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Title: The social, relational, and mental health characteristics of justice-involved men in the south-west England.

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Conflicts of Interest

None

Word count: 4949

Abstract

Objective: To describe the social, relational, and mental health characteristics of a sample of offenders serving prison or community sentences in the south-west England.

Method: 100 adult male offenders were screened for anxiety and depressive disorders, post-traumatic stress disorder (PTSD), drug and alcohol dependence, and likely personality disorder using validated instruments.

Results: 58% of the sample reported at least one common mental health problem, of these only 26% reported receiving treatment. Participants exposed to traumatic events and/or participants with past mental health problems were more likely to score positive for current common mental health problems.

Conclusion: Our study identified factors that may increase the risk of a first episode or recurrent anxiety and/or depression for offenders. Health and criminal justice services should create partnerships and develop interventions that address the risk factors which lead and/or contribute to offenders' mental health difficulties.

Keywords: prisoners; probationers; common mental health problems; risk factors; England

Introduction

There is considerable evidence demonstrating the causal influence of biological (i.e. neurotransmitters, brain structure, genetics), relational (i.e. families, early experience, trauma and abuse), and social factors (i.e. inequalities, gender, ethnicity) on creating mental distress (Cromby, Harper & Reavey, 2013). In this article, we draw on data collected as part of a PhD study on offenders' mental health and care, and explore the relationship between offenders' social and relational characteristics and rates of common mental health problems (CMHPs). We begin our article with a review of the epidemiological and social epidemiological literature on offenders; next, we examine the way that mental health care services are delivered in prisons and in the community for offenders.

Background

International sources have demonstrated that, compared to the general population, offenders subject to the criminal justice system serving either prison or community sentences, have increased rates of mental illness including CMHPs (common mental health problems), such as anxiety and depressive disorders (Fazel & Danesh, 2002; Fazel & Seewald, 2012). One of the most comprehensive studies on psychiatric morbidity in prisons in England and Wales (Singleton, Meltzer & Gatward, 1998), reports that nearly 45% of the prison population has either anxiety or depression or both, and that almost 45% and 30% of the prison population has a drug or alcohol dependency problem respectively. A small proportion of prisoners have a severe mental illness, such as psychosis (8%). Mental health and substance misuse problems are the most prevalent health problems in the prison population (Birmingham, 2003), associated with an increased risk of re-offending (Fazel & Yu, 2011), suicide (Fazel, Cartwright, Norman-Nott & Hawton, 2008), and premature death after release (Kariminia et al., 2007). The limited literature that is available for offenders under community supervision has shown that the rates of mental illness and co-morbid disorders for this group are higher than the general population and similar to those of the prison population (Brooker, Sirdifield, Blizard, Denney & Pluck, 2012; Sirdifield, 2012).

Compared to the general population, people who are in contact with the criminal justice system are more likely to experience social exclusion and live in poverty (Social Exclusion Unit, 2002; Bradley Report, 2009). Many offenders have little in the way of educational attainments, are long-term unemployed, and rely on housing/unemployment benefits or are homeless. Social exclusion and poverty are, among others, factors that contribute to re-

offending, mental health problems (Bradley Report, 2009) and low access rates to primary care services including IAPT services (Improving Access to Psychological Therapies) (Department of Health [DH], 2013; National Institute for Health and Clinical Excellence [NICE], 2014). The association between social exclusion, and poverty, and mental health is complex, and it is difficult to assess the direction of causality (Payne, 2012). For example, is there a one or a two-way interaction between poor mental health, social exclusion and poverty? Research has demonstrated that social exclusion, and poverty, and CMHPs are linked (Brown & Harris, 1978; Jenkins et al. 2008), but it is unclear whether this is directly related to the onset of the illness, the persistence of poor mental health or to the experience of social exclusion and poverty. Two high profile epidemiological studies make a strong case for the causal role of social inequalities in mental distress (World Health Organisation, 2009; Wilkinson & Pickett, 2009), however, other evidence indicates that causal influences of mental distress are more complex and multi-determined (Cromby et al. 2013).

