

**PSYCHIATRIC MORBIDITY AND TREATMENT NEEDS AMONG PRISONERS**

**PHD THESIS**

**SHARON JAKOBOWITZ**

**UNIVERSITY COLLEGE LONDON**

**UNIVERSITY OF LONDON**

## DECLARATION

I, Sharon Jakobowitz confirm that the work presented in this thesis is my own.

Where information has been derived from other sources, I confirm that this has been indicated in the thesis

Signed Sharon Jakobowitz

Dated 03/05/2015

## **ABSTRACT**

### **Background**

Epidemiological surveys consistently show that levels of psychiatric morbidity in prisons are very high. Prevalence rates of mental disorder are only imperfect predictors of treatment need. Government policy states that mental health service provision ought to be based on an assessment of need. Yet few assessments of mental health needs among prisoners exist in the academic literature.

### **Method**

368 male and female prisoners were interviewed using the same diagnostic instruments used in the National Prison Survey of Psychiatric Morbidity (Singelton et al., 1998) for the purpose of comparing the two samples according to sex and sentencing status. The MRC Needs for Care Assessment was used to determine the treatment needs of each prisoner and the extent to which they had been met.

### **Results**

Prevalence rates of psychiatric disorders were broadly in line with those found in the National Prison Survey of Psychiatric Morbidity. There was only partial overlap between diagnosis and adjudged needs for treatment. Depression, alcohol and drug abuse were the most commonly identified problems in the sample. In total 78.1% of prisoners had at least one treatment need. Women had significantly higher numbers of overall treatment needs but men had significantly higher levels of unmet needs. In total around half of all treatment needs were met. The number of treatment needs and levels of unmet needs did not differ significantly between sentenced and remand prisoners.

### **Conclusions**

This study identified high levels of psychiatric treatment needs among the sample when compared to the general population, suggesting a filtering system by which the mentally ill come preferentially into the prison system. Failed detection of mental illness and under resourcing of services are the biggest barriers to the adequate provision of mental health care in prison. Results from this study should enable improved service planning for this vulnerable population.

<b>ABSTRACT</b>	<b>3</b>
<b>LIST OF TABLES AND FIGURES</b>	<b>9</b>
<b>CHAPTER 1: INTRODUCTION TO THE THESIS</b>	<b>11</b>
1.1 - Purpose of the thesis	11
1.2 - Prison mental health care: Setting the scene	11
1.3 – Needs assessments to date	15
1.4 – The current study	17
<b>CHAPTER 2: REVIEW OF THE BACKGROUND LITERATURE</b>	<b>18</b>
2.1 - Psychiatric Morbidity in the Community and amongst the prison population	18
2.2 - The state of prison mental healthcare	24
2.3 - Policy development	27
2.4 - Development and implementation of Mental Health In-Reach Teams	35
2.4.1 - Staffing	36
2.4.2 - Mission Creep	38
2.4.3 - Referrals and therapeutic interventions	39
2.4.4 - Self assessment of services	40
2.4.5 - Commissioning	40
2.4.6 - In reach services in London	41
2.5 - Spending on prison mental health care	43
2.6 - The principle of equivalence and spending	44
2.6 - A new attempt at a solution	48
2.6.1 - The Bradley Review	49
2.7 - Assessing mental health needs	51
2.7.1 - Defining needs	51
2.7.2 - Needs assessments in the academic literature	52
2.7.3 – Examples of prison service commissioned needs assessments	58

2.8 - Gender differences in psychiatric morbidity in prisoners	67
2.8.1 - Experiences of abuse and psychiatric morbidity	69
2.8.2 - Traumatic experiences and PTSD	71
2.8.3 - Women in prison – England and Wales statistics	75
2.8.4 - Recognition of gender specific needs	78
2.9 – Summary of the background literature	83
2.9.1 – Psychiatric morbidity surveys in prison and the general population	83
2.9.2 – Policy development	84
2.9.3 – The state of prison mental healthcare	85
2.9.4 – The assessment of mental health needs	87
2.9.5 – Gender differences in psychiatric morbidity	89
<b>CHAPTER 3: RATIONALE</b>	<b>91</b>
3.1 – Selection of assessment tools	93
3.2 - Objectives of this research	94
<b>CHAPTER 4: METHODS</b>	<b>95</b>
4.1 - Setting	95
4.2 – Design	97
4.2.1 – Sample size calculation	97
4.2.2 - Sampling methods	98
4.2.3 - Data collection	100
4.3 - Instruments	100
4.4 - Data management	107
4.5 - Data analysis	108
4.5 – Hypothesis	108
<b>CHAPTER 5: RESULTS</b>	<b>109</b>
5.1 Response rates	109
5.2 - Socio -demographic characteristics	111
5.3 Use of mental health services prior to imprisonment	114
5.4 Prevalence of Disorders	116

5.5 – Summary of findings based on the use of diagnostic instruments	124
5.6 - Results from the Needs for Care assessment	125
5.7 - Level of met needs for individual areas of impaired functioning	130
5.7.1 - Psychosis	131
5.7.2 – Depression	133
5.7.3 – Anxiety	136
5.7.4 – Alcohol abuse	137
5.7.5 – Drug abuse	141
5.7.6 – Personality disorders	144
5.7.7 – Post traumatic stress disorder	147
5.7.8 – Adjustment reaction	149
5.7.9 – Dangerous and destructive behaviour	150
5.8 - Summary of findings from the needs for care assessment	152
<b>CHAPTER 6: DISCUSSION</b>	<b>157</b>
6.1 – Findings from the study	157
6.1.2 - The problems of recruitment	157
6.2 - Characteristics of the sample	158
6.2.1- Ethnicity	158
6.2.2 - Age	158
6.2.3 - Previous service use	159
6.3 - Prevalence rates of disorders based on diagnostic questionnaires	159
6.4 - Results from the needs for care assessments	165
6.4.1 – Levels of impaired functioning and the diagnosis of mental disorders	165
6.4.2 - Levels of unmet treatment needs	169
6.6 - Organisational aspects of mental healthcare in prisons	178
6.7 – Strengths and limitations of the study	180
6.8 - New approaches to diversion	181
6.8 - Future trends for policy	187
<b>CHAPTER 7: CONCLUSIONS</b>	<b>202</b>

<b>ACKNOWLEDGEMENTS</b>	<b>206</b>
<b>REFERENCES</b>	<b>207</b>
<b>APPENDICES</b>	<b>214</b>
Appendix I Permissions	
Appendix 1a – Ethics Approval	215
Appendix 1b – Camden and Islington NHS Foundation Trust R&D Approval	218
Appendix II - Instruments	218
Appendix IIa - CIS-R	219
Appendix IIb – AUDIT, SAD-Q and Drug use questionnaire	248
Appendix IIc – Traumatic Events Inventory	263
Appendix IId – PDS	265
Appendix III – Vignette	268
Appendix IV – Glossary	268





