overall level remained high, 47% still had a problem with aggression or disruptive behaviour. Levels of depression were high within 3 months of admission, and some young people developed problems shortly after admission. Of the 38 boys who had a problem with depression, identified at the second interview, 15 (39%) had developed the problem since arriving. At the first interview, the most prevalent psychiatric disorders identified were conduct disorder (91%), substance misuse (69%), alcoholism (48%), major depression (22%) and generalized anxiety disorder (17%). The number of individuals with major depression at the second interview was similar (21%), with some individuals showing improvements but several others becoming depressed after admission.

A study commissioned by the YJB\textsuperscript{14} conducted a cross-sectional survey of the mental health, social and educational needs of 151 young people (118 boys and 33 girls) aged 13–18 years in YOIs and SCHs. Six sites were chosen (4 YOIs and 2 SCHs) as geographically representative areas across England and Wales. The mean age of the sample was 15.7 years (SD = 1.3) and the majority classified themselves as White British (74%). Nearly half (43%) had been in social services care at some time in their lives, 33% had received a previous custodial sentence and 78% had a history of school expulsion/suspension. The study found significant mental health needs for depression (19%), anxiety (11%), post-traumatic stress disorder (PTSD, 11%), substance misuse (11%), self-harm (8%), hyperactivity (6%), alcohol issues (6%) and psychotic-like symptoms (5%). In addition, social and educational needs were also high—35% had difficulties with social relationships, 30% were violent and 23% had serious educational problems.

More recently, a prospective cohort study of a consecutive sample of 219 young people admitted into one YOI was carried out to establish changes in mental health and other needs from admission over a 6-month period.\textsuperscript{15} The mean age was 16.56 years (SD = 0.6) and the young people were assessed using a needs assessment tool (SNASA) and a psychiatric diagnostic tool (K-SADS). On admission mental health needs were identified in 43% of young people, the psychiatric diagnostic tool identified 78% with alcohol misuse, 73% with substance misuse, 7% with depression, 4% with PTSD, 3% with anxiety disorders and 2% with psychosis. Co-morbidity within the young people was high with 80% being identified with two or more psychiatric diagnoses. Over time there were significant reductions in symptom severity for depressed mood, self-harm, anxiety and psychotic symptoms on the needs...
assessment, but the proportion of young people with a mental health need did not significantly change. There were significant reductions in the proportion of young people with a need in other domains such as education, relationships and risky behaviour (drugs/alcohol). When assessing diagnostic ‘caseness’ three young people showed a significant deterioration in their mental health while in custody.

These studies13–15 all show the high levels of health needs within young people in prison and that mental health needs and diagnostic caseness fluctuate over time with very high rates on admission and some improvement over time. However, for a few young people their mental health deteriorated significantly while in custody. The biggest reductions in need during early custody were seen for education, relationships and risky behaviours. Not only is there fluctuation during admission and early custody but fluctuation has also been seen at the point of discharge. Needs increased on discharge into the community in the areas of alcohol and drug misuse and social (peer and family) relationships, but there was little change in mental health needs, which remained high. Although a secure setting may meet some of the needs of young people by providing statutory education, reducing access to alcohol and drugs and being away from family conflict these studies suggest that some needs are only temporarily lowered while young people are in prison. These studies13–15 all included a relatively small sample size and did not focus on other health needs, e.g. physical and neuro-developmental problems. In addition, while one study14 included girls and attempted to oversample BME groups the numbers were too small to make generalizations; therefore, the quality of research available on gender and BME-specific needs requires improvement.

Physical health
There is currently very little published information about the physical health needs of young people in prison. The most common citation to include physical health is the study by Lader et al.12 They found that among males, respiratory system complaints were the most common group of complaints, being reported by 10% of remand and 11% of sentenced young people, with musculo-skeletal problems; second, being mentioned by 7 and 4%, respectively. Among females the pattern was similar, with respiratory problems being reported by 18% and musculo-skeletal problems by 4% of female young people. However, as already highlighted, due to how the sample was drawn it is unlikely to be an accurate current reflection. In addition, information on physical health was collected by asking the young people ‘Do you have any long-standing illness, disability or infirmity? By long-standing I mean something that has troubled you over a period of time or that is likely to affect you over a period of time?’ Those who answered ‘Yes’, were then asked: ‘What is the matter with you?’ Young people did not receive a physical assessment by a health professional; therefore, it is unlikely that this question elicited complete and accurate physical health information.