Offenders have a high incidence of exposure to (multiple) traumatic events, such as abuse (i.e. physical, emotional, and sexual), neglect, torture, growing up in care, and witnessing interpersonal violence (SEU, 2002). Studies have demonstrated the relationship between trauma and mental illness, such as PTSD (Goff, Rose, Rose & Purves, 2007), depression (Shalev et al., 1998), and substance misuse (Khoury, Tang, Bradley, Cubells & Ressler, 2010). Stressful life events, occurring either in childhood or adulthood, contribute to the onset and to the recurrence of depression and anxiety disorders. Kessler and Magee (1993) report that parental drinking, death of a mother or a father, and parental marital problems are associated with first-onset depression, while parental divorce and family violence are associated with an increased risk of recurrence. Kessler and Magee (1994) also report that chronic interpersonal stress in adulthood (i.e. demands and conflicts with relatives and children and negative interactions with families) mediates the effects of childhood stressful life events on recurrence of depression. That is, people who experienced childhood traumas and interpersonal stress during adulthood are more likely to experience recurrent depression compared to individuals who have not experienced chronic interpersonal stress. Although the causes of first episode of depression may be different from the causes of recurrent depression, stressful life events are a common factor to both (Burcusa & Iacono, 2007). Demographic (i.e. gender, socio-economic status) and psychological factors (i.e. cognitions, personality) are also related to the onset and recurrence of depression (Burcusa & Iacono, 2007).

With regards to anxiety disorders, a study by Taher, Mahmud and Amin (2015) with 123 patients who attended a psychiatric clinic, found that childhood separation was one of the most important factor in the development of an anxiety disorder. Further, Scholten et al. (2013) found that trauma exposure was associated with the recurrence of anxiety disorders in their sample of 2981 individuals who were part of the Netherlands Study of Depression and Anxiety and who were assessed again two years after their initial assessment. Other risk factors for onset and/or recurrence of anxiety disorders include: psychological factors (i.e. neuroticism), and social factors (i.e. parental history of substance use disorders). In addition, individuals with a history of depression or anxiety disorders are more likely to experience recurrent depression or anxiety disorders (Burdusa & Iacono, 2007). Comorbid psychopathology is also a risk factor for recurrent anxiety or depressive disorders (Scholten et al. 2013). Child abuse, poverty, witnessing violence, and neglect are, among others, the most common risk factors for anti-social behaviour and aggression (Ardino, 2012).

Having considered the mental health needs of offenders and the risk factors that often affect their mental health, we arrive at offenders' mental health care. In prisons, primary care professionals provide a range of health care services to prisoners, including those with mental illness, such as advice, clinical assessments, referral to other services, and, where appropriate, treatment. In-reach mental health teams are responsible for providing care to prisoners with severe mental illness, while general practitioners provide care for the prisoners with CMHPs. Prisoners with substance misuse problems receive care from specialised teams, such as the CARAT (Counselling, Advice, Referral, Assessment, and Through-care) service or IDTS (Integrated Drug Treatment System) service. The IAPT service has not yet been rolled out to prisons, and therefore, prisoners cannot access talking therapies, unless the CCG (Clinical Commissioning Group – these are local GP led commissioning groups responsible for NHS commission of services) has commissioned a third sector organisation to provide similar type services.

The presence of such services within prisons does not necessarily correlate with equity of access; equivalence in accessing mental healthcare of the same quality as the general population poses an 'enormous challenge' for prisoners (Jordan, 2012; Sainsbury Centre for Mental Health [SCMH], 2007, p.2). Access to good quality care is not systematic (Durcan, 2008; SCMH, 2007). For example, even though the *Changing the Outlook* report introduced the in-reach mental health teams, it mentioned no care for the majority of prisoners who experience CMHPs (DH, 2001; Durcan, 2008). Such needs are expected to be met by primary

care mental health services in the community (Durcan, 2008), which are responsible for the clinical assessment, treatment, care, and, where appropriate referral (i.e. IAPT service), for offenders with CMHPs serving community sentences.

In the community offenders can access standard NHS care (i.e. general practitioners, IAPT) and care provided while in police custody. Healthcare in police custody is commissioned by local police and is mainly provided by private agencies. Such healthcare is variable, and there are moves to bring it under the NHS (Byng et al. 2012). With regard to the standard NHS care that offenders receive in the community, some evidence suggests that it does not adequately address their mental health needs (Byng et al. 2012; Howerton et al. 2007; Sirdifield et al. 2009). A recent study by Byng et al. (2012) with offenders recently released from prison shows that the service design (and in particular access arrangements) is not suitable for offenders' needs. Further, a study by Howerton et al. (2007) identified a range of personal factors that pose barriers to offenders' seeking professional help, such as stigma and offenders' distrust towards health professionals.