# LIST OF TABLES AND FIGURES

## CHAPTER 2:

TABL: 2.7.3.1 – MENTAL HEALTH RELATED NEEDS REPORTED USING THE CANSAS .....	60
TABLE 2: 2.7.3.2 - SYMPTOMS REPORTED WITH PMHI AND CANSAS .....	63
TABLE 3: 4.3.1 – OVERVIEW OF ASSESSMENT TOOLS USED.....	106
TABLE 4:5.1.1 – RECRUITMENT FIGURES BY MONTH AND PRISON - PENTONVILLE .....	110
TABLE 5.1.2 – RECRUITMENT FIGURES BY MONTH AND PRISON - HOLLOWAY .....	111
TABLE 5.2.1 – ETHNIC DISTRIBUTION OF RESPONDENTS BY SEX .....	112
TABLE 5.2.2 – ETHNIC DISTRIBUTION OF RESPONDENTS BY SENTENCING TYPE .....	113
TABLE 5.2.3 – AGE DISTRIBUTION OF THE SAMPLE BY SEX .....	114
TABLE 5.2.4 – AGE DISTRIBUTION OF THE SAMPLE BY SENTENCING TYPE .....	114
TABLE 5.3.1 - RATES OF MENTAL HEALTH SERVICE USE IN THE 12 MONTHS PRIOR TO IMPRISONMENT BY SEX .....	115
TABLE 5.3.2 - RATES OF MENTAL HEALTH SERVICE USE IN THE 12 MONTHS PRIOR TO IMPRISONMENT BY SENTENCING STATUS .....	116
TABLE 5.4.2 - PROPORTION OF SENTENCED AND REMAND PARTICIPANTS MEETING DIAGNOSTIC CRITERIA FOR DIFFERENT PSYCHIATRIC DISORDERS.....	118
TABLE 5.4.3 - FREQUENCY OF PERSONALITY DISORDER BY TYPE AND SEX .....	119
TABLE 5.4.4 - FREQUENCY OF PERSONALITY DISORDER BY TYPE AND SENTENCING STATUS.....	120
TABLE 5.4.5 – CO-OCCURRENCE OF DISORDERS BY SEX.....	121
TABLE 5.4.6 – CO-OCCURRENCE OF DISORDERS BY SENTENCING STATUS .....	122
FIGURE 5.1 – CO-MORBIDITY OF PERSONALITY DISORDER, ALCOHOL ABUSE AND DRUG ABUSE.....	123
FIGURE 5.2 – CO-MORBIDITY OF DEPRESSION, ALCOHOL ABUSE AND DRUG ABUSE.....	124
TABLE 5.6.1 - LEVEL OF IMPAIRED FUNCTIONING BY SEX .....	127
TABLE 5.6.2 - LEVEL OF IMPAIRED FUNCTIONING BY SENTENCING TYPE .....	128
TABLE 5.6.3 – NUMBER OF CO-MORBID AREAS OF IMPAIRMENT BY SEX .....	129
TABLE 5.6.4 – NUMBER OF CO-MORBID DISORDERS BY SENTENCING TYPE.....	130
TABLE 5.7.1.1 – OVERALL LEVELS OF NEED STATUS FOR PSYCHOSIS BY SEX .....	131
TABLE 5.7.1.2 OVERALL LEVELS OF NEED STATUS FOR MEDICATION FOR PSYCHOSIS BY SEX .....	132
TABLE 5.7.1.3 – OVERALL LEVEL OF NEED STATUS FOR PSYCHOSIS BY SENTENCING TYPE .....	132
TABLE 5.7.1.4 OVERALL LEVELS OF NEED STATUS FOR MEDICATION FOR PSYCHOSIS BY SENTENCING TYPE...	133
TABLE 5.7.2.1 – OVERALL LEVEL OF MET NEEDS FOR DEPRESSION BY SEX.....	134
TABLE 5.7.2.2 - LEVEL OF SPECIFIC MET TREATMENT NEEDS FOR DEPRESSION BY SEX .....	134
TABLE 5.7.2.3 OVERALL NEED STATUS FOR DEPRESSION BY SENTENCING TYPE .....	135
TABLE 5.7.2.4 - LEVEL OF MET TREATMENT NEEDS FOR DEPRESSION BY SENTENCING TYPE .....	136
TABLE 5.7.3.1 -OVERALL LEVELS OF MET NEED FOR ANXIETY DISORDERS BY SEX.....	137
TABLE 5.7. 3.2- OVERALL MET LEVELS OF NEED FOR ANXIETY DISORDERS BY SENTENCING TYPE .....	137
TABLE 5.7.4.1 – OVERALL LEVEL OF NEED STATUS FOR ALCOHOL ABUSE BY SEX.....	138
TABLE 5.7.4.2 – OVERALL LEVEL OF NEED STATUS FOR ALCOHOL ABUSE BY SENTENCING TYPE .....	138
TABLE 5.7.4.3 - LEVEL OF MET TREATMENT NEEDS FOR ALCOHOL ABUSE BY SEX .....	140
TABLE 5.7.4.4 - LEVEL OF MET TREATMENT NEEDS FOR ALCOHOL ABUSE BY SENTENCING TYPE. ....	141
TABLE 5.7.5.1 – OVERALL LEVEL OF NEED STATUS FOR DRUG ABUSE BY SEX .....	142
TABLE 5.7.5.2 - OVERALL LEVEL OF NEED STATUS FOR DRUG ABUSE BY SENTENCING TYPE .....	142
TABLE 5.7.5.3 – LEVEL OF MET TREATMENT NEEDS FOR DRUG ABUSE BY SEX .....	143
TABLE 5.7.5.4 - LEVEL OF MET TREATMENT NEEDS FOR DRUG ABUSE BY SENTENCING TYPE .....	144
TABLE 5.7.6.1 – OVERALL LEVEL OF NEED STATUS FOR PERSONALITY DISORDER BY SEX .....	145

TABLE 5.7.6.2 – OVERALL LEVEL OF NEED STATUS FOR PSYCHOLOGICAL INTERVENTION FOR PERSONALITY DISORDER BY SEX .....	145
TABLE 5.7.6.3 – OVERALL LEVEL OF NEED STATUS FOR PERSONALITY DISORDER BY SENTENCING TYPE.....	146
TABLE 5.7.6.4 – OVERALL LEVEL OF NEED STATUS FOR PSYCHOLOGICAL INTERVENTION FOR PERSONALITY DISORDER BY SENTENCING TYPE .....	146
TABLE 5.7.7.1 – OVERALL LEVEL OF NEED STATUS FOR PTSD BY SEX.....	147
TABLE 5.7.7.2 – OVERALL LEVEL OF MET LEVELS OF NEED FOR PSYCHOLOGICAL INTERVENTION FOR PTSD BY SEX .....	147
TABLE 5.7.7.3 – OVERALL LEVEL OF NEED STATUS FOR PTSD BY SENTENCING TYPE.....	148
TABLE 5.7.7.4 – OVERALL LEVEL OF MET NEED FOR PSYCHOLOGICAL INTERVENTION FOR PTSD BY SENTENCING TYPE .....	148
TABLE 5.7.8.1 – OVERALL LEVEL OF NEED STATUS FOR ADJUSTMENT REACTION BY SEX .....	149
TABLE 5.7.8.1 – OVERALL LEVEL OF NEED STATUS FOR ADJUSTMENT REACTION BY SENTENCING TYPE .....	150
TABLE 5.7.9.1 – OVERALL LEVEL OF NEED STATUS FOR DANGEROUS AND DESTRUCTIVE BEHAVIOUR BY SEX	151
TABLE 5.7.9.1 – OVERALL LEVEL OF NEED STATUS FOR DANGEROUS AND DESTRUCTIVE BEHAVIOUR BY SENTENCING TYPE.....	151
TABLE 5.9.1 – OVERALL STATUS OF NEED FOR PSYCHIATRIC TREATMENT BY SEX .....	153
TABLE 5.9.2 – OVERALL STATUS OF NEED FOR PSYCHIATRIC TREATMENT BY SENTENCING TYPE .....	153
TABLE 5.9.3 – OVERALL STATUS OF NEED FOR MEDICATION BY SEX.....	154
TABLE 5.9.4 – OVERALL STATUS OF NEED FOR MEDICATION BY SENTENCING TYPE.....	154
TABLE 5.9.5 – OVERALL STATUS OF NEED FOR PSYCHOLOGICAL TREATMENT BY SEX .....	155
TABLE 5.9.6 – OVERALL STATUS OF NEED FOR PSYCHOLOGICAL TREATMENT BY SENTENCING TYPE .....	155
TABLE 6.3.1 - PROPORTION OF RESPONDENTS WHO MET DIAGNOSTIC CRITERIA FOR THE DISORDERS ASSESSED BY SEX. FIGURES FROM THE NPSPM ARE GIVEN IN BOLD .....	163
TABLE 6.3.2 - PROPORTION OF RESPONDENTS WHO MET DIAGNOSTIC CRITERIA FOR THE DISORDERS ASSESSED BY SENTENCING STATUS. FIGURES FROM THE NPSPM ARE GIVEN IN BOLD.....	164
TABLE 6.4.11 – OVERALL LEVELS OF NEED IN PRISON AND IN THE GENERAL COMMUNITY.....	169

## **CHAPTER 1: INTRODUCTION TO THE THESIS**

### **1.1 - Purpose of the thesis**

The purpose of this PhD study is to determine the level of psychiatric morbidity in two inner London prisons housing male and female prisoners and to examine the associated level of mental health care needs and how well they are being met. As well as providing a historical and policy context through which the current nature of prison mental health care can be understood, special consideration will be given to the complexities involved in carrying out meaningful health care needs assessments. In addition, gender differences will be examined in terms of morbidity and treatment needs with a view to identifying shortcomings of current provisions and informing potential improvements in the treatment of mentally ill offenders.

### **1.2 - Prison mental health care: Setting the scene**

There is a wealth of data suggesting that, in comparison to the general population, the rate of mental illness in prison is disproportionately high. Some studies report that as many as 90% of prisoners suffer from at least some level of mental illness (Fazel & Danesh, 2002, Birmingham et al., 1996). In 1998 the Office of National Statistics (ONS) commissioned a comprehensive and methodologically robust survey of psychiatric morbidity in prisons, including samples from each prison in England and Wales. The results showed that more than 70% of the prison population had two or more mental health disorders, that male prisoners were 14 times more likely to have two or more mental health disorders than men in the general population, and that, for women, the equivalent figure was 35 times.

With such overwhelming numbers the prospect for people with a mental illness entering the prison system is bleak. Prison itself is chaotic and not conducive to mental wellbeing.

Adjusting to what can often be an alien and hostile environment can be challenging even for someone in fairly robust mental health, and so is likely to be more problematic for the psychiatrically vulnerable. How has such a level of crisis been reached?

Historically the mentally ill were cared for in asylums. However, socio-political change, ever-increasing numbers and concerns about the quality of patient care, encouraged reforms that resulted in the closure of the asylums in the last decades of the last century. While this cause was noble in its intention to support people in leading more fulfilled lives in their homes, supervised by community care, this process of deinstitutionalisation often had less beneficial outcomes. Expectations that community care would inevitably lead to fuller social integration were over-optimistic. Many former patients were unable to find work and had limited social contacts. Worse, they were poorly prepared for release into a world that many knew little about and frequently could not cope with. This often resulted in homelessness and sometimes a return to institutional living. However, given the shortfall in psychiatric hospital beds, this increasingly meant incarceration in prison (Fakhoury & Priebe, 2007). The inverse relationship between psychiatric beds and prison populations is commonly referred to as 'Penrose's law', after Lionel Penrose, who in 1939 conducted a cross sectional study of 18 European countries and demonstrated that as psychiatric beds fell in the respective countries prison populations grew larger (Penrose 1939). More recent research has shown this relationship to remain intact (Kelly, 2007, Hartvig & Kjelsberd 2009). Priebe et al. (2005) looked at six European countries and found that in England the

number of psychiatric hospital beds fell by 52% between 1990 and 2002, while the number of forensic hospital beds rose by 38% and the prison population by 57%. Penrose argued that it is the same small, relatively fixed proportion of any population which requires institutionalisation, which led most of the authors of modern examinations of the Penrose Law to conclude that the decline in psychiatric hospital populations was due to growing prison populations. It would be simplistic however to infer such a causal relationship without considering some mediating factors, such as the fact that In many countries the reduction in psychiatric beds has exceeded the growth of prisoner numbers and that 'general attitudes to risk containment in a society' may also go some way towards explaining increases in prison populations (Priebe et al., 2005). Large and Nielsen, (2009) replicated Primrose's analysis and confirmed the results of a negative correlation in 1939, but found that data collected from the same 18 countries in 2004 showed a non-significant positive relationship between psychiatric hospital and prison populations. They further examined the relationship between prison and psychiatric hospital populations in 38 high income countries and found no relationship between the two. The authors noted that there was a wide variation of prisoner to inpatient ratios amongst countries, and that whilst 16 countries had more psychiatric beds than prisoners the UK belonged to a group of countries that had two to three times more prisoners (Large & Nielsen, 2005) It is also important to note that the last 20 years or so have seen significant investment in mental health services and that in most (developed) countries a care-based approach centred on community mental health services has been adopted, which will have contributed to the reduction in psychiatric beds.