A recent study identified that of a consecutive sample of 127 boys on admission to one YOI, 60% were identified as having a physical health problem. The most common physical health needs were: vision (13%), oral health (12%), skin problems (12%), asthma (11%), weight problems (11%) and genito-unrinary (10%).16 In this study the physical health assessment was conducted by a general nurse; however, this study did not include females or sufficient numbers from BME groups to allow for separate reporting.

Substance misuse
In the general population, a recent survey of school aged children 11–15 years found that 7% of young people had used drugs within the last month with cannabis use being the most common.17 Rates of substance misuse in young people in prison are significantly higher.12–15 A study covering all three types of secure setting and based on surveys or interviews with 486 young people (408 in YOIs, 64 in STCs, 14 in SChs) found that drinking alcohol was widespread, just 11% of the young people said that they never drank alcohol, whereas 64% were drinking alcohol on a weekly or daily basis before they came into custody. Substance misuse was also
widespread, young people were asked about their use of individual substances before they came into custody. On at least a monthly basis: 82% used cannabis; 43% used ecstasy; 35% used cocaine; 28% used amphetamines and 10% used crack cocaine. Of the young people who were interviewed, 64% said that they had used cannabis at least once a day and 84% saying they had used substances a few times a week. 

Neurodevelopmental needs
There is emerging evidence to suggest that young people in custody have higher rates of neurodevelopmental disorders than the general population. Neurodevelopmental disorders are impairments of the growth and development of the brain or central nervous system and can be the result of biological factors such as genetic vulnerability and environmental factors such as birth trauma, injury in childhood, nutritional and emotional deprivation.

Young people with a learning disability are over-represented within prison with prevalence rates of between 20 and 32% found in UK-based studies, in comparison with 2% in the general population. Young people in custody also have higher rates of specific learning difficulties and broader speech, language and communication impairment. A study assessed a consecutive sample of 91 boys (15–17 year olds) in one YOI on a range of tasks including the Wechsler Intelligence Scale for Children (WISC-III) to assess cognitive ability, the Wechsler Objective Reading Dimensions to assess reading ability and the British Picture Vocabulary Scale (BPVS-II) to assess receptive vocabulary. They found that the average reading age was 11 years and 3 months, mean spelling age of 9 years and 6 months and that the prevalence of dyslexia ranged from 8 to 57% depending on which definition of dyslexia was applied to the data. The authors state that young people in prison are best described as having general verbal deficits encompassing problems of language and literacy. In another study young people in one YOI were selected at random and screened on the oral subtests of the Test of Adolescent and Adult Language, the BPVS-II and the Test for Reception of Grammar. A sample of 68 was identified as every second person on the roll call during one particular week. A total of 58 young people were assessed. They found that the proportion of young people with below average language skills ranged from 66% in relation to ‘speaking grammar’ to 90% in relation to ‘listening vocabulary’. These proportions included 46% assessed as ‘poor or very poor’ in relation to ‘speaking grammar’ and 67% similarly assessed in relation to ‘listening vocabulary’. This compares with an expected proportion of the general adolescent population in the ‘poor or very poor’ category of around 9%, and of ~25% below average for their expected chronological development. Both these studies have small sample sizes and do not include all groups, i.e. females, BME. In addition, being conducted in single sites means that the results may not be generalizable to the wider secure estate; therefore, larger studies of specific learning difficulties and broader speech, language and communication impairment are needed.

It has been reported that the prevalence of Autistic Spectrum Disorders (ASD) in young people generally is ~1%. There is some evidence that young people who experience ASD may be over-represented among offending populations. The National Autistic Society suggested that young people with Asperger’s syndrome are seven times more likely to come into contact with the criminal justice system than their peers. Certain features of ASD may predispose young people to offend including social naivety, misinterpretation of social cues and poor empathy. However, there are currently no studies examining the prevalence of ASD in young people in prison.