Across the literature, there is considerable evidence highlighting the contrast between offenders' significant mental health needs and their difficulties accessing and receiving mental health care. **Although there is wide variability in the care of offenders with serious mental illness in terms of quality and outcomes (OHRN, 2010), our study has focused on offenders with CMHPs because they are less likely to be identified, and thus, access treatment (Byng et al. 2012; NICE, 2014).** If services cannot address the factors that contribute to offenders' mental distress, then offenders are likely to continue experiencing difficulties with accessing services and receiving appropriate care. It is therefore essential to determine how such factors intermingle and contribute to offenders' mental distress in order to develop practices and interventions that need to be implemented in order to ensure that offenders receive good quality and appropriate mental health care.

Methods

The data was collected as part of a wider, predominantly qualitative study, which examined offenders' and their professionals' perceptions of CMHPs and care. The quantitative analysis of offenders' characteristics allowed us to purposively sample a sub-group for the second, qualitative phase, of the PhD study.

We recruited 100 adult male offenders serving prison and community sentences in the south-west England. Table 1 presents the inclusion and exclusion criteria for participation in the study in both prison and probation settings. AG visited two local prison establishments (B and C categories, second and third in the four categories of severity of offence) and approached prisoners due to be released in the local area within 6-10 weeks following our visit. AG liaised with prison staff to receive lists with the names of prisoners that met the inclusion criteria. For offenders receiving probation supervision, he worked collaboratively with offender managers to identify potential participants who met the inclusion criteria. A few offender managers excluded some potential participants either because they believed that they would not engage with the researcher or because they had systematically presented intoxicated at their appointments. We did not set up any limitations regarding the point at which offenders on supervision orders were in their sentence at the time of recruitment.

Insert table 1 here

Ethical approvals

Ethical approval was obtained for the study from a research ethics committee responsible for research involving offenders (NHS REC for Wales, 12/WA/0319), the National Offender Management Service, the Ministry of Justice, and the local Research & Development offices. The researcher asked participants to sign an informed consent and briefed them about issues of confidentiality and anonymity. Participants did not receive any compensation for their participation in the study.

Assessment Tools

In this study we did not rely on formal classification systems, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-V, American Psychiatric Association, 2013) or the International Classification of Diseases (ICD-10, World Health Organisation, 1992) to operationalise depression and anxiety. Instead we used validated symptom checklists and rating scales, such as the GAD-7 (Spitzer, Kroenke, Williams & Lowe, 2006) and the PHQ-9 (Kroenke & Spitzer, 2002) that, based on DSM, assess the severity of the symptoms that have been associated with the presence of anxiety and depressive disorders respectively. We embedded these screening tools in an in-depth partially structured interview format to allow participants to delve deeper into the meaning they attributed to each symptom (one of the aims of the PhD study). Our intention in using such screening tools was to purposively

sample participants for our subsequent qualitative study who, according to clinical practice and health policy, should be cared for in primary care mental health services. Consistent with the practice of the IAPT service, participants who scored 8 and above on the GAD-7 scale and 10 and above on the PHQ-9 scale were considered cases for this study. This means that people who scored equal and/or over these thresholds were eligible to be referred and access primary care mental health services. In order to describe co-morbidity and social context more fully, we also included the following measures: a PTSD measure (Prins et al. 2003) (cut off point ≥ 3), a traumatic events inventory, SAPAS screen for personality disorder (cut off ≥ 3) (Moran, Leese, Lee, Walters & Thornicroft, 2003), a drug misuse measure (DAST, cut off ≥ 11) (Skinner, 1982), an alcohol misuse measure (MAST [revised], cut off ≥ 6) (Selzer, Vinokur & van Rooijen, 1975), and an inventory including self-reported mental illness experiences in the last two years. Quantitative analyses were conducted using the SPSS software program for statistical analyses.

Besides the participant and the researcher, no one else was present during the interviews in both research settings. All interviews were digitally audio-recorded and lasted on average 40 min. The data was collected from May 2013 to January 2014.

Figure 1 presents the number of participants recruited in each setting. In the prison setting we achieved a recruitment rate of 94.3%, whereas in the probation setting we achieved a recruitment rate of 75.7% (50/66) (excluding the 8 participants who were not interviewed due to logistical reasons). Overall, the recruitment rate for both settings was 84.7% (100/118) (for those approached and successfully interviewed).

Insert figure 1 here

Results

Demographic and criminological characteristics

Table 2 presents the demographic characteristics of participants per recruitment setting. The sample had an average age of 32.43 years (SD=9.72). The median age of participants was 31 (ranging from 18 to 65). The majority of participants reported their ethnicity as white British (97%); this is not untypical for the recruitment area.

Insert table 2 here

Common mental health problems and 2-year rates of self-reported mental illness

In both ratings scales, the majority of participants reported mild to moderately severe (scores between 5-19) levels of emotional distress (62% in PHQ-9 and 60% in GAD-7) (Table 3). More than half of the sample (58%) screened positive for at least one current CMHP. From those, 93% (n=54) screened positive for likely anxiety (GAD-7 \geq 8) and 74% (n=43) for likely depression (PHQ-9 \geq 10). There was a strong positive correlation between participants' scores in the anxiety and depression scales $r(98)=.77, p \leq .01$. There were no significant differences between those recruited in the prison establishments and those in the probation setting with regards to the levels of mental distress they reported.

Insert table 3 here

Participants who reported a mental health problem in the last 2 years reported higher levels of emotional distress compared to those who did not. Table 4 presents the number (and proportion) of participants that screened positive or not for current CMHPs and their self-reported 2-year rates of mental illness.

Insert table 4 here

Traumatic events and rates of PTSD

We developed an inventory to identify the range of traumatic events that participants may have been exposed to either in the past or recently. The majority of the sample (n=87) reported that it had been exposed to at least one traumatic event in their lives, with the most common event being 'sudden death of family member or friend', which was also the event most frequently linked to the experience of a mental health problem in the last 2 years. Table 5 presents the proportion of participants who reported that they had been exposed to traumatic events either in the past or recently, and they had experienced mental illness in the last 2 years. Thirty seven percent of participants reported experiencing high levels of mental distress due to their exposure to a traumatic event. From those 58% and 78% percent were above the threshold for depression and anxiety respectively. Participants scores in the PTSD scale were positively but moderately correlated with their scores in the GAD-7 scale ($r(95)=.53, p \leq .01$) and SAPAS scales ($r(95)=.43, p \leq .01$) but weakly correlated with the PHQ-9 scale ($r(95)=0.38, p \leq .01$).

Insert table 5 here

Substance misuse and personality disorders

More than 60% of the sample reported that it had used illicit drugs in the last 6 months; 42% of these participants reported a drug misuse problem (DAST ≥ 6). Regarding alcohol use, 36% reported high levels of alcohol misuse (MAST ≥ 5). Almost 67% of the sample reported problems due to substance use. The majority of the sample [81% (cut off ≥ 3) and 67% (cut-off ≥ 4)] screened positive for a likely personality disorder¹. There was a positive but moderate correlation between participants scores in the SAPAS and the PHQ-9 ($r(97) = .46$, $p \leq .01$) and the GAD-7 scales ($r(97) = .49$, $p \leq .01$). There were not significant correlations between the MAST and DAST measures and between MAST/DAST and any of the schedules.

Co-morbidity

Table 6 presents the proportion of participants who scored positive for at least one CMHP, had a substance use problem (either drugs or alcohol), and scored positive for a likely personality disorder. Co-morbid rates of substance misuse and likely personality disorders were high in both recruitment settings, with no differences between prisoners and offenders under probation supervision.

Insert table 6 here

Severe mental illness

Six (6) participants reported that they had been diagnosed with and were receiving on-going treatment for a serious mental health problem (i.e. schizophrenia and/or bipolar disorder). The average age of these participants was 38.17 (SD=14.2). All of these participants screened positive for at least one current CMHP, five (5) screened positive for a likely personality disorder, and two (2) screened positive for a substance misuse problem.

Care outcomes

All participants that had received a diagnosis of severe mental illness had accessed and were receiving mental health treatment from community mental health services (all participants

¹ The SAPAS questionnaire is a screening tool for personality disorders, so not specific details are included regarding the particular details of a personality disorder. A higher cut-off point (≥ 4) has been recently introduced to further increase the validity of the measure when used in primary care settings (Alex Stirzaker, personal communication)

were serving community sentences). In contrast, only 26% of the sample with CMHPs reported that they were receiving treatment.

Discussion

This article has described the social, relational and mental health characteristics of a sample of adult male offenders serving either prison or community sentences in the south-west England who took part in a PhD study. The strength of our study is that the interviews were carried out in private rooms, and therefore, the participants were more comfortable to talk about the factors that influenced their mental health.

Firstly, our findings provide further evidence for the established link between past mental health problems and current CMHPs and trauma exposure. Participants who scored positive to current CMHPs were more likely to report that they had experienced a mental health problem (either similar or not) in the last 2 years. Several authors report that patients who have experienced childhood maltreatment and/or violence and/or have on-going psychosocial stressors are more likely to experience recurring mental health problems, compared to patients who do not experience such issues (Monroe, Roberts, Kupfer & Frank, 1996). Our participants reported that they had been exposed to a range of traumatic events (i.e. abuse and violence) and that they were experiencing on-going social difficulties (i.e. long term unemployment, accommodation problems, involvement with the criminal justice system) issues that may have contributed to the recurrence of their mental health difficulties (in case their mental health difficulties were in remission or partial remission between these years).

Secondly, in line with other studies, our findings indicate an association between trauma and mental illness (Shalev et al., 1998; Goff et al., 2007; Khoury et al., 2012). Participants who reported a mental health problem in the last two years were more likely to report that they had experienced a traumatic event in their lives. Participants who had experienced the death of a family member or friend and/or were forced to have sexual contact as children or adults, reported the highest rates of mental health problems in the last two years (i.e. depression, anxiety, and bad stress) a finding that other studies have also reported (Spataro, Mullen, Burgess, Wells & Moss, 2004; Kendler, Myers & Zisouk, 2008).

Thirdly, our results partially agree with previous research that has shown the negative impact of unemployment on mental health (Warner, 2004). For instance, we expected that participants who were unemployed would report higher rates of CMHPs compared to

participants who were employed. However, from those who were unemployed, 44% were above the threshold for depression and 56% scored negative, whereas 56% scored positive for anxiety and 44% scored negative. Although restricted income and opportunities affect mental health, our results may be due to an interaction between less material and tangible factors such as social capital (Cromby et al. 2013). For instance, our participants' financial situation could have contributed to their worry, but social and emotional support from friends, relatives or other professionals could ameliorate their feelings of sadness.

Fourthly, only a small proportion of participants with CMHPs reported that they were receiving mental health care, whereas all participants who reported that they were experiencing severe mental illness were receiving care. This is indicative of the existing gap in service delivery both for offenders and for other people (i.e. homeless people) who often experience co-existing disorders (Durcan, 2008; Jordan, 2012). Whereas the majority of participants scored above the threshold over which, according to the screening tools, they suffered from anxiety and/or depression, and therefore, they were eligible to access the IAPT service, none of the participants reported that they had accessed it. Many participants did not receive care for treatable mental health problems; receiving treatment could have conferred several benefits to these participants, such as reducing their risk of self-harm within custody, suicide, drug-related death upon release, and reoffending (Fazel & Seewald, 2012). The relevance of our findings to healthcare policy and practice are further enhanced by the fact that we recruited participants fairly representative of the general male offender population.

Our sample had an average age of 32.43 years ($SD=9.72$), similar to the average age reported in other studies (Byng et al., 2012; Brooker et al., 2012). Participants' rates of CMHPs (58%) are much higher from the rates reported in the Office of National Statistics (ONS) survey for the general population (16.2%) (McManus, Meltzer, Brugha, Bebbington & Jenkins, 2009), but similar to other studies conducted with UK based prisoners (45%) (Singleton et al., 1998), probationers (38.7%) (Brooker et al., 2012), and international studies (10.2% major depression in male offenders) (Fazel & Danesh, 2002). Thirty seven per cent of our sample scored positive for a likely PTSD, much higher than the 4.6% reported by Brooker et al. (2012) in the probation population, and higher than the 2.6% in the general population in the UK (McManus et al., 2009).

Participants' rates of drug (42%) and alcohol (36%) misuse are similar to the 45% and 30% reported by Singleton et al. (1998), higher than the rates reported for the general population

(3.4% and 5.9% respectively (McManus, 2009), and lower than the rates reported for female prisoners [51% and 39% respectively (Singleton et al. 1998)]. This is also consistent with the study by Brooker et al. (2012) who estimated that around 60% of individuals in probation in Lincolnshire met the criteria for substance misuse (either alcohol or drug). Likely rates of personality disorders (80%) were also consistent with other studies (Singleton et al., 1998; Brooker et al., 2012).

Co-occurrence of current CMHPs, substance misuse, and personality disorder was similar to other studies (Brooker et al. 2012; Singleton et al. 1998). Of those identified with CMHPs, over 90% scored positive for a likely personality disorder (cut-off ≥ 3), almost 41% scored positive for either drug or alcohol misuse and a likely personality disorder. These results are also similar to that of Brooker et al. (2012) in the probation population, and Singleton et al. (1998) in the prison population, but distinct from the general population (7.2%) (McManus et al., 2009). Nearly half of the sample reported a substance misuse problem in tandem with a mental illness, with drugs being more likely than alcohol. The association between mental illness and personality disorder was similarly strong with likely PD in 91% (cut-off ≥ 3) and 84% (cut-off ≥ 4) of all those with a CMHP compared to 66.6% in those without a CMHP.

The ethnic background of our sample was predominantly white British, and therefore, not necessarily representative of the prison population in England. In addition, although the PHQ-9 and GAD-7 are frequently used in primary care settings (not so for PTSD and SAPAS), they are proxy indicators for the likely presence of mental health problems. It is therefore possible that the measures have underestimated (poor sensitivity) or overestimated (poor specificity) the rates of mental illness in our sample (Fazel & Seewald, 2012).

Considering that our findings have generated a more nuanced insight into the risk factors that can lead and/or contribute to offenders' mental health problems, we conclude our article with making some recommendations for clinical practice, mental health services and health policy.

Firstly, we have identified a range of risk factors that healthcare professionals should look for to identify offenders at higher risk for a first episode or for recurrent anxiety and/or depression. Our findings indicate that exposure to traumatic events and/or past mental health difficulties can increase the risk of experiencing CMHPs. Whilst our analysis did not examine whether these risk factors are directly related with the cause, mediate, or with the persistence of CMHPs, we contend that there is an association among them. Therefore, we suggest that

healthcare professionals should examine offenders' wider life stories and how they relate with their mental distress.

Secondly, our findings provide further insights for enhancing prison mental health services. During the reception screening process, healthcare professionals should establish if prisoners have previously received a mental health diagnosis. Strengthening the interface between community and prison services could facilitate information sharing and communication among care professionals, in cases where prisoners are unsure about the diagnoses and the treatments they may have received. However, alongside better identification, suitable services need to be developed within prisons for offenders with CMHPs in order for their care to be improved. The findings from this study fed directly into the ENGAGER 2 study, which is actively exploring how to develop services suitable for prisoners with CMHPs near to and after release (Pearson et al. 2015). Building positive and trusting working relationships with offenders would facilitate healthcare professionals to identify any mental health difficulties and explore whether they have been exposed to traumatic events. Establishing positive working relationships may help offenders to overcome their reservations with receiving treatment and therapy or even assist them with identifying people who they would be willing to discuss their concerns. Identifying previous diagnoses or current mental health difficulties and exploring exposure to trauma could assist both healthcare and criminal justice professionals with identifying offenders with increased risk for reoffending; however, owing to the type of our data, the direction of causality between mental health state and reoffending is unclear in our study.

Thirdly, our findings provide a preliminary basis for the development of interventions that address the risk factors that may lead and/or contribute to CMHPs. Owing to the complexity of offenders' needs, we suggest that healthcare services need to create partnerships with criminal justice and social care services and join their skills and knowledge to develop interventions that address offenders' mental distress. This recommendation was mentioned in Lord Bradley's report (2009), but it did not include offenders with CMHPs, but only offenders with severe mental illness. We believe that these jointly commissioned and delivered services should reconsider the use of diagnosis as the main measure to define need, as offenders often fit the criteria for more than one mental health problem, owing to their complex behaviours (i.e. low mood, distrust to others, irritability), that result from their exposure to trauma, relationships problems and substance misuse; diagnoses can also be stigmatising for this group. Instead, we recommend that services such as primary care,

substance use and secondary care, as well as housing and criminal justice services should consider developing a relatively simple way of describing individual's need in terms of the real issues in offender's lives: past trauma and attachment/abandonment,; types of emotional distress (depressive, anxious, anger); linked behaviours (substance use, self-harm, aggression); and linked social problems (housing, work, relationships) as has been done in the intervention developed for the ENGAGER programme (NIHR Programme Grants for Applied Research, RP-PG-1210-12011).

References

- American Psychiatric Association. (2013) *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Ardino, V. (2012). Offending behaviour: the role of trauma and PTSD. *European Journal of Psychotraumatology*, 3. doi: 10.3402/ejpt.v3i0.18968.
- Birmingham, L. (2003). The mental health of prisoners. *Advances in Psychiatric Treatment*, 9, 191-199. doi: 10.1192/apt.9.3.191
- Brooker, C., Sirdifield, C., Blizard, R., Denney, D. & Pluck, G. (2012). Probation and mental illness. *Journal of Forensic Psychiatry & Psychology*, 23, 522-537.
- Brown, G.W. & Harris, T.O. (1978). *Social origins of depression: A study of psychiatric disorder in women*. New York (NY): The Free Press.
- Burcusa, S.L. & Iacono, W.G. (2007). Risk for recurrence in depression. *Clinical psychology review*, 27, 959-985.
- Byng, R., Quinn, C., Sheaff, R., Samele, C., Duggan, S., Harrison, D., Owens, C. et al. (2012). *COCOA: Care for Offenders, Continuity of Access. Final report*. London: NIHR Service Delivery and Organisation programme.
- Cromby, J., Harper, D., & Reavey, P. (2013). *Psychology, mental health and distress*. London: Palgrave Macmillan.
- Department of Health (2001). *Changing the Outlook: A strategy for developing and modernising mental health services in prisons*. London: Department of Health.
- Department of Health (2013). *Offenders: positive practice guide*. London: Department of Health.
- Durcan, G. (2008). *From the inside: experiences of prison mental health care*. London: Centre for Mental Health.
- Fazel, S., Cartwright, J., Norman-Nott, A. & Hawton K. (2008). Suicide in prisoners: a systematic review of risk factors. *Journal of Clinical Psychiatry*, 69, 1721–31.
- Fazel, S. & Danesh, J. (2002). Serious mental disorder in 23000 prisoners: a systematic review of 62 surveys. *Lancet*, 16, 545-550.
- Fazel S. & Yu, R. (2011). Psychotic disorders and repeat offending: systematic review and meta-analysis. *Schizophrenia Bulletin*, 37, 800–810.
- Fazel, S. & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: systematic review and meta-regression analysis. *The British Journal of Psychiatry*, 200, 364-373.

- Goff, A., Rose, A., Rose, S. & Purves, D. (2007). Does PTSD occur in sentenced prison populations? A systematic literature review. *Criminal Behaviour and Mental Health*, 17, 152-162.
- Howerton, A., Byng, R., Campbell, J., Hess, D., Owens, C. & Aitken, P. (2007). Understanding help seeking behaviour among male offenders: qualitative interview study. *BMJ*. doi: 10.1136/bmj.39059.594444.AE.
- Jenkins, R., D., Bhugra, P., Bebbington, T., Brugha, M., Farrell, J., Coid, T., Fryers, S. et al. (2008). Debt, income and mental disorder in the general population. *Psychological Medicine*, 38, 1485-1493.
- Jordan, M. (2012). Patients'/prisoners' perspectives regarding the National Health Service mental healthcare provided in one Her Majesty's Prison Service establishment. *Journal of Forensic Psychiatry & Psychology*, 23, 722-739.
- Kariminia, A., Law, M., Butler, T., Corben, S.P., Levy, M.H., Kaldor, J.M. et al. (2007). Factors associated with mortality in a cohort of Australian prisoners. *European Journal of Epidemiology*, 22, 417-428.
- Kendler, K.S., Myers, J. & Zisook, S. (2008). Does bereavement-related major depression differ from major depression associated with other stressful life events? *American Journal of Psychiatry*, 165, 1449-1455. doi: 10.1176/appi.ajp.2008.07111757.
- Kessler, R.C & Magee, W.J. (1993). Childhood adversities and adult depression: basic patterns of association in a US national survey. *Psychological Medicine*, 23, 679-690.
- Kessler, R.C. & Magee, W.J. (1994). Childhood violence and adult recurrent depression. *Journal of Health and Social Behaviour*, 35, 13-27.
- Khoury, L., Tang, Y.L., Bradley, B., Cubells, J.F. & Ressler, K.J. (2010). Substance use, childhood traumatic experience, and Posttraumatic Stress Disorder in an urban civilian population. *Depression and Anxiety*, 27, 1077-1086. doi: 10.1002/da.20751.
- Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: a new depression diagnostic and severity measure. *Psychiatric Annals*, 32, 509-515.
- McManus, S., Meltzer, H., Brugha, T., Bebbington, P. & Jenkins, R. (2009). *Adult psychiatric morbidity in England 2007: results from a household survey*. London: National Centre for Social Research.
- Monroe, S.M., Roberts, J.E., Kupfer, D.J. & Frank, E. (1996). Life stress and treatment course of recurrent depression: II. Postrecovery associations with attrition, symptom course and recurrence over 3 years. *Journal of Abnormal Psychology*, 105, 313-328.
- Moran, P., Leese, M., Lee, T., Walters, P. & Thornicroft, G. (2003). Standardised assessment of personality. Abbreviated scale (SAPAS): preliminary validation of a brief screen for personality disorder. *The British Journal of Psychiatry*, 183, 228-232.

National Institute for Health and Clinical Excellence, (2014). *Mental health of adults in contact with the criminal justice system*. London: NICE. <https://www.nice.org.uk/guidance/gid-cgwave0726/resources/mental-health-of-adults-in-contact-with-the-criminal-justice-system-final-scope2> (Accessed on July 2016).

Offender Health Research Network (2010). *The pathway of prisoners with mental health problems through prison health services and the effect of the prison environment on the mental health of prisoners. A report to the National Institute of Health Research*. Manchester: Offender Health Research Network.

Payne, S. (2012). Mental health, poverty and social exclusion. Conceptual note n. 9. PSE, ESRC. [http://www.poverty.ac.uk/sites/default/files/attachments/Conceptual%20note%20No.%209%20-%20Mental%20Health%20\(Payne%20Dec2012\).pdf](http://www.poverty.ac.uk/sites/default/files/attachments/Conceptual%20note%20No.%209%20-%20Mental%20Health%20(Payne%20Dec2012).pdf) (Accessed on May 2016).

Pearson, M., Brand, S.L., Quinn, C., Shaw, J., Maguire, M., Michie, S., Briscoe, S. et al. (2015). Using realist review to inform intervention development: methodological illustration and conceptual platform for collaborative care in offender mental health. *Implementation Science*, 10, 134. doi: 10.1186/s13012-015-0321-2

Prins, A., Ouimette, P., Kimerling, R., Cameron, R. P., Hugelshofer, D. S., Shaw-Hegwer, J., Thrailkill, A. et al. (2003). The Primary Care PTSD Screen (PC-PTSD): Development and operating characteristics. *Primary Care Psychiatry*, 9, 9-14. doi: 10.1185/135525703125002360.

Sainsbury Centre for Mental Health. (2007). *Getting the basics right: Developing a primary care mental health service in prisons*. London: Sainsbury Centre for Mental Health.

Scholten, W.D., Batelaan, N.M., van Balkom, A.J.L.M., Pennix, B.W.J.H., Smit, J.H. & van Oppen, P. (2013). Recurrence of anxiety disorders and its predictors, *Journal of Affective Disorders*, 147, 180-185. doi: <http://dx.doi.org/10.1016/j.jad.2012.10.031>.

Selzer, M.L., Vinokur, A. & van Rooijen, L. (1975). A self-administered short Michigan Alcoholism Screening Test. *Journal of Studies on Alcohol*, 36, 117-126.

Shalev, A.Y., Freedman, S., Peri, T., Brandes, D., Sahar, T., Orr, S.P. & Pitman, R.K. (1998). Prospective study of posttraumatic stress disorders and depression following trauma. *American Journal of Psychiatry*, 155, 630-637.

Social Exclusion Unit (2002). *Reducing re-offending by ex-prisoners: Report by the Social Exclusion Unit*. London: Social Exclusion Unit.

Sirdifield, C. (2012). The prevalence of mental health disorders amongst offenders on probation: a literature review. *Journal of Mental Health*, 21, 485-498. doi: 10.3109/09638237.2012.664305.

Singleton, N., Meltzer, H. & Gatward, R. (1998). *Psychiatric morbidity among prisoners in England and Wales*. London: Office for National Statistics.

Skinner, H.A. (1982). The drug abuse screening test. *Addictive Behaviours*, 7, 363–371.

Spataro, J., Mullen, P. E., Burgess, P. M., Wells, D.L. & Moss, S.A. (2004) Impact of child sexual abuse on mental health: prospective study in males and females. *British Journal of Psychiatry*, 184, 416 -42.

Spitzer, R.L., Kroenke, K., Williams, J.B. & Lowe, B. (2006). A brief measure for assessing generalised anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166, 1092-97.

Taher, D., Mahmud, N. & Amin, R. (2015). The effect of stressful life events on generalised anxiety disorder. *European Psychiatry*, 30. doi: 10.1016/S0924-9338(15)30427-2.

The Rt Hon Lord Bradley, (2009). *Lord Bradley's review of people with mental health problems and learning disabilities in the criminal justice system* (PDF format). London: Department of Health.

Warner, R. (2004). *Recovery from schizophrenia: Psychiatry and Political Economy*. London: Routledge.

World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization.

World Health Organisation. (2009). *Mental health, resilience and inequalities*. Copenhagen: World Health Organisation.

Wilkison, R. & Pickett, K. (2009). *The Spirit Level: Why more equal societies Almost Always Do Better*. London: Allen Lane.