# Mental health morbidity among people subject to immigration detention in the UK: a feasibility study

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**Aims.** The UK has one of the largest systems of immigration detention in Europe.. Those detained include asylum-seekers and foreign national prisoners, groups with a higher prevalence of mental health vulnerabilities compared with the general population. In light of little published research on the mental health status of detainees in immigration removal centres (IRCs), the primary aim of this study was to explore whether it was feasible to conduct psychiatric research in such a setting. A secondary aim was to compare the mental health of those seeking asylum with the rest of the detainees.

**Methods.** Cross-sectional study with simple random sampling followed by opportunistic sampling. Exclusion criteria included inadequate knowledge of English and European Union nationality. Six validated tools were used to screen for mental health disorders including developmental disorders like Personality Disorder, Attention Deficit Hyperactivity Disorder (ADHD), Autistic Spectrum Disorder (ASD) and Intellectual Disability, as well as for needs assessment. These were the MINI v6, SAPAS, AQ-10, ASRS, LDSQ and CANFOR. Demographic data were obtained using a participant demographic sheet. Researchers were trained in the use of the screening battery and inter-rater reliability assessed by joint ratings.

**Results.** A total of 101 subjects were interviewed. Overall response rate was 39%. The most prevalent screened mental disorder was depression (52.5%), followed by personality disorder (34.7%) and post-traumatic stress disorder (20.8%). 21.8% were at moderate to high suicidal risk. 14.9 and 13.9% screened positive for ASD and ADHD, respectively. The greatest unmet needs were in the areas of intimate relationships (76.2%), psychological distress (72.3%) and sexual expression (71.3%). Overall presence of mental disorder was comparable with levels found in prisons. The numbers in each group were too small to carry out any further analysis.

**Conclusion.** It is feasible to undertake a psychiatric morbidity survey in an IRC. Limitations of the study include potential selection bias, use of screening tools, use of single-site study, high refusal rates, the lack of interpreters and lack of women and children in study sample. Future studies should involve the in-reach team to recruit participants and should be run by a steering group consisting of clinicians from the IRC as well as academics.

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## Introduction

Immigration detention is the practice of holding in custody people (and in some cases families) who are subject to immigration control, either while they await permission to enter, or prior to their deportation or removal from a country (McGinley & Trude, 2012).

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The first such Immigration Removal Centre (IRC) in the UK was opened in 1970 at Harmondsworth, next to London Heathrow Airport. Since then, the immigration detention estate has grown in size, with a corresponding increase in the associated legal framework (including tribunals, judges and caseworkers). In January 2015, there were 11 centres (Wilsher, 2011). There has also been an increase in the number of statutory immigration-related offences. This has taken place against a backdrop of public and political anxiety about immigration and crime, and in parallel with what some refer to as a process of criminalisation of

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migration, sometimes referred to as 'crimmigration' (Stumpf, 2006). The recent increase in the population of displaced persons throughout the world has highlighted the importance of these issues and increased their media prominence (Berger & Abbasi, 2015).

The detention system in the UK is now one of the largest in Europe, with reports that the UK detains a greater number of asylum-seekers for longer periods than any other European country (Bosworth, 2008). As many as 32741 individuals entered detention in the year ending September 2015, an increase of 11% from the previous year (UK Home Office Immigration Statistics, 2015). People who are detained in IRCs are a diverse group ranging from people who have overstayed their visa arrangements to foreign national ex-prisoners. A significant proportion of this detained population had been resident in the UK for periods of months or even years prior to their detention.

In contrast with practice in other European Union (EU) countries, there is no legal limit to the length of time that people can be held in detention in the UK (Teather, 2015). Detainees can potentially remain in detention indefinitely until an immigration decision is made or until they are removed or deported. Calls to introduce a time limit on immigration detention have been rejected by the Government. The reasons appear to be largely political (Herald Scotland, 2015; Teather, 2015).

IRCs in the UK can now hold a total of around 3500 detainees at any one time; the average length of stay is about 2 months (Shaw, 2016). Around 90% of the IRC detainee population are young adult males (Aas & Bosworth, 2013). They come from all over the world, but a particularly high number are Commonwealth citizens from former British colonies (Bosworth, 2012). The majority of the population in IRCs (around 60%) are people who have sought asylum (UK Home Office Immigration Statistics, 2015).