So what can mentally ill prisoners expect in terms of treatment? Not much, seems to be the answer. In 2002, a new health screening tool was introduced in prisons (Grubin et al., 2002). However, it did not address mental health needs in any detail, although it was reasonably effective in the detection of physical health needs and substance misuse issues (Shaw et al., 2008). Even the medical staff responsible for assessing prisoners when they first arrive may lack specific mental health training (Reed & Lynne, 1997). In addition, prisoners themselves may not actually know that they have mental health problems. Even those who do feel unwell are often unable to articulate their feelings, and are unaware that they could seek treatment for them. Thus people with less flagrant symptoms are frequently overlooked. For those with more severe symptoms the situation is not much better. The chaotic and sometimes violent nature of life on the wing does nothing to soothe an already agitated mind. And while this group of people are more likely to be detected by mental health services in prison, given the severity of their symptoms and the associated stress to the prisoner (as well as disruption on the wing), detection does not automatically lead to suitable treatment (Landsberg 2002). Failure to identify people requiring mental health services not only reduces their chances of being appropriately referred in prison but also means that the chances of follow-up in the community upon release are much lower (Butler et al., 2005).

A major paradigm shift took place in 1990, when the Home Office introduced the principle of 'equivalence of care'. This stipulated that prisoners were to receive the same level of health care that they would expect were they not incarcerated. Historically, prison healthcare had been commissioned and provided by the prison and was frequently criticised for a lack of mental health training in those responsible for providing health care services. A

number of reports suggested that the NHS would be a more suitable provider of such care (Reed, 1992, Home Office, 1996). The NHS formally took over health care services in 138 prisons in England and Wales in April 2003, including mental health care (Wilson, 2004). A number of new policy papers sought to formalise mental health care reforms in prisons (e.g. *The Future Organisation of Prison Health Care* Department of Health, 1999, *Changing the Outlook*, Department of Health, 2001). The main tenet of these new policies was that prison mental health care ought to mirror community mental health services; as a result all prisons in England and Wales gradually implemented mental health in-reach teams. Whilst policies for improving prison mental health care were clearly gaining momentum, in reality the situation improved only marginally. Evaluations of prison mental health services regularly reveal their inadequacy. Overwhelmed by demand, understaffed and under-resourced teams are unable to cope with the magnitude of the problems they face (Brooker & Gojkovic, 2009, Durcan & Knowles, 2006).

### **1.3 – Needs assessments to date**

All policy papers that sought to reform prison mental healthcare stipulated that that the provision of such care should be underpinned by a needs-assessment in order to structure services based on the mental health treatment need of prisoners. However none of them specified how such an assessment ought to be conducted. Carrying out a needs assessment is a complex task; careful consideration needs to be given to methodological issues, such as sampling strategies and selection of assessment tools. The available literature on needs assessments is sparse and has meant that prisons, if they choose to carry out such an

assessment to begin with have developed methods for doing so that are divergent from one another. The main problems in the current literature occur in relation to:

Sampling strategies: Most needs assessments carried out in prison rely on an available sample and therefore under-sample particular groups such as remand prisoners because they are in the prison for sometimes very short periods of time but present with greater psychiatric morbidity. Therefore under-sampling this group may distort true levels of need.

In the academic literature needs assessment have been carried out with prisoners recruited from mental health in-reach services, meaning that because they are known to services their treatment needs are more likely to have been detected and possibly met. They will also have been selected because they are known to have a mental illness. These factors make it difficult to generalise findings from this group to the wider prison population. In addition the vast majority of needs assessments do not include women in their sample.

Morbidity surveys frequently concentrate on a limited number of mental disorders and needs assessments tend to focus on particular symptoms associated with mental ill health (e.g. psychological distress or hearing voices) but do not systematically assess for specific mental disorders making it difficult to plan structured interventions that cover a broad range of disorders.

Consideration needs to be given to the definition of *need*. In the academic literature need is defined as the requirement of treatment based on a professional perspective, and assumes that there is a potentially effective intervention for a problem (Stevens & Gabbay, 1991). In contrast *demand* for services is based on the way clients perceive their needs and is thus based on lay knowledge of disorder and treatment and service users' willingness to accept treatment. Most needs studies are based on measures of self-report (although some



augment self-report data with brief questionnaires given to clinical staff) and therefore ought to be classed as studies of demand.

#### **1.4 – The current study**

In order to assess psychiatric morbidity in this sample the same methodology as that employed in the 1997 National Prison Survey of Psychiatric Morbidity carried out by the ONS was used. This will allow for a comparison of national prevalence rates of mental disorders among prisoners to this sample. The methodological issues in regard to needs assessment discussed above will be addressed in the following way: The sample includes equal proportions of female and male, and sentenced and remand prisoners. The assessment tool chosen to carry out the needs assessment is the The MRC Needs for Care Assessment (Brewin et al., 1987), which was designed to define the relationship between prevalence and treatment needs. It aims to standardise the application of clinical judgement in order to allow disorders to be linked to appropriate treatment through rules that operationalise need. The instrument is comprehensive, in that it includes all major mental disorders and specifies particular items of care for each disorder, based on current clinical consensus. For each area of clinical and social functioning covered, the assessment specifies a minimum level of functioning and records whether appropriate interventions have been offered. Prisoners will be compared according to their sex and sentencing status findings from the study will be discussed in terms of their implications for the planning of service provision for mental health services in prison.

## CHAPTER 2: REVIEW OF THE BACKGROUND LITERATURE

### **2.1 - Psychiatric Morbidity in the Community and amongst the prison population**

Establishing psychiatric morbidity levels is a crucial first step in establishing the treatment and service needs of any population. Epidemiological surveys consistently show that psychiatric morbidity is higher in forensic populations than amongst the general population.

In a review of 62 surveys of mental illness in prison, Fazel & Danesh (2002) found that overall, 3.7% of male and 4% of female prisoners were diagnosed with a psychotic illness.

In addition 10% of men and 12% of women were suffering from major depression and 47% of men and 21% of women had a diagnosis of antisocial personality disorder. Results also showed that characteristics such as age and type of offence varied little by disorder and that, despite the fact that data came from 12 different countries and were gathered over several decades, there was little variation in the prevalence rates of psychotic illness and major depression. However, there was considerable variation in the prevalence of ASPD.

This was attributed to greater diagnostic consensus for the former two types of disorder.

A series of surveys assessing psychiatric morbidity and receipt of services were initiated during the 1990s in the UK in order to establish progress towards health policy objectives (Jenkins et al., 1997). The first full survey of the mental health of prisoners in England and Wales undertaken by the Office for National Statistics (ONS, Singleton et al. 1998) revealed that 7% to 14% of prisoners had shown signs of psychotic illness in the year prior to interview in prison compared with 0.4% in the general population (Jenkins et al., 1997).

Depressive episode had a general population prevalence of 2-3%, while in prisoners it

ranged from 8 to 21%. This study was sophisticated and exhaustive: it stratified prisoners by sex and type of legal status (sentenced / remand) and obtained representative samples from all types of prisons, according to the size of the population in each establishment. Using data from both the general household survey (Jenkins et al., 1997) and prison surveys of psychiatric morbidity, Brugha et al. (2005) compared rates of psychosis in prison to those in the community and found them to be ten times as high. This difference did not wane when potential mediators such as age and socio-economic status were controlled for. The clinical symptom profile was the same in both settings, i.e. people experiencing a psychotic episode in prison tended to present with the same kinds of symptoms as people experiencing psychosis in the community. Amongst the prison population it was found that psychosis rates were higher for sentenced than remand prisoners at 7% for male sentenced, 10% for male remand and 14% for female prisoners (figures were not split into sentenced and remand for the female sample). The fact that these rates are higher than those reported by Fazel & Danesh (2002) may at least in part be attributed to the fact that the ONS survey took into consideration the 12 months prior to imprisonment, whereas Fazel & Danesh only included studies that investigated psychosis six months prior to imprisonment in their review. In terms of service use, 63% of adults from the general household survey had consulted a primary care physician for a mental health problem in the previous year, whereas this was the case for 40% of the male remand prison population and 37% of the male sentenced population.

Brugha et al. (2005) also reported findings from a follow-up study of those prisoners with probable psychosis who had returned to the community at least once during the year after the initial assessment and found that less than a quarter had seen a psychiatric professional.

For those with more serious offences this rate was 41%. Lennox et al. (2012) conducted a study investigating the proportion of prisoners with severe mental illness in touch with prison mental health in-reach teams who also made contact with community mental health teams. Out of 137 prisoners who were identified as having a serious mental illness from the in-reach team case load 53 had been released at six month follow up. Of those only four were in contact with community mental health services. Dyer & Biddle (2013) studied care pathways in four prisons in the north east and identified barriers to continuous care on institutional, staffing and prisoner levels. Among them were sudden, security related transfers, time and resource constraints to plan and effectively coordinate care packages, related to which was the often rapid turnover of prisoners who only spent short amounts of time in prison. Prisoner engagement was also found to be challenging, particularly for those prisoners who perceived re-offending as their only choice. Others were expected to become homeless on their release, meaning that they would face difficulties registering with a GP, which in turn was likely to negatively impact on their access to community mental health services. These findings highlight the need for health and social care reforms that provide a more co-ordinated mental health pathway for prisoners returning to the community, which include primary healthcare and specialist services.