There is emerging evidence that young people in prison have high rates of traumatic brain injury (TBI). A recent study of an opportunistic sample of 61 young people in one YOI found that 72% reported suffering at least one TBI of any severity, 41% reported experiencing a loss of consciousness and 46% reported suffering more than one injury. This study did not include a control group for comparison for rate of injury and it relied on retrospective self-report accounts with no corroborative information. The authors highlight the need for well-designed prospective longitudinal studies to investigate whether and how TBI may be a risk factor in criminal behaviour.
Screening and assessment
A recent review for the Office of the Children’s Commissioner highlighted significant unmet needs due to lack of identification and difficulties accessing appropriate support and intervention. The most common reason for unmet need is a lack of holistic screening and early identification. In many countries it is becoming routine practice to screen all young people on admission, for example in the USA the Massachusetts Youth Screening Instrument 2 (MAYSI-2) is currently used in all intake probation, detention and/or corrections facilities in over 40 states. There is, therefore, a need for comprehensive screening and assessment throughout the secure estate for young people as the evidence suggests that unmet needs persisting into late adolescence/adulthood can lead to a wide range of adverse outcomes, such as continuing/worsening mental health problems, unemployment, teenage parenthood, marital problems, suicide and self-harm and further criminal activity.

The Department of Health and YJB commissioned the development of the Comprehensive Health Assessment Tool (CHAT). The CHAT is a standardized and validated health assessment tool for young people in the secure estate and is currently being implemented across all secure establishments. It includes a first night reception screening tool to identify immediate and urgent needs, followed by a comprehensive assessment identifying physical and mental health, substance misuse and neurodisability needs within 10 days of reception to help create a holistic care pathway. In addition, the recent publication of the ‘Healthcare Standards for Children and Young People in Secure Settings’ provides an excellent opportunity to make real improvements to the health outcomes of young people in prison.

Service provision
Historically, there has been significant variability in the level and quality of health services provided across the secure estate. Since 2006 the NHS has commissioned health services within YOIs, but did not start commissioning health services in SCHs and STCs until April 2013 and April 2014, respectively. This change should provide an opportunity to promote consistency and drive up standards, but needs to be supported by robust data collection and effective IT systems. However, an area that has been very much neglected is an evidence base of effective health interventions in secure settings for children and young people. This may be in part due to the problems associated with evaluating effectiveness among a transient population, but also due to a lack of focus on undertaking rigorous studies. In addition, the emphasis of the custodial setting is not health, so monitoring, data collection and analysis of health conditions of the young people has not been a priority of these establishments. Studies assessing effectiveness have emphasized outcomes in relation to reducing reoffending, but it is also possible to look at other short-term outcomes such as changes in clinic attendance, increased take-up of tests or improvements in health literacy, etc.

Most young people spend relatively short periods of time in custody. In 2012/13 the average time spent in prison was 85 days, and while custody can provide an opportunity for young people to access healthcare services that they may have previously missed out on in the community, community health services need to do much more to engage these young people. Traditional community service models are not designed to meet the multiplicity of health needs and these young people tend to have poor records of engaging with largely clinic-based community health services. Priority should be placed on developing and resourcing more robust pathways to a range of engaging specialist services. A recent report found that the provision of mental health services for young people at risk of or engaged with offending was woefully inadequate and made a number of recommendations for how services could be better designed, e.g. training for staff to gain knowledge and skills regarding the identification and awareness of mental health issues to ensure children are not written off as ‘trouble children’.

Conclusion
Children and young people have a multiplicity of health needs when they enter prison, including complex mental health needs, in addition to physical health issues, substance misuse problems and/or
neurodevelopmental disorders and many of their health and social care needs have gone unrecognized and unmet. Young people spend relatively short periods of time in custody and while this can provide an opportunity for them to access healthcare services, community services need to engage with this group of young people better. There needs to be commitment and funding from health services to identify and intervene with these children and young people at the earliest possible point to change costly and damaging life trajectories. Service models and approaches also need to change so that they reach out to and engage with children and families in their communities, recognizing and responding better to multiplicity of need.

We urgently require up-to-date and robust representative prevalence data on the health needs of young people in prison. To date research has tended to focus on substance misuse and mental health needs, but there is little comprehensive data on physical healthcare needs and neurodevelopmental disorders. There is also a particular need to improve the quality of research available for females and BME groups.

Measuring behaviour change resulting from health interventions is critical to evaluating their usefulness. There is currently a dearth of high-quality evaluations of health interventions for young people in prison. Evaluations need to be independent, with robust and sensitive outcome measures, and with both short- and long-term follow-ups comparing intervention outcomes with those receiving standard support.

References