The higher prevalence of mental disorders such as post-traumatic stress disorder (PTSD), depression and anxiety in asylum-seekers and refugees when compared with the general populations in Western countries is well documented (Fazel et al. 2005; Heeren et al. 2012), though information is lacking as to whether asylum-seekers have an excess prevalence of mental disorders compared with rates in their country of origin. Psychological symptoms like anxiety, depression, PTSD, self-harm and suicidal ideas can be worsened by immigration detention (Keller et al. 2003; Steel et al. 2006; Robjant et al. 2009a; Procter et al. 2013). Time in detention, uncertainty of immigration status, time in prison and having been the victim of interpersonal violence are significantly associated with severity of mental health problems, as well as with increased risk of self-harm among this group (Momartin et al. 2006; Hallas et al. 2007; Robjant et al. 2009*a*, *b*; Griffiths, 2013). Another important group within IRCs are foreign national prisoners who are detained with a view to deportation. They may be particularly difficult to engage with mental health services despite their considerable vulnerabilities (Forrester *et al.* 2014; Sen *et al.* 2014).

The feasibility of conducting a survey of psychiatric morbidity in an IRC is unknown. We thus set out to establish this in a preliminary study among the (exclusively male) population of one IRC. We tested the feasibility of screening for a wide range of mental disorders including autism, intellectual disability (ID), attention deficit hyperactivity disorder (ADHD) and personality disorder. A secondary objective of our study was to compare the mental health of a group seeking asylum with that of immigration detainees who were not seeking asylum.

#### Method

#### Study design

A cross-sectional survey was conducted in a single IRC in the south of England, with capacity to hold up to 400 male foreign national detainees. Data were collected through a structured, verbal interview using six validated questionnaires (see Measures).

#### Procedure

Informed consent was obtained both in oral and written form. An assessment of the participants' knowledge of English was made by the researcher while seeking informed consent. Participants were recruited 24 h before the scheduled interview, which took place in a private interview room in the IRC's visitors' centre. The interview lasted between 45 and 60 min. Data collection took place in two phases. The first phase took place over 4 weeks in June/July 2014 and was carried out by one researcher. The second phase took place over 8 weeks in January/February 2015 and was carried out by two other researchers.

### Participant selection

Participants were selected using simple random sampling during phase 1 and the first half of phase 2. Participants were identified for inclusion in the study using a Microsoft Excel random number generator applied to the full list of detainees at the centre. Those selected by the randomisation process were then given an information sheet about the study by researchers accompanied by IRC officers, and were invited to participate in the study. Those willing to participate were then given a time at which the interview was due to take place. Due to relatively poor phase 1 recruitment, permission was sought and obtained from the ethics committee for a protocol amendment changing to an opportunistic method of sampling. This was implemented during phase 2. All potential participants resident in a particular 'block' (accommodation area) of the IRC were approached by a member of the IRC's mental health in-reach team. The same member of staff then returned the next day, and those willing to participate were given an interview time. This meant that access to all participants was far easier for the in-reach team member, who was then able to fix up the appointment with the researcher. Once there was no further recruitment in one block, the whole recruitment process was repeated in the next block. The recruitment flow-chart is reported in Fig. 1.

Eligibility criteria for participation were as follows: being born outside the EU, being over the age of 18 and (because it was impractical to use interpreters) possessing a working knowledge of English, (which was assessed through their capacity to understand the contents of the consent form while providing informed consent). According to the Inspection Report for the IRC in 2010, approximately 75% of detainees understood spoken English and 67% understood written English. Standardised Assessment of Personality Abbreviated Scale SAPAS (Moran *et al.* 2003), the Autism-Spectrum Quotient 10 AQ-10 (Allison *et al.* 2012), Part A of the Adult ADHD Self-Report Scale ASRS (Kessler *et al.* 2005), The Learning Disability Screening Questionnaire LDSQ (McKenzie & Paxton, 2006; McKenzie *et al.* 2012), and the Camberwell Assessment of Needs – Forensic Version CANFOR (Thomas *et al.* 2008). The clinical and/or diagnostic purpose of each test is clear from its title. The rationale for choice of the screening tools was that we had identified prison studies using these tools (McCarthy *et al.* 2015).

The interviewers were trained to use the MINI and the other tools by the chief investigator (PS). Inter-rater reliability was assessed by joint ratings of all measures with each of the researchers on at least one study participant.

The following demographic data were also obtained: age; nationality; immigration status; and any information regarding prior imprisonment.

## Ethical considerations

# Measures

Six validated screening tools were used for the assessment interview: the Mini International Neuropsychiatric Interview MINI v6.0 (Sheehan *et al.* 1998), which assesses common Diagnostic and Statistical Manual diagnoses, the Ethical approval, including approval for the amendment to the sampling methodology, was obtained from the NRES ethics committee of East of England and from the National Offender Management Service. The Research Ethics Committee reference number was 13/EE/0182.