Most of the studies conducted to date have focused on one or two types of mental disorders among prisoners, some on as many as four, but none bar the prison survey have addressed all major types of mental illness. In fact, most mental disorders do not occur in isolation, complicating not only our understanding of the disorders themselves but also of how best to treat them and what resources are required to do so. In the prison survey, Singleton et al. (1998) found that only one prisoner in ten showed no evidence of any

mental disorder and no more than two out of ten had only one disorder. Presence of co-morbid personality disorder is linked to poorer treatment outcomes of Axis I disorders (Newton-Howes et al., 2006) and significantly increases the risk of violent behaviour among those suffering from psychotic disorders (Moran et al., 2003).

The co-occurrence of multiple disorders in the same person has been a source of great debate with regard not only to the validity of assessment instruments and classification systems but also to the conceptualisation of certain disorders. The Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000) differentiates between types of disorders through their placement on different axes. Axis I includes all categories of psychological disorder with the exception of personality disorders and intellectual disabilities, which together with paraphilias can be found on Axis II. Unlike Axis I disorders, Axis II disorders (with the exception of gender identity disorders and paraphilias) are characterised by a pervasive and persistent pattern of behaviour and relational style without periods of remission or exacerbation and generally begin in childhood (American Psychiatric Association, 1989). Distinctions have also been made between Axis I and Axis II disorders with regards to the role of biogenetic factors in their etiology, their responsiveness to pharmacological treatment and the severity of dysfunction they cause (Gunderson & Siever, 1985). There are particular patterns of association which are frequently found (Widiger & Shea, 1991) and which obscure the differentiation between true comorbidity (separate disorders) and false comorbidity (consanguinity, or such a close relationship between the disorders that they are nearly the same, [Tyrrer, 1996]) and the literature provides many examples of this. The most commonly correlated Axis I and Axis II disorders are borderline personality disorder and mood disorders (Zanarini et al., 1998),

avoidant and dependent personality disorder with anxiety (Skodol et al., 1995), antisocial personality disorder with substance misuse (Morgenstern et al., 1997), and schizotypal personality disorder and schizophrenia (Kety, 1985.)

Research from a variety of disciplines such as genetics, service use and treatment outcomes has consistently demonstrated a relationship between schizotypal personality disorder and schizophrenia (Gunderson & Siever, 1985), suggesting that schizotypal personality disorder may represent an experiential or genetic variant of schizophrenia. One of the diagnostic criteria of the Structured Clinical Diagnostic Interview for assessing personality disorders stipulates that the symptoms must not occur exclusively during an episode of schizophrenia, but otherwise both diagnoses can be given to the same patient, which in many cases will not be meaningful because the schizotypal personality disorder symptoms represent prodromal or residual phases of schizophrenia. With regards to the relationship between borderline personality disorder and mood disorders there is debate as to whether borderline personality disorder is a variant of mood disorder (Davis & Akiskal, 1986) or whether the association stems from the comorbidity of mood disorders in borderline personality disorder patients (Zanarini et al., 1998). It stands to reason that borderline personality disorder should be related to mood disorders (Widiger & Shea, 1991) as many of its defining features involve affective problems of dysregulation and instability such as intense relationships, chronic feelings of emptiness and self-harming behaviour. In the same way that schizoid personality disorder could be seen as a variant of schizophrenia, borderline personality disorder may characterize a variation of mood pathology, as the same type of data for family history, biological markers and treatment that supported the construct validity of schizoid personality disorder are available for borderline personality

disorder (Gunderson & Siever, 1985). On the other hand there is evidence that in some people the diagnosis of borderline personality disorder is the result of overlapping diagnostic criteria. Pope et al., (1987) examined data from a set of patients who met criteria for depression, bulimia and borderline personality disorder and found that when they excluded depressive and bulimic symptoms the criteria for borderline personality disorder were no longer met. A similar problem exists with anti-social personality disorder and substance misuse, where by virtue of drug or alcohol misuse one of the criteria of an anti-social personality disorder diagnosis is automatically met (in convicted prisoners the same problem applies in another case, as they automatically fulfil one diagnostic criteria by virtue of being in prison, i.e. having broken the law). The diagnosis of substance dependence also includes theft, dangerous behaviour and the inability to function in areas such as work or childcare, all of which also currently indicate anti-social personality disorder, which would support the notion that in at least some cases apparent co-morbidity reflects artefacts of diagnostic classification systems (Widiger, 1992). Additional complicating factors are the choice of assessment tool used for diagnosis. Oldham et al. (1992), for example, found that two semi-structured interviews for personality disorder resulted in different prevalence rates and different patterns of co-morbidity. What these examples illustrate is that current classifications and diagnostic criteria for most mental disorders are not as robust as one would like them to be. Given the frequency of co-morbid disorders and the overlap between diagnostic categories the reliance on prevalence of diagnosis alone can be problematic when assessing needs.

## **2.2 - The state of prison mental healthcare**

‘A period in prison should present an opportunity to detect, diagnose and treat mental illness in a population often hard to engage with NHS services. This could bring major benefits not only to patients but to the wider community by ensuring continuity of care and reducing the risk of re-offending on release.’

(Reed& Lynne, 2000), p.1033

Given the high rates of psychiatric morbidity the state of prison healthcare – and prison mental healthcare in particular - has been a concern for some time. The 1999 Joint Prison Service and National Health Service Executive Working Group report, (Department of Health, 1999), which sought to formalise the relationship between the two organisations described the problems well: ‘Health care in prisons is characterised by considerable variation in organisation, and delivery, quality, funding, effectiveness and links with the NHS.’ Meanwhile Smith (1999) described prison health care as ‘out of date, with a very “medicalised model of care,” focusing on illness not health, and with little attention to prevention, guidelines, multidisciplinary work, audit, continuing professional development, or information.’ Highlighting the variable and often rudimentary nature of healthcare in prison the Reed report (1992, Home Office) on health and social services for mentally disordered offenders resulted in 276 recommendations pertaining to the proper structuring of services for this group of prisoners. Their needs, Reed argued, could only be met by a broad and integrated range of health and social services. Reed’s view was that quality health care should be provided by health and social services rather than the criminal justice system, and should be based on individual need. It should also take place as near to the prisoner's home or family and, as far as possible, ideally based in the community but



otherwise in conditions of no greater security than required. He felt that the ultimate aim of a stay in prison should be to maximise opportunities for prisoners' rehabilitation, reintegration into society and independent living and that these goals could not be accomplished without addressing their mental health needs. A multi-agency approach and local ownership of services were seen as crucial. The underlying conclusion from this report was that contracting in services from the NHS would further equality and consistency of care by replicating the structures of community care outside of prisons and, in addition, would also help address such issues as special or differing needs in women and ethnic minorities, improvement of access to specialist mental health and learning disability services as well as better multi-agency working in order to avoid unnecessary prosecutions.

Reed and Lynne (1997) published the results of a series of prison inspections with troubling results. They conducted assessments of the quality of healthcare in prisons, based on healthcare quality standards published by the prison service. They visited 19 prisons in England and Wales and found the quality of healthcare to be greatly varied. Whilst in some prisons healthcare was broadly equivalent to the NHS, many provided care of low quality. Overall they concluded that 'the current policy for improving health care in prisons was not likely to achieve its objectives and was potentially wasteful' (Reed & Lyne, 1997). They specifically highlighted:

None of the prisons inspected had conducted assessments of healthcare needs (though two had taken some first steps towards it), despite the fact that the prisons' Health Care Standards require them to do so and suggest seeking specialist advice. None of the inspected prisons had sought advice.

Budgets were decided based on last year's budget, as opposed to a needs assessment. They allowed for small changes but were overall aimed at reducing the total budget. None of the prisons knew their overall budget for health care, though all knew the locally held budget for drug treatment and visiting specialists.

According to the authors 'only half of the prisons had a clear healthcare management structure, with a managing medical officer who sat on the prison senior management team. In other prisons a junior governor represented health care on the senior management team. Clinical, academic, or management meetings involving all healthcare staff were unusual'.

- Most health care in prisons was primary care. Inspectors expected this care to be provided by doctors who were qualified to deliver such care in NHS general practice. However this was only the case in 10 of the inspected prisons. In the remainder primary care was routinely given by doctors who had not completed primary care training.
- Mental healthcare was significantly lacking. Whilst 17 prisons had arranged visits from local psychiatrists, this was mainly to organise transfers out of prison. For the remaining prisoners who had mental health problems but did not warrant transfer to the NHS, provision was sketchy. Most were inpatients in the healthcare centres, where they were often not under the supervision of a consultant psychiatrist. None of the prisons had multidisciplinary mental health teams and none had arranged for all mentally disordered offenders to be under psychiatric supervision.

### **2.3 - Policy development**

The last 20 years have seen a continued drive to reform and improve prison health services. One of the most important steps in that direction was taken by the Home Office in 1990 by committing to the principle of *equivalence of care*. In terms of policy, standards and delivery prisoners were to receive the same level of care that they would expect were they not incarcerated. The prison itself was to be seen as a community and the health care provided within it should be equivalent to primary care in the NHS, including specialist out-patient services. Any prisoner in need of more than primary care was to be transferred from prison to hospital (Wilson, 2004). The government had acknowledged that the NHS could not abandon patients at the prison gate, when more than half serve sentences of less than six months and many only spend a few weeks in prison. When they are released back into the community they require on-going treatment. Ensuring the continuity of good quality care not only fulfils the obligation of care in custody but also facilitates a smooth transition between the prison and the NHS and helps manage those in custody more effectively (Department of Health [DoH], 2001a).