Fig. 1. Sampling and recruitment flow sheet over the two phases of the study. Phase one: Random sampling. Phase two: Opportunity sampling.

The prevalence rate from the current study was compared with the prevalence rates reported within comparable published studies in community or prison populations.

## Results

In total 101 male detainees took part in the study. The response rate for Phase 1 was 24.8%, with 35 participants taking part out of 141 approached, while the response rate for Phase 2 was 56%, with 66 participants taking part out of 118 approached. The overall response rate for the study was 39%.

The mean age of the whole sample was 31.65 years (s.D. = 9.51); ages ranged 18–60 years, with 58% of the sample aged 21–30. More than half of the sample (55.4%) had not been educated beyond secondary school. More than three-quarters (77%) were single. There was wide variation in their year of arrival in the UK, from 1980 to 2015. The detainees also varied in their immigration status (see Fig. 2). The participants came from 27 different countries, with the majority from the Indian subcontinent and Africa. 35% had previously been to prison. 31% reported having a current mental health disorder and 19% reported having had a past mental health disorder.

Table 1 outlines the at-risk prevalence for each mental health, developmental or personality disorder as screened through the MINI, Adult ADHD self-report scale, AQ-10 and SAPAS. A total of 22 detainees (21.8%) screened positively for suicidal ideation. Overall, the screened prevalence for any mental health, developmental or personality disorder was 74.3%, with 55.4% screening positive for more than one disorder. Table 2 summarises our results against those from the community- and prison-based studies (Ginsberg *et al.* 2010; Rivlin *et al.* 2010; Brugha *et al.* 2012; Das *et al.* 2012; Robinson *et al.* 2012; Fok *et al.* 2013; Pluck & Brooker, 2014) that used the same screening tools, which we identified as providing meaningful comparisons with our IRC data. Caution should nonetheless be applied in interpretation of the differences, given the differences in comparator characteristics between the current and published samples with respect to sample size, assessment instruments used, as well as characteristics of the sample. For this reason, we have not reported formal tests of statistical significance for these apparent differences.

Table 3 outlines the level of met and unmet needs for the IRC sample, as identified by CANFOR. In addition, the table outlines the proportion of needs that were 'unmet'. Most needs were met (M=8.6; s.D.=4.05), with a lower level of unmet needs (M=5.7; s.D.=3.31). However, at least one unmet need was reported by 95% of the participants. The most common unmet needs included intimate relationships (77%), psychological distress (73%) and sexual expression (72%). Other frequently unmet needs included company (63%), daytime activities (46%) and physical health needs (41%).

# Discussion

Overall, 75% of the sample screened positive for at least one mental health disorder. The most common psychiatric problems that emerged were depression, personality disorders and moderate to high levels of suicidality. The prevalence of depression was higher than the reported prevalence in prisons using the



Fig. 2. Bar chart showing the frequency and distribution of participants' immigration status in the sample.

Table 1. Prevalence according to screening tests

Mental health/neurodevelopmental disorder	Screened prevalence in the whole sample N = 101(%)
Depression	53 (52.5)
Personality disorder	35 (34.7)
PTSD	21 (20.8)
Autism (Autism Quotient-10)	15 (15)
ADHD (Adult ADHD self-report scale)	14 (14)
Social anxiety disorder	12 (12)
Manic episode	10 (10)
Mood disorder with psychotic symptoms	10 (10)
Generalised anxiety disorder	10 (10)
Obsessive compulsive disorder	9 (9)
Hypomanic episode	8 (8)
Alcohol dependence	8 (8)
Drug dependence	8 (8)
Antisocial personality disorder	8 (8)
Agoraphobia	7 (7)
Panic disorders with agoraphobia	4 (4)
Panic disorders without agoraphobia	4 (4)
Hypomanic symptoms	3 (3)
Psychotic disorder	3 (3)
Drug abuse	2 (2)
Bulimia	1 (1)
Anorexia	0 (0)
Any MH disorder from MINI	65 (64.3)
Any MH, Neurodevelopmental disorder or PD	75 (74.3)

same screening tool (Rivlin *et al.* 2010). The rates of PTSD were lower compared with those reported in detention (Heeren *et al.* 2012) and were also lower

than have been reported in asylum-seekers living in the community (Fazel *et al.* 2005) They were, however, higher than in a study of prisoners using the same screening tool (Rivlin *et al.* 2010). The overall presence of mental disorder in the sample was comparable with the levels found in prisons. The rates of suicidality are also comparable with the male prison population (Prison Reform Trust, 2014).

To the best of our knowledge, this is the first study to screen for neurodevelopmental disorders Attention Deficit Hyperactivity Disorder (ADHD), Autism and ID in immigration detainees using recognised screening tools. The prevalence rates for these conditions were lower than those detected in British prisoners using the same screening tools (McCarthy *et al.* 2015). However, the prevalence for autism spectrum disorder was higher than a North American high secure prison sample (Fazio *et al.* 2012). The comparatively low prevalence figures detected in our study does raise questions about the validity of using this set of screening tools in populations containing large numbers of people from Africa and the Indian subcontinent.

The findings for the LDSQ screening for ID were not reported as it became apparent that the LDSQ was inappropriate for use in our study sample. This was because it included questions on their ability to read and write, whether they had a job, lived independently and had contact with learning disability services, all of which were inappropriate for a detained IRC group, with English not their first language. A better screening tool needs to be identified for future studies with greater emphasis on non-verbal skills. However, at the very least, our findings indicate a need for greater awareness of staff within IRCs about the presence of neurodevelopmental disorders to facilitate early recognition and appropriate onward referral. This is

Table 2. Summary of the frequency rates for the IRC compared with community, probation and prison populations

At-risk level	IRC (%)	Published (%)	Comparator
Depression	52.5	18.1(suicidal)	Rivlin <i>et al.</i> (2010)*
-		7.1(control)	Rivlin <i>et al.</i> (2010)*
PTSD	20.8	5.1(suicidal)	Rivlin <i>et al.</i> $(2010)^*$
		2.1(control)	Rivlin <i>et al.</i> (2010)*
ADHD	13.9	40	Ginsberg <i>et al.</i> $(2010)^*$
		6	Das et al. (2012)†
Autism	15	4	Robinson et al. (2012)*
		1	Brugha <i>et al.</i> (2012)†
PD (cut-off 4)	34.7	15	Fok et al. (2013)
Suicide (mod/high)	21.8	14	Pluck & Brooker (2014)‡
Any Disorder (MINI)	63.4	62	Rivlin (2010)*

\*Prison sample.

+Community sample.

<sup>‡</sup>Probation sample.

Table 3 Frequency of need,	met need	and u	ınmet	need of	n
CANFOR					

CANFOR item	No need or unknown (%)	Met need (%)	Unme need (%)
Accommodation	18.8	70.3	10.9
Food	1	77.2	21.8
Looking after the living environment	18.8	79.2	2
Self-care	24.8	70.3	5
Daytime activities	6	48.5	45.5
Physical health	11	48.5	40.6
Psychotic symptoms	58.4	30.7	10.9
Information about condition and treatment	62.4	15.8	21.8
Psychological distress	6	21.8	72.3
Safety to self	40.6	38.6	20.8
Safety to others	52.5	39.6	8
Alcohol	92.1	3	5
Drugs	88.1	4	8
Company	3	34.7	62.4
Intimate relationships	20.8	3	76.2
Sexual expression	26.7	2	71.3
Child care	76.2	20.8	3
Basic education	17	65.3	17.8
Telephone	3	96	1
Transport	43.6	53.5	3
Money	42.6	40.6	16.9
Benefits	86.1	8	6
Treatment	76.2	11	12.9
Sexual offences	91.1	1	8
Arson	91.1	1	8

particularly important as there are serious questions about the vulnerability and capacity of detainees with limited cognitive function to ask for assistance, and to be aware of the services available to them.

This was also the first study to screen for the presence of personality disorder in detained foreign nationals. Perhaps unsurprisingly, the prevalence of screen-positive personality disorder was higher than estimates reported in community samples using the same screening instrument, the SAPAS. This is at variance with the results of other studies which suggest lower rates of personality disorder among immigrant populations (Tyrer et al. 1994; Pascual et al. 2008; Nielsen et al. 2014). Bearing in mind the limitations of our sample, and the use of a PD screen (rather than a formal diagnostic process), the findings need to be interpreted cautiously. Nonetheless, they serve to highlight the importance of screening for personality disorder within IRCs, as a positive screen is likely to have prognostic implications for recovery from associated health conditions (Tyrer et al. 1994; Fok et al. 2013).

There are some key limitations to our study. The lack of interpreters meant that detainees without a working knowledge of English were excluded from the study. This group could arguably constitute the most vulnerable detainees, and our mental disorder prevalence figures could thus be an under-estimate because of their exclusion. There were relatively high refusal rates, especially in the first phase of the study, which may indicate self-selection bias. Specific reasons for refusal were not sought from the participants, another limitation of the study. However, in our view, the principal reasons for poor recruitment in the first phase were the reliance on IRC staff for recruiting participants, the presence of only one researcher for data collection, and the data collection period overlapping with the holy month of Ramadan, which meant that several detainees were fasting and hence not in the best frame of mind to take part in the study.

These issues were addressed in the second phase, where the involvement of a member of the mental health in-reach team for the initial approach seemed to be the single biggest factor in improved recruitment. We do not have data to determine whether subjects with more severe symptoms are more likely to participate or refuse to take part. It is, however, clear that possible self-selection in the context of high refusal rates limits the generalisability of the results. Additionally, most of the tests administered were intended for screening rather than for generating definitive diagnoses. The screening tools were also not validated in an immigration detainee population. The numbers were also too small to generate any meaningful sub-group analysis. The study was conducted in only one site, and thus the results might not be generalisable to the whole IRC population. There were no women or children included in the study population. EU nationals were excluded from the study sample as it was felt that they would be in the IRC for reasons not connected with immigration, but future studies should perhaps include them, as they are subject to similar issues as other detainees. There are further difficulties in applying our findings internationally, since immigration detention policy and practice worldwide are very variable.

Despite these shortcomings, we have demonstrated that it is feasible, albeit challenging, to conduct psychiatric research in an IRC setting. One of the major strengths of the study was the involvement of the mental health in-reach team from a very early stage. The members of the in-reach team were able to approach and secure approval from the governor of the IRC who then sent out a circular to all staff to instruct maximum co-operation with the researchers. This model also helped to ensure somewhat the perceived neutrality of the researchers as they were not seen going around with the IRC staff recruiting participants.

The project had a steering group, which met regularly with participation from key stakeholders, which included representatives from the in-reach team. Discussions with staff from the IRC took place at an early stage. This was crucial to ensure that the research procedures were acceptable to IRC staff and did not hamper the smooth functioning of the IRC. It took nearly 2 years to gain approval from all parts of the system before the commencement of data collection. However, with close co-operation between the clinicians at the IRC and the academics through the steering group, the project was completed successfully within the constraints of the dissertation submission deadlines for the students who took part in it. Our study thus helps to demonstrate that research in IRCs is indeed feasible, provided that the right model for data collection is followed and the right stakeholders involved from an early stage.

It is important to note that IRCs do not serve the same functions as prisons. Prisons are intended to deter, punish and rehabilitate as well as providing retribution. Most prisoners serve pre-defined sentence periods. In contrast, IRCs serve an 'administrative' function, detaining people who have either committed no crime or who have completed their prison sentences. Length of detention is often not specified clearly, there is no active rehabilitative function and no question of retribution. Detainees face the prospect of an imminent return to their country of origin, which they may wish to avoid.

There was a significant change in detention policy in the UK in 2010. Until then, people with a mental illness were only considered suitable for detention 'under exceptional circumstances.' This was amended so that individuals with mental health problems were only exempt if their mental health problems 'could not be managed satisfactorily in the detention setting'. However, the Royal College of Psychiatrists supports the position that serious mental health problems cannot be managed satisfactorily in such detention settings and such detention is likely to be harmful to detainees' mental health (Royal College of Psychiatrists, 2013). There have also been several cases where the detention of people with mental illness has breached the threshold of Article 3 of the Human Rights Act (Royal College of Psychiatrists, 2013). The high levels of morbidity found in our study offer support for the argument that community provision should be actively considered as a possible alternative to custodial detention for many of those who are currently detained, as well as continuing to ensure that people with serious mental illness are not subjected

to immigration detention. The study also supports the findings of other research demonstrating high rates of mental health problems in immigration detainees and high levels of vulnerability.

Concerns about detaining people with mental health problems have been raised repeatedly by various bodies (Teather, 2015). The standard of healthcare, including mental healthcare, within IRCs, has been identified as cause for serious concern (Royal College of Psychiatrists, 2013; Grant-Peterkin et al. 2014). To maintain appropriate standards of care, responsibility for healthcare in IRCs has recently been transferred from the Home Office to the Department of Health (Pickles & Hartree, 2013). Commissioning responsibilities have been transferred to NHS England, using a process that had previously taken place in prison healthcare and which has also been considered or implemented in other parts of the criminal justice system (Ramsbotham, 1996; Forrester et al. 2016). In prisons, these changes followed the publication of estimates, which included a series of single site studies (Brooke et al. 1996; Birmingham et al. 1997) and a national morbidity study (Singleton, 1998). The findings resulted in new mental health in-reach services that were then rolled out nationally (Department of Health, HM Prison Service, and The National Assembly of Wales, 2001). Subsequently, however, the in-reach teams encountered higher levels of morbidity than had been anticipated, and there was early evidence of under-resourcing (Forrester et al. 2014). Given the lessons from these earlier changes within prison healthcare, it would be important to assess the prevalence of psychiatric morbidity within IRCs to ensure that in-reach mental health services are commissioned and resourced appropriately. Failure to do so breaches the core principles of the human rights-based approach to healthcare provision, based on the principles of fairness(F), respect(R), equality (E), dignity(D) and autonomy(A)-also known as FREDA (Curtice & Exworthy, 2010).

In view of our results suggesting a high prevalence of mental disorders in IRCs, we would recommend that a national multi-site prevalence study of mental health morbidity is required in order to improve understanding of the needs of detainees in such a setting. Such a survey is more likely to be successful with the assistance of a representative from the mental health in-reach service for the initial approach to potential participants. The multi-site model would also help to ensure that subjects consenting to take part are not missed, as the turnover of detainees is very high in IRCs. Finally, we recommend that future research should include appropriate interpreting facilities and should not exclude EU nationals, without which the sample would not be truly representative.

We are aware that the UK government has undertaken a review to implement the Tavistock Institute's report on mental health in Immigration Removal Centres, which makes some important recommendations about change of practice in IRCs, particularly with regard to mental health, and has accepted most of its recommendations (Home Office, 2015; Lawlor et al. 2015; Shaw, 2016). There was an inquiry into the use of immigration detention by an All-Party Parliamentary Group (Teather, 2015), which made many key recommendations to the government on fundamentally altering the system of immigration detention, learning from community-based alternatives practiced in countries like Sweden and the USA. Similar recommendations were made in a Government-sponsored report (Shaw, 2016). Suicide attempts in IRCs are at an all-time high, attracting national headlines (Taylor, 2016). The challenges around providing appropriate mental health care to refugees and asylum-seekers continue to be debated in the psychiatric literature (Sen, 2016). We hope the findings from our study contribute to this debate.

#### Supplementary material

The supplementary material for this article can be found at https://doi.org/10.1017/S2045796017000269.

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#### **Conflicts of Interest**

None.

## **Ethical Standards**

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

## Availability of data and materials

Uploaded as supplementary file.

# References

- Aas KJ, Bosworth M (2013). The Borders of Punishment: Migration, Citizenship and Social Exclusion. Oxford University Press: Oxford.
- Allison C, Auyeung B, Baron-Cohen S (2012). Toward brief 'Red flags' for autism screening: the short autism spectrum quotient and the short quantitative checklist in 1000 cases and 3000 controls. *Journal of the American Academy of Child and Adolescent Psychiatry* **51**, 202–212.
- Berger D, Abbasi K (2015). Refugees: time for moral leadership from the Western democracies. *British Medical Journal* 350, 7.
- Birmingham L, Mason D, Grubin D (1997). Health screening at first reception into prison. *Journal of Forensic Psychiatry* 8, 435–439.
- Bosworth M (2008). Immigration detention. *Criminal Justice* Matters 71, 24–25.
- **Bosworth M** (2012). Subjectivity and identity in detention: punishment and society in a global age. *Theoretical Criminology* **16**, 123–140.
- Brooke D, Taylor C, Gunn J, Maden A (1996). Point prevalence of mental disorder in unconvicted male prisoners in England and Wales. *British Medical Journal* 313, 1524–1527.
- Brugha T, Cooper SA, McManus S, Purdon S, Smith J, Scott FJ, Spiers N, Tyrer F (2012). Estimating the Prevalence of Autism Spectrum Conditions in Adults: Extending the 2007 Adult Psychiatric Morbidity Survey. Retrieved 20 March 2017 from http://content.digital.nhs.uk/catalogue/ PUB05061/esti-prev-auti-ext-07-psyc-morb-surv-rep.pdf.
- Curtice MJ, Exworthy T (2010). FREDA: a human rights-based approach to healthcare. *Psychiatrist* 34, 150–156.
- Das D, Cherbuin N, Butterworth P, Anstey KJ, Easteal S (2012). A population-based study of attention deficit/ hyperactivity disorder symptoms and associated impairment in middle-aged adults (ADHD Symptoms in middle-aged adults). *PLoS ONE* **7**, e31500.
- Department of Health, HM Prison Service, & The National Assembly of Wales (2001). Changing the Outlook: A Strategy for Developing and Modernising Mental Health Services in Prisons. Retrieved 20 March 2017 from http://webarchive.nationalarchives.gov.uk/20130107105354/ http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_ digitalassets/@dh/@en/documents/digitalasset/dh\_4034228. pdf.
- Fazel M, Wheeler J, Danesh J (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *Lancet* **365**, 1309–1314.
- Fazio RL, Pietz CA, Denney RL (2012). An estimate of the prevalence of autism-spectrum disorders in an incarcerated population. Open Access Journal of Forensic Psychology 4, 69–80.

Fok M, Hotopf M, Stewart R, Hatch S, Hayes R, Moran P (2013). Personality disorder and self-rated health: a population-based cross-sectional survey. *Journal of Personality Disorders* **28**, 319–333.

Forrester A, Valmaggia L, Taylor P (2016). Healthcare services in police custody in England and Wales: recent government U turn leaves police healthcare adrift from the NHS. *British Medical Journal* **353**, i1994.

**Forrester A, Singh J, Slade K, Exworthy T, Sen P** (2014). Mental health in- reach in an urban UK remand prison. *International Journal of Prisoner Health* **10**, 155–163.

**Ginsberg Y, Hirvikoski T, Lindefors N** (2010). Attention deficit hyperactivity disorder (ADHD) among longer-term prison inmates is a prevalent, persistent and disabling disorder. *BMC Psychiatry* **10**, 112.

Grant-Peterkin H, Schleicher T, Fazel M, Majid S, Robjant K, Smith G, Katona C (2014). Inadequate mental healthcare in immigration removal centres. *British Medical Journal* **349**, g6627.

Griffiths M (2013). Living with uncertainty: indefinite immigration detention. *Journal of Legal Anthropology* 1, 263–286.

Hallas P, Hansen A, Stæhr M, Munk-Andersen E, Jorgensen H (2007). Length of stay in asylum centres and mental health in asylum seekers: a retrospective study from Denmark. *BMC Public Health* 7, 288.

Heeren M, Mueller J, Ehlert U, Schnyder U, Copiery N, Maier T (2012). Mental health of asylum seekers: a cross- sectional study of psychiatric disorders. *BMC Psychiatry* **12**, 114.

Herald Scotland (2015). 28-day Immigration Detention Time Limit Rejected by Government. Retrieved 20 March 2017 from http://www.heraldscotland.com/news/homenews/ 14115795.28\_day\_immigration\_detention\_time\_limit\_ rejected\_by\_Government/.

Home Office (2015). Mental Health Issues in Immigration Removal Centres: Tavistock Institute Review. Retrieved 20 March 2017 from https://www.gov.uk/government/ uploads/system/uploads/attachment\_data/file/402205/ tavistock\_response.pdf.

Keller AS, Rosenfeld B, Trinh-Shevrin C, Meserve C, Sachs E, Leviss JA, Singer E, Smith H, Wilkinson J, Kim G, Allden K, Ford D (2003). Mental health of detained asylum seekers. *Lancet* 362, 1721–1723.

Kessler RC, Adler L, Ames M, Demler O, Faraone S, Hiripi E, Howes MJ, Jin R, Secnik K, Spencer T, Ustun TB, Walters EE (2005). The World Health Organization adult ADHD selfreport scale (ASRS): a short screening scale for use in the general population. *Psychological Medicine* 35, 245–256.

Lawlor D, Sher M, Stateva M (2015). Mental Health Issues in Immigration Removal Centres. Tavistock Institute Review. Retrieved 20 March 2017 from https://www.gov.uk/ government/uploads/system/uploads/attachment\_data/file/ 402204/tavistock\_institute\_report\_final.pdf.

McCarthy J, Underwood L, Hayward H, Chaplin E, Forrester A, Mills R, Murphy D (2015). Autism spectrum disorder and mental health problems among prisoners. *European Psychiatry* **30**(Suppl. 1), 864.

**McGinley A, Trude A** (2012). Positive Duty of Care? The Mental Health Crisis in Immigration Detention. A Brief Paper by the Mental Health in Immigration Detention Project. Retrieved 30 November 2015 from aviddetention. org.uk.

McKenzie K, Paxton D (2006). Promoting access to services: the development of a new screening tool. *Learning Disability Practice* **9**, 17.

McKenzie K, Michie A, Murray A, Hales C (2012). Screening for offenders with an intellectual disability: the validity of the learning disability screening questionnaire. *Research in Developmental Disabilities* **33**, 791–795.

Momartin S, Steel Z, Coello M, Aroche J, Silove DM, Brooks R (2006). A comparison of the mental health of refugees with temporary versus permanent protection visas. *Medical Journal of Australia* 185, 357–361.

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.

Nielsen F, Ziegenbein M, Sieberer M (2014). Prevalence of borderline personality disorder in immigrants in a psychiatric inpatient setting. *Australian and New Zealand Journal of Psychiatry* 48, 488–488.

Pascual JC, Malagón A, Córcoles D, Ginés JM, Soler J, García-Ribera C, Pérez V, Bulbena A (2008). Immigrants and borderline personality disorder at a psychiatric emergency service. *British Journal of Psychiatry* 193, 471–476.

Pickles H, Hartree N (2013). Transferring healthcare for immigration detainees in England to the NHS. *British Medical Journal* 346, 6.

**Pluck G, Brooker C** (2014). Epidemiological survey of suicide ideation and acts and other deliberate self-harm among offenders in the community under supervision of the Probation Service in England and Wales. *Criminal Behaviour and Mental Health* **24**, 358–364.

**Prison Reform Trust** (2014). Prison: The Facts. Bromley Briefings Summer.

Procter NG, De Leo D, Newman L (2013). Suicide and self-harm prevention for people in immigration detention. *Medical Journal of Australia* 11, 730–732.

**Ramsbotham D** (1996). Patient or prisoner? A new strategy for health care in prisons. *HM Inspectorate of Prisons for England and Wales*. HMSO.

Rivlin A, Hawton K, Marzano L, Fazel S (2010). Psychiatric disorders in male prisoners who made near- lethal suicide attempts: case-control study. *British Journal of Psychiatry* 197, 313–319.

Robinson L, Spencer MD, Thomson LDG, Stanfield AC, Owens DGC, Hall J, Johnstone EC (2012). Evaluation of a screening instrument for autism spectrum disorders in prisoners (autism spectrum disorders in prisoners). *PLoS ONE* 7, e36078.

Robjant K, Hassan R, Katona C (2009a). Mental health implications of detaining asylum seekers: systematic review. *British Journal of Psychiatry* **194**, 306–312.

Robjant K, Robbins I, Senior V (2009b). Psychological distress amongst immigration detainees: a cross-sectional questionnaire study. *British Journal of Clinical Psychology* **48**, 275–286.

**Royal College of Psychiatrists** (2013). Position Statement on Detention of People with Mental Disorders in Immigration Removal Centres. Retrieved 20th March 2017 from http://www.rcpsych.ac.uk/pdf/Satisfactory20Treatment 20in20Detention20document20March202014%20edit.pdf.

- **Sen P** (2016). The mental health needs of asylum-seekers and refugees-challenges and solutions. *British Journal of Psychiatry International* **13**, 30–32.
- Sen P, Exworthy T, Forrester A (2014). Mental health care for foreign national prisoners in England and Wales. *Journal of Mental Health* 23, 333–339.
- **Shaw S** (2016). *Review into the Welfare in Detention of Vulnerable Persons: A Report to the Home Office.*
- Sheehan DV, Lecrubier Y, Sheehan KH, Amorim P, Janavs J, Weiller E, Hergueta T, Baker R, Dunbar GC (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.
- Singleton N (1998). Psychiatric Morbidity Among Prisoners in England and Wales. Stationery Office: London.
- Steel Z, Silove D, Brooks R, Momartin S, Alzuhairi B, Susljik I (2006). Impact of immigration detention and temporary protection on the mental health of refugees. *British Journal of Psychiatry* 188, 58.
- Stumpf J (2006). The crimmigration crisis: immigrants, crime, and sovereign power. American University Law Review 56, 367–419.

- Taylor D (2016). Suicide Attempts at UK Immigration Removal Centres at All-time high. The Guardian, 4th April, 2016. Retrieved 25 March 2017 from https://www.theguardian.com/ uk-news/2016/apr/04/suicide-attempts-uk-immigrationremoval-centres-all-time-high-home-office-figures.
- Teather S (2015). The Report of the Inquiry into the Use of Immigration Detention in the United Kingdom. Retrieved 20 March 2017 from https://detentioninquiry.files.wordpress. com/2015/03/immigration-detention-inquiry-report.pdf.
- Thomas SDM, Slade M, Mccrone P, Harty M, Parrott J, Thornicroft G, Leese M (2008). The reliability and validity of the forensic Camberwell Assessment of Need (CANFOR): a needs assessment for forensic mental health service users. *International Journal of Methods in Psychiatric Research* **17**, 111–120.
- **Tyrer P, Merson S, Onyett S, Johnson T** (1994). The effect of personality disorder on clinical outcome, social networks and adjustment: a controlled clinical trial of psychiatric emergencies. *Psychological Medicine* **24**, 731–740.
- **UK Home Office** (2015). Immigration statistics, July to September 2015.
- Wilsher D (2011). *Immigration Detention: Law, History and Politics*. Cambridge University Press: Cambridge.