The four most important policy papers to lay the foundation for these reforms were *Patient or Prisoner* (Home Office, 1996), *The National Service Framework* (DoH, 1999a), *The Future Organisation of Prison Health Care* (Joint Prison Service and National Health Service Executive, Working Group, 1999) and *Changing the Outlook* (DoH, 2001a). The Home Office discussion paper *Patient or Prisoner* (1996) acknowledged the need to provide consistent health care in prisons and aimed to provide models of how this could be achieved. Current problems in the delivery of adequate care were described primarily in terms of the lack of

skills for providing such care. The report highlighted that the majority of doctors working in prisons were not in receipt of any specialist psychiatric training and belonged to an independent medical service, isolating them from their peers in the NHS. Patients were nursed by a mixture of prison and nursing staff, again often without adequate training and from differing backgrounds, i.e. with and without nursing qualifications. The report also noted that many mentally disordered offenders fell outside the 1983 Mental Health Act and were therefore cared for within establishments in which they were not adequately provided for. The report concluded that as had been recommended but never implemented in the past, the NHS should assume the responsibility for all prison health care through the introduction of a purchaser/provider relationship. The report advocated a comprehensive analysis of need as the only sound base for implementing new services and argued that the expertise for such an undertaking lay within the NHS, not the prison service. It set out some important steps that would need to be taken to formalise this proposed relationship:

- The agreement of responsibilities between the Home Office and the NHS
- Agreeing the necessary levels of finance and identification of necessity for the provision of additional funds.
- The establishment of a protocol for the assessment of need for health care in prisons
- The agreement of contracts between purchasers and providers and the necessary systems for their monitoring.

The report also stressed that it was *insufficient to lay down standards without the proper support of adequate resources, audits and evaluation.*

*The National Service Framework for Mental Health* (NSF, DoH, 1999) sought to set a national agenda for the improvement of mental health services for working age adults up to the age of 65; this was to be achieved within 10 years. It set standards for the design and delivery of services that would raise quality and eliminate the wide and unacceptable variations in provision. It did so by defining service models for the promotion of mental health and the treatment of mental illness, establishing programmes to support local delivery and outlining performance indicators against which progress would be measured. The NSF set standards in five areas and committed to investing £700 million in mental health services.

- Standard one addressed mental health promotion strategies to combat discrimination associated with mental health problems.
- Standards two and three set out how primary care should work for people with mental health issues, including referrals and round-the clock care.
- Standards four and five covered services for people with severe and enduring mental health problems, including crisis plans, in-patient treatment and rehabilitation care.
- Standard six established annual checks for carers of those with severe and enduring mental illness.
- Standard seven addressed suicide prevention by taking into account standards one to six and drawing together the action implied in them.

Whilst the NSF did not focus on any particular group there was an acknowledgement that *closer partnerships between the NHS and the prison service were needed in order meet the needs of mentally ill prisoners*. Whereas the NSF laid out what best practice should be, the *NHS Plan* (DoH, 2001c) set more specific and practical targets for the development of

services. It specified a range of new services that were in the spirit of, but beyond the specifications of the NSF, such as women only services, community links for secure patients and improved prison mental health services. Local Implementation Teams were set up, which were responsible for the development of these new services and were given a degree of flexibility to commission services in a manner that matched the needs of local service users and carers.

The NSF has since been superseded by the new mental health strategy 'No health Without Mental Health' (DoH, 2011), which has not shifted the policy focus of the NSF but rather reframed it under six 'shared objectives' (Smith & McCulloch, n.d.)

*The Future Organisation of Prison Health Care* (DoH, 1999) acknowledged that services for dealing with the high rate of mental illness in prison were underdeveloped. The two main areas identified as problematic were the screening process for mental health needs upon reception into prison and a lack of sufficient levels of care-planning in prisons. It was argued that the criminal justice process by design does not lend itself to the successful detection and subsequent treatment of mental illness. The process can be rapid, meaning that opportunities for effective screening are missed, and often managed by people who lack the necessary skills to conduct such assessments. In addition, non-standardised operational procedures lead to great variability in service delivery. This policy document set out a plan for a new screening procedure at reception, which was to function as a 'triage' with an additional health assessment to be conducted during the first week in prison.

The concept of care planning was introduced as a mainstay of the Care Programme Approach (CPA) in 1991 in order to provide a cohesive framework for the delivery of mental health care across England and Wales (DoH, 1991). Though it has been revised over the last 20 years or so, its main elements are still key to the way in which mental health care is delivered:

- Systematic structures for assessing the needs of people received into specialist mental health care.
- The formulation of a care plan which recognizes the health and social care provisions required from multiple providers.
- The appointment of a care-coordinator who monitors the delivery of such care.
- Regular review of the plan and the incorporation of relevant changes.

The NSF stated that a full CPA should be put in place for all patients with mental health problems, and take the form of a collaboration between the care-coordinator, service-user and, where appropriate, carer. There are various hindrances to the implementation of this approach in prison, such as the high turnover of staff and a lack of infrastructure to maintain communication between various agencies involved in the service provision for prisoners.

The policy also set out principles that were to be followed in the future planning of prison services, most importantly that all future improvements should be in line with the NSF, the implementation of the CPA and mechanisms to ensure its delivery as well as better communication between mental health services and prisons. This document rejected earlier calls for the responsibility of all prison health care to be transferred to the NHS on the grounds that existing prison health care staff might become marginalized and that both

NHS and prison service expertise were needed to provide adequate services. It therefore endorsed *partnership working*, by which both organisations would be jointly responsible for the planning and commissioning of services.

*Changing the Outlook* (DoH, 2001) sought to operationalize the principles set out in *The Future Organisation* and provide strategies for prison mental health reform. It was wider in scope, also recognizing more specialist needs of women, young offenders and black and ethnic minority prisoners. It recognized that most prisons would need to make significant changes in order not only to meet the complex needs of their population but also be more in line with general mental health service delivery and the changes to it as set out in the NSFMMH. In particular it was recognized that services needed to be structured in a way that engaged the more severely mentally ill in active treatment programmes. Prison inpatient care teams therefore had to include professionals from varying professional backgrounds and offer regular access to general and forensic psychiatric services in the NHS. This vision stood in some contrast to the current reality of prison health care services, where staffing difficulties, a narrow skill-mix and a lack of appropriate facilities often meant little meaningful activity and limited therapeutic intervention.

The key idea to emerge from *Changing the Outlook* was that, mirroring treatment modalities in the community, it should no longer be automatically assumed that the presence of a mental illness should necessarily warrant treatment in the health care wing or transfer to hospital. In the community it is common practice for people to be treated in their homes by visiting mental health professionals (often Community Psychiatric Nurses). The greater use of facilities such as day care and wing based treatments should similarly relieve



the burden on health care wings and provide greater opportunities for participation in the everyday regime and other purposeful activities. This approach led to the biggest innovation in prison mental health care services to date: the establishment of *Mental Health In-Reach Teams* (MHIRTs). They were envisaged as counterparts to Community Mental Health Teams (CMHTs), providing multidisciplinary assessments of need and risk, with the possibility of referrals back to primary care and the development of care plans. The aim was for all prisoners with mental health problems to be subject to an individually tailored care plan, encompassing appropriate psychosocial interventions targeting their specific needs, the delivery of which was to be co-ordinated by a named member of the in-reach team (the care-coordinator). Their early focus was on those with severe and enduring mental illness, though it was believed that all prisoners with mental health issues were to benefit from them to some degree, e.g. through better detection of prisoners with mental health problems. It is the responsibility of Primary Care Trusts to set local priorities and strategies for improving health and to commission health services accordingly. Those with prisons in their area were to be given funding for the establishment of these teams. They were expected to collaborate with the prisons to develop an appropriate range of community style services, as *Changing the Outlook* warned that in-reach teams alone would not solve all the mental health problems of the prison population. The Prison Health Policy Unit and Task Force were tasked with overseeing these works. Regional task forces were to be established in order to monitor progress against agreed action plans.

The document specified that by September 2002 all prisons and their local NHS partners ought to have completed a detailed review of their prisons' mental health needs, identified gaps in provision and developed action plans to fill those gaps. *Changing the Outlook* was

not a blueprint, nor did it provide a manual for making prison mental health services 'right'. Rather it set a direction for travel by raising the issues that needed to be addressed in order to achieve the desired changes.

Based on the principles of the NSF, the Prison Health Policy Unit and Task Force published a strategy for modernizing mental health services in prisons in 2001 (DoH, HM Prison Service), the implementation of which fell to the National Institute for Mental Health in England (NIMHE) in 2003. By 2004 each of the eight NIMHE Development Centres had a prison mental health lead and mental health collaborative, guiding staff in the implementation of clinical improvements and use of collaborative networks. Five years after the publication of the NSF, a review of met objectives seemed to bring good news for prison mental healthcare: the target of implementation of 300 prison mental health in-reach staff by April 2004 was not only met, but exceeded by 70 (Appleby, 2004).

There was also increased investment in secure places. As indicated in the NSF, an extra 300 medium secure beds were provided and a commitment to increase long-term secure beds by 200 was also made, so that inappropriately placed prisoners could be moved to more suitable accommodation.

The number of Local Implementation Teams reporting no deficiencies in the availability of medium and low secure beds rose from 14% in 2001 to 26% in 2003. The number reporting significant deficiencies fell from 13% to 6%. Figures also showed that the national spend on secure and high dependency care had risen from £295 million in 2001/02 to £428 million in 2003/04 - a real terms increase of 45% (Appleby, 2004). With regards to services for

mentally disordered offenders, spending rose from £31 million in 2001/2 to £48 million in 2003/4 (Appleby, 2004). Between 2003 and 2004 there was also, for the first time, targeted investment into specialist services for personality disorder, the Dangerous and Severe Personality Disorder (DSPD) programme. Targets were set to create, by 2004, 140 new places in high secure hospitals and prisons, as well as 45 medium secure hospital places and 30 hostel places. These targets were met in early 2004 (Appleby, 2004). Following publication of the guidance, *Personality Disorder – No longer a diagnosis of Exclusion* (DoH, 2003), 11 new pilot services were established across England.

The creation of these services saw the recruitment of 200 new specialist staff and six new outreach teams in order to begin the process of improving services for this challenging client group.

#### **2.4 - Development and implementation of Mental Health In-Reach Teams**

After the publication of *Changing the Outlook*, Martin Narey, the Director General of the Prison Service, hailed the newly recruited 300 psychiatric nurses as ‘the cavalry coming over the hill’, but at the same time warned that, with rates of mental illness having risen sevenfold since the 1980s, the situation was near overwhelming (Narey, 2002, at the British Institute of Human Rights). So whilst by 2007, 102 in-reach teams had been established (HM Inspectorate of Prisons, 2007) Narey’s concerns were well-founded. Subsequent reviews of the state of prison mental healthcare revealed a less than rosy picture. Whilst official guidance on the implementation of new services had been kept deliberately non-

prescriptive (DoH, 2001) in order to allow services to address the specific need of each of the prisons they are located in, it has resulted in the development of idiosyncratic models of care (Brooke et al., 2009), with patchy coverage and variability in how teams operate the norm rather than the exception. Frequent reviews of MHIRTs revealed problems in several areas:

#### 2.4.1 - Staffing

A survey carried out in 56 prisons published in 2008 found that despite the fact it was always intended that psychiatric nurses would form the core of in-reach teams whilst being supported by other professionals, such as clinical psychologists, psychiatrists, occupational therapists and counsellors, this was not always the case (Brooker & Ullman, 2008). Teams consisted of anything from two nurses to 19 whole-time equivalent staff. Variance in team size was mostly not reflective of variations in the size of the prison population the team catered for. The original role of these teams was relatively discrete: looking after those with a severe and enduring mental illness. However, even that seemed ambitious given the current staff complement and a number of team leaders complained about not having multi-disciplinary teams. These figures represent a notable departure from what could be expected in the community. DoH guidelines for CMHTs stipulate that a team with a caseload of 350 clients (no more than 50% having complex needs) would consist of three to four psychiatric nurses, two to three social workers, two full-time psychiatrists, and at least one clinical psychologist, as well as a support worker and administrator. This makes a total of 12 to 14 team members. The average team size in this survey was just over four. A report by the Sainsbury Centre for Mental Health (now Centre for Mental Health/CMH) estimated that

meeting the needs of a category B men's prison with 550 inmates would require a MHIRTs of 11 full-time staff (Boardman & Parsonage, 2007). This meant that provision was only a third of what it should be, and not reflective of the multidisciplinary approach envisaged by the policymakers. Moreover, MHIRTs face additional demands unique to the prison setting, such as providing assessments for courts, and making release and transfer arrangements, as well as looking after those for whom no hospital bed has yet been found. It is clear that under these circumstances most of the clinical activity undertaken by MHIRTs teams revolves around assessment, liaison and support, leaving little scope for therapeutic input. It should be noted however that the sample in this survey was relatively small and therefore not necessarily representative: only two professional groups were surveyed, in-reach team leaders and PCT prison health leads, with response rates of 49% and 35% respectively. The second national survey of prison MHIRTs (Brooker & Gojkovic, 2009) had a much better response rate of 73%, but findings were not much more encouraging. The authors concluded that little had changed since the first survey in 2005 (Brooker et al., 2005). There was still wide variation in staff numbers, with the smallest team consisting of a single staff member and the largest counting 15 members. The median size of teams had increased from four to five. The largest staff group were still nurses, who had increased in numbers while the proportion of other professions had decreased. Recruitment also proved to be problematic, with 70% of team leaders reporting having had at least one vacant post in the last year, 46% had two or more posts unfilled, and 13.5% three or more. The researchers concluded that recruitment difficulties had worsened since the first survey. Team leaders cited financial constraints as the main obstacle to successful recruitment drives and sustained staff retention.

#### 2.4.2 - Mission Creep

Another problem that was widely acknowledged in a number of reviews was that of 'mission-creep'. Whilst MHIRTs were originally tasked with looking after people with a severe and enduring mental illness, with common mental disorders falling under the purview of primary care services, these boundaries soon became blurred. The first national survey of MHIRTs (Brooker et al., 2005) revealed that many had operational policies emphasising greater collaboration with primary care, partly because primary care was ill-equipped to act as the 'gatekeeper' for secondary services it was designed to be. This had not changed by the time of the second review, with 67% of team leaders saying that triage was inadequate (Brooker & Gojkovic, 2009). A further reflection of this is the fact that the number of teams with operational policies excluding common mental disorders had dropped from 52% to 38%. This is perhaps unsurprising given that a review by the Inspectorate of Prisons (2007) found that none of the GPs they had interviewed had received any training in working with prisoners with specialist mental health needs. In addition, they reported that hardly any primary care services in prison had specialist nurses able to assist with screening or triage (although it must be noted that they only interviewed nine). Many of the MHIRTs surveyed by Brooker & Ullmann in 2008 reported there was a lack of clarity, particularly when it came to working with people with personality disorders. While some regarded personality disorder, especially when accompanied by self-harming behaviour as a 'serious mental illness' others felt that in-reach teams should adhere more closely to the brief they were given upon their inception. The second national survey of in-reach teams (Brooker & Gojkovic, 2009) revealed mission-creep to be an ongoing problem. They estimated that overall there were 4700 service users on the case-load in England at the

time of their survey, out of which only 32% had been diagnosed as severely mentally ill (i.e. they met diagnostic criteria for schizophrenia, psychosis, schizoaffective disorder or mood disorder). It was reported that 25% had a personality disorder or a dual diagnosis of mental illness and personality disorder, and 31% had neither. Over 50% had some form of dual diagnosis. The surveyed team leaders and experts consistently felt that teams were often used to deal with difficult and disruptive prisoners rather than those they were meant to be treating.

There was a consistent feeling among respondents that MHIRTs were overburdened. Whereas in the community there were a variety of services that dealt with different subgroups of mentally ill service users (assertive outreach, crisis management, early intervention teams), each with a set of specific guidelines for the staffing and operation of the service, no equivalent had been established in the prison service.

#### 2.4.3 - Referrals and therapeutic interventions

The second national survey showed that the number of referrals had increased since the first one had been conducted. In 2005 fewer than 25% of participating teams had had over 50 referrals in a four-week period. By 2007 this figure had increased to 75%. In 2004 the average number of annual referrals per team member had increased by 57% from 51 to 89, with the consequence that caseload size had risen by 32%. In-reach team size however had only increased by 20%. As a result the number of team leaders who felt their teams were adequately resourced dropped from 23% to 17%. A similarly bleak image emerged when

team leaders were asked about therapies and interventions. There was overwhelming agreement that very little time was spent on face-to-face therapeutic activities. On average teams provided around three sessions of individual cognitive behavioural therapy and anxiety management per week. The rest of the time was spent on liaison and support, discharge planning, needs assessments and ongoing assessments. With regards to implementing the CPA approach (a corner stone of *Changing the Outlook*), figures were not much better. Despite the goal that every prisoner on the caseload of the service should be subject to the CPA framework, only 28% were. Limited resources were cited as the main barrier to the implementation of the services MHIRTs were designed to deliver.

#### 2.4.4 - Self assessment of services

Brooker and Ullman (2008) asked the PCT prison health leads and in-reach team leaders of the 56 prisons participating in their survey to give an assessment of the state of mental health care in prison. Both groups had similar views: Of PCT leads, 60% rated services as either average or poor and 40% said they were good. Of team leaders, 54% said that provision was either average or poor and 34% rated it as good. Nobody rated it as very good or excellent. The results were dispiriting, particularly for a self-assessment.

#### 2.4.5 - Commissioning



Despite earlier resistance, the NHS finally took over all healthcare provision in 2006 and commissioning of all healthcare services therefore became responsibility of PCTs<sup>1</sup>. However this transfer did not yield the positive changes that were expected from it. A prisoner diagnosed with two mental disorders might be involved with five different service providers (Brooker & Ullman, 2008), but communication between the different agencies working in prison was still poor, resulting in missed opportunities for the delivery of a comprehensive care package. The report '*The mental health of prisoners*' (HM Inspectorate of prisons, 2007) also raised concerns about commissioning. Figures obtained from the healthcare commission revealed that assessments of commissioning carried out in 23 PCTs covering 25 prisons showed that mental health was a low priority for PCTs. Asked to identify their priorities with regards to prison health care, only three PCTs mentioned mental health care specifically. Reviewers also cited findings from the Health Service Journal, which surveyed NHS mental health Trust chief executives on a number of confidence measures. Whilst most of these had steadily increased, the confidence in PCT commissioners' understanding of mental health needs of communities had consistently been the lowest of all the measures.

#### 2.4.6 - In reach services in London

The Centre for Mental Health conducted a review covering the topics discussed so far in the eight Greater London Area prisons, with similar findings (Durcan & Knowles, 2006). Most of the participants agreed that the range of interventions offered was very limited indeed and the majority of resources were aimed at assessment, mental health monitoring and medication management, with liaison and seeking information from external service

---

<sup>1</sup> In April 2013 the NHS commissioning Board took over this task.

providers taking up a significant amount of time. It was also noted that frequent prisoner movement further hampered continuity of care. Participants reported that the average stay of a remand prisoner was three weeks, with many staying for much shorter periods of time. Sentenced prisoners were also moved frequently. Participants cited the issues discussed previously around mission creep, inadequate primary care services and a high volume of referrals as problematic. It is noteworthy that several participants had adopted a more narrow view of their target group, with a significant number not believing that in-reach services should take on people with personality disorders. Given the make-up of the teams, these pressures are easily understood.

Results from the 2006 review (Durcan and Knowles) showed that the teams in the establishments where the current research took place were staffed as follows: HMP Pentonville, housing approximately 1100 prisoners, was served by an in-reach team consisting of one team manager, one deputy manager, four social workers, one 0.6 whole-time-equivalent (WTE) locum consultant, one trainee psychiatrist on monthly rotation from the local NHS mental health Trust, and 0.8 sessions contracted by the prison from North London Forensic Services (NLFS). One position for a community psychiatric nurse was vacant. This makes a total of 6.6 WTE members of staff plus the NLFS contingent. HMP Holloway, with around 460 prisoners at any given time, had an in-reach team consisting of one team manager, two nurses and one social worker, a total of four members of staff. In addition the team had input from a community psychiatrist for four sessions, 2 sessions from a forensic psychiatrist and a trainee psychiatrist. Between them all London prisons had 7.5 WTE psychiatrists and one trainee, but no clinical or counselling psychologist or occupational therapist. Teams also noted having developed 'hybrid' models of care adopting

elements of services available in the community and complained about a lack of guidance on policy implementation, particularly around the function and make-up of teams. This lack of specificity was unique to the prison system and not noted in relation to any other of the specialist services to emerge from the NSF.

### **2.5 - Spending on prison mental health care**

It is clear at this point that funding makes a key contribution to the shortcomings of prison mental health care. *Changing the Outlook* estimated that around 50% of the healthcare budget in prisons was spent on mental health. A recent review of prison healthcare and of mental health spending in particular found this to be far from the case. In fact mental health care accounted for only 11% of the total health care spend (Brooker et al., 2009). Moreover, the report revealed stark differences in the levels of spending between regions, effectively turning the level of provision in each prison into a postcode lottery. The authors estimated that, in 2007/08, the total mental health care spend in prison was £20.8 million in England, and rose to £24 million in 2008/9. There was also a variation of around 25% between different types of prison, ranging from £280 (category D prisons) to £350 (category A prisons). This can be largely attributed to the fact that Category D establishments house prisoners who are preparing for release, or are perhaps already on day-release, and are therefore more likely to be reasonably well adjusted. These prisons typically do not take remand prisoners, who have higher rates of mental illness and adjustment difficulties. The regional breakdown revealed a more worrying picture: here provision varies by 130% (£182 mental health expenditure per prisoner in the East Midlands and the South West, in

comparison to £416 in London). Whilst expenditure in London might be expected to be greater due to higher costs and morbidity, this is still a remarkable gap. The report also highlighted that in other areas of the country spending was still twice as high as in the East Midlands (e.g. the North East and Yorkshire & Humberside). The researchers ruled out the possibility of mix of prisons in each area as a major factor in explaining these differences, as there was no evidence of skewing in the location of different types of prison and the variation in per capita spending between prison types was in any case limited,. The disparities in mental health spending were not a reflection of discrepancies in general health care spending, which varied much less, by 30%. In the most extreme example the South West was found to spend significantly more per head on general healthcare than the North East, but less than half as much on mental health care. While London was amongst the top spenders on general health care, it came second to last amongst all eight regions in terms of the proportion that mental health accounted for. It should also be noted that expenditure per head in female prisons seemed to be particularly low, a worrying finding given that mental health problems amongst women are even more common than in men (Corston, 2007).

## **2.6 - The principle of equivalence and spending**

The above figures show that that the principle of equivalence does not apply between prisons, so it is worthwhile comparing them to the general population. Brooker et al. (2009) argue that this warrants a definition of what is to be understood in this context by the term 'equivalence'. They stipulate that in order to assess equivalence it is necessary to compare

levels of need between the general and prison population and then comparing per capita spend taking into account these differences in need. The ONS prison survey (Singleton et al., 1998) estimated that 90% of the prison population has a mental health problem, which is nearly four times higher than in the community (Singleton et al., 2001). While there is a problem with equating prevalence to need (see chapter 2.7.2), these figures would suggest that, taking need into consideration, spending on prison healthcare should also be four times as high as in the community in order to achieve equivalence. However, this equation severely underestimates levels of need in prison. First of all, co-morbidity rates are significantly higher in prison than in the community. According to ONS figures, more than seven out of ten prisoners have two or more psychiatric problems, while this figure stands at one in 25 in the general population. Multiple diagnoses add considerably to the complexity of treatment needs, and therefore to their cost. In addition the differences in prevalence vary greatly by type of mental health problem, being greater for more serious disorders such as psychosis. In the community depression and anxiety are the most common mental health disorders. They are frequently treated within in primary care settings, and hardly ever necessitate highly specialist interventions. These types of mental health problems are about three times as prevalent in prisons as in the general population. In contrast, the prevalence of psychosis is 15-20 times higher in prisoners than in the population at large (Singleton et al., 1998). This disorder accounts for the best part of specialist mental health provision, in prisons as well as in the community. The estimated number of people in prison with psychosis (at a prevalence rate of about one in 12) is about 6,500, whereas the total number of prisoners on in-reach caseloads is about 4,700 (Brooker et al, 2009). In broad terms, , taking into account both the higher prevalence of severe mental illness in prisons and the greater complexity of cases associated with multiple

diagnoses, the principle of equivalence would require mental health spending to be about 20 times larger per head than in the general population.

Looking at spending figures Brooker et al. (2009) found that spending on prison mental health care is estimated at £306 annually per person in prison, nearly twice the average level of mental health spending on working-age adults living in the community. Based on an annual survey of investment in adult mental health services carried out for the DoH (Mental Health Strategies, 2008), total expenditure on mental health care for adults of working age was estimated at £169 per head in 2007/08. This had risen to £195 per head by 2010/11, an increase of 18.5% and a real-terms cash investment of 9.9%. This figure had dropped by 1% in 2012. The authors argue that it is difficult to compare these figures directly, because the community figure includes spending on a range of services that are not covered in the estimate for prisons, such as inpatient and residential care. Under the principle of equivalence of care, prison MHIRTs are supposed to provide broadly the same type of services as are available to people with severe mental health problems living in the community. In the absence of a precise definition of what this provision should include, Brooker et al. (2009) propose two alternative measures: a broad one including spending on all non-inpatient/residential services in the community, and a narrow one covering only expenditure on community based mental health teams. Using these measures, the authors estimated spending on adult mental health services for the general population at £79 per head on the broad definition and £42 per head on the narrow definition. Per capita spending on prison mental health care was between 3.9 and 7.3 times as large as per capita spending on the adult population at large. This is a significant difference, but still well short of the broad multiple of 20 that is needed. They conclude that 'substantial extra provision of

mental health care is required in prisons to achieve equivalence'. This report highlights not only the continued non-equivalence between prison and community mental healthcare, but also emphasises that equivalence must also mean comparability of standards between prisons. However there may be a wider argument about equivalence. As discussed, there is a much greater variety of services available in the community than in prison but Brooker et al., (2007) question the wisdom and utility of modelling prison services such as in-reach teams on CMHTs. They argue that any models seemingly effective in the community cannot be applied to the prison population because the tension between the retributive nature and security demands of prisons and the therapeutic aspirations of mental healthcare render the two environments incomparable. In addition, issues around criminality further complicate the picture. What Booker et al.'s model highlight is the lack of specificity of the principle of equivalence. Although it was adopted a number of years ago Brooker et al highlight how governments and as a consequence health care providers have aimed at adopting it without considering the differences between the general population and prisoners or the nature and structure of community services and prison services. Without addressing these issues it is unsurprising that a great disparity between the two settings still exists. The fact that the two populations differ significantly in terms of their psychiatric morbidity and the conditions under which services for them have to be planned, implemented and delivered must be reflected in the principles that underpin service delivery. While Brooker et al. unequivocally demonstrate that equivalence of care does not yet exist in prisons they do not challenge the concept itself. By even their most conservative calculation prison mental health budgets ought to be 13 times what they are now. In the current – or any- economic climate this is a tall order. It might therefore be appropriate to re-define what we mean by equivalence of care. One aspect the principle does not address

expressly, is the goal of service provision, i.e. what would constitute a satisfactory outcome of therapies. Perhaps it is therefore time to rethink our understanding of the principle of equivalence and change the emphasis from equivalence of healthcare standards to equivalence of outcomes. The accumulation of morbidity in prison demands greater levels of intervention to achieve levels of success similar to those in community settings. Settling merely for the same level of input in prison as in the community will result in an overall smaller reduction in morbidity in prisoners, to their detriment (Lines, 2006).

### **2.6 - A new attempt at a solution**

Despite the fact that some momentum has certainly been gained in the drive to improve prison mental health care, the results clearly leave a lot to be desired. A plethora of policy initiatives notwithstanding, the 'rehabilitation revolution' promised by Kenneth Clark as recently as 2010 seems slow in materializing. There is an argument that it is precisely this abundance of output that has led to the incoherent structures that we now have, despite nearly twenty years of reform. In the Brooker & Ullmann (2008) review, one of the biggest difficulties in-reach teams were presented with was their separation from other services. There was a strong perception that too many policies had been rolled out separately, resulting in an overall disjointed offender pathway into mental health care. While it is commendable that policy initiatives and reviews are comprehensive and ambitious, it is often this very quality and the fact that the resulting recommendations are interdependent that makes their implementation difficult. A nationwide system of court diversion schemes has only limited value without new places in secure units for people to be diverted to, and these, in order to be effective, require appropriate facilities for aftercare (Chiswick 1992). Of



course implementation is also dependent on what the government is willing and able to fund (which perhaps exceeds the 900 new secure unit beds, 175 new psychiatrists and 80 new forensic psychiatrists recommended by Reed). What can result is a “pick-and-mix” approach to policy implementation.

*The Mental Health of Prisoners* (Her Majesties Inspectorate of prisons, 2007) arrived at two major conclusions. First, there were still too many gaps in service provision, and secondly, need will remain greater than capacity unless services for mentally disordered offenders in the community are improved and people are directed to them before, instead of, and after custody. Improving diversion schemes will therefore be as important in reducing the burden on prison mental health services as increased funding and better commissioning.

#### 2.6.1 - The Bradley Review

These findings were echoed by Lord Bradley, who, in 2007, was asked to undertake an independent review of barriers to diversion schemes. He quickly realized that the lack of progress in this area stems from the continued development of new policies and practices in isolation from one another, which never target the system as a whole, but rather focus on smaller problems one at a time. As a result the consultation period for the review was extended and finally resulted in a comprehensive consideration of the offender pathway. The Bradley report makes 82 recommendations for the improvement of diversion schemes at every step of the of the offender pathway, including:

- Early intervention, arrest and prosecution
- The court process
- Prison, community sentences and resettlement

- Delivering change through partnership

The Health and Criminal Justice Programme Board published its National Delivery Plan entitled '*Improving Health, Supporting Justice*' in 2009 (DoH, 2009). It set out a strategic framework and five cross-departmental objectives, which were underpinned with key deliverables for relevant Government Departments in the areas illustrated above. The Centre for Mental Health has set up an independent commission to carry out a five-year-on review of the Bradley report. Chaired by Lord Bradley, the commission will review progress made in achieving the recommendations set out in the report, and will publish its findings in 2014. However, even if the commission finds that good progress has been made, there are some indications that this will not have had the desired 'knock-on effect' for prison mental health services. A recent study into the variations in prison mental health services revealed that little has changed. In a survey of 105 prisons across England and Wales some of the issues discussed earlier continued to prevail (Forrester et al., 2013). In 13% of prisons surveyed no in-reach teams were in operation (although these were significantly more likely to be category D prisons) and there was still considerable variability in the models these services had adopted, with 57% following the CMHT model described in *Changing the Outlook*, 30% following an out-patient model with medically led outpatient clinics only, and 13% following an in-patient model, where all care was arranged around the healthcare unit, the very thing *Changing the Outlook* sought to put an end to. Staffing levels and complements were still an issue. Nurses again formed the largest staff group but the mean was just under two. The next biggest group was medical staff with an average of 0.3 WTE per prison. Most other staff groups, if at all present, were so only in very small numbers. There was only a weak association between prison size and staffing levels, indicating that

staff teams were not designed with the level of need in the population in mind. On average each nurse covered 500 prisoners and each doctor 3700; whilst many teams had access to a consultant, the great majority of them worked only one, two, or three half- day sessions in the prison. Worryingly though, 29% of team had no consultant cover at all. In addition, only 24% of MHIRTs had a dedicated psychologist. These figures are disheartening, but without more up-to-date figures on current morbidity, it is difficult to determine their true impact. It seems there is still some progress to be made in achieving the goals envisaged some 20 years ago.

## **2.7 - Assessing mental health needs**

### **2.7.1 - Defining needs**

Any meaningful reform of prison mental health services must correspond to the treatment needs of MDOs in prisons, a fact that is reflected in all the policy papers previously reviewed calling for an assessment of need on which the implementation of new services should be based. And yet none of these papers give guidelines as to how such an assessment should be carried out or even what constitutes 'need'. Rafferty (1994) defines need as the potential to benefit from an intervention, which makes it different from 'demand', i.e. what a person asks for, and 'utilisation', i.e. the take-up of services.

*Demand* for services is based on the way clients perceive their needs and is thus based on lay knowledge of disorder and treatment. Inevitably the sophistication of such knowledge will vary between individuals and depend on people's illness perceptions. *Need* is the requirement for services identified based on a professional perspective, and assumes that there is a potentially effective intervention for a problem (Stevens & Gabbay, 1991).

*Utilisation* can be shaped by practical issues such as the availability of services, but is also affected by people's beliefs about their needs, and by the accessibility, real or perceived, of services. Services may also be sought inappropriately, or declined to the detriment of health (Bebbington et al., 2011, unpublished).

### 2.7.2 - Needs assessments in the academic literature

As mentioned earlier, establishing prevalence rates of psychiatric disorder can only serve as an indicator of requirements for mental health treatment and services as symptomatic prevalence is an imperfect predictor of treatment needs (Bebbington et al. 1996). Several factors impede a straightforward relationship between diagnosis and ideal treatment. Sometimes the mere presence of a set of diagnostic criteria does not necessitate treatment. In other cases, even though a diagnosis has been made and suitable treatment identified such an intervention is rejected by the client, rendering the need 'unmeetable'. Most importantly, clinicians do not base their treatment strategy on diagnosis alone, they consider factors such as the development of symptoms, their associated distress and the level of social impairment they cause (Bebbington et al. 1996). These considerations can lead to significantly different treatment approaches, even when clients meet the same diagnostic criteria.

It is therefore clear that any meaningful reform of prison mental health services needs to correspond to the actual treatment needs of MDOs in prisons. Curiously, such literature is sparse. While there is some research on the treatment needs of MDOs in secure settings (Mader et al., 1993, Pierzchniak et al., 1996, Coid et al., 2000), evidence about such needs in prison environments is scant. In an early study, Gunn et al. (1991) assessed psychiatric need in a 5% (n=406) sample of the male sentenced population of the time. Prevalence rates of psychiatric morbidity were relatively low in comparison to other studies (psychosis 1.9%, Personality Disorders 10%, alcohol and drug abuse 11.5% respectively) which might at least partially be explained by the fact that each participant could only have up to three conditions diagnosed. In addition participants were not assessed with diagnostic instruments, rather diagnoses were made based on clinical judgements. These limitations may have impacted the decision on treatment needs, as co-morbidity rates of mental disorders tend to be high. The treatment options that participants were rated on were treatment within prison (i.e. treatment that either a GP or psychiatrist would provide, such as drugs or psychotherapy), therapeutic community (i.e. transfer to an institution operating such a regime, mostly for people with personality disorders, but also some drug and alcohol rehabilitation facilities), further assessment (in instances where there was uncertainty about diagnosis, treatment or motivation to engage), and hospital (meaning transfer to an inpatient facility). Judgments about appropriate treatment were made by the research team on clinical grounds. Results showed that 3% were judged to require a hospital transfer, 5% required treatment in a therapeutic community and 10% were deemed to be in need of further psychiatric assessment or treatment within prison. The study did not specify in any detail which intervention in a particular needs category was deemed appropriate for each

case, making it difficult to understand which specific interventions were particularly needed. The study did not determine to what extent these needs had been met.

Harty et al., (2003) focused on male psychotic (N=73) prisoners, sentenced and remand, using the Camberwell Assessment of Needs (CAN) to assess needs in this group. The CAN is a standardised instrument developed for individuals with severe mental illness. It comprises of 22 individual domains of need which are divided into 'met' and 'unmet' needs. While the CAN does include items that assess mental health needs (psychotic symptoms, psychological distress, drugs and alcohol) the majority of items address resources (e.g. transport, money, food, accommodation), relational need (company, sexual expression, intimate relationships), self-care (looking after the home, safety to self/others) as well as physical health.

Unsurprisingly, needs in this population were high across the majority of items, but the highest level of need was recorded for psychotic symptoms and psychological distress (around 80% and 75% respectively). Overall, 12% of psychotic needs were met, while for psychological distress this figure was nearly 20%. The figures for alcohol and drugs needs were lower (roughly 30% and 48% respectively): however here rates of met need stood at less than 5% for both items. Harty et al. (2003) also sampled a group of male patients with psychosis in the community (CMHT group). The prison group tended to have higher levels of needs across the board. Overall the individuals in the community group had an average of 5.8 needs in comparison to 7.5 needs in the prison group. In the community group, an average of 1.3 needs went unmet, while amongst the prison sample this figure stood at 5.8 unmet needs. For psychotic symptoms, the rate of need was virtually the same. However in the community group only about 5% of this need was unmet (for the prison group around 85% of needs for psychosis were unmet). The need for psychological distress stood at about

40% in the community group, with around 13% of needs rated as unmet (for the prison group around 80% of needs for psychological distress were unmet). Interestingly the level of need rated for alcohol and drugs was virtually 0% in both instances in the community group. Given what is known about the co-morbidity of mental disorders and substance misuse, this is surprising. The most likely explanation is that, in this study, need was rated by service users themselves. Bearing this in mind, it is noteworthy that among the prison group the level of need recorded for drugs is similar to the prevalence rates of drug misuse reported in many epidemiological surveys, while the discrepancy is somewhat bigger in the alcohol category.

A similar study (Harty et al., 2012), which drew its sample from MHIRTs (n=151) mirrored these findings using an adapted version of the CAN (Camberwell Assessment of Need Forensic – Short Version {CAN-FOR-S}, Thomas et al., 2003). While in this instance the most frequent unmet need identified by patients was daytime activities (54%), this was followed by psychotic symptoms (31%) and psychological distress (27%, Harty et al. 2012). Similar to the 2003 study of Harty et al., rates of treatment needs for alcohol and drugs related problems were also low, with 14% of participants stating they had met needs for alcohol treatment and 15% reporting met needs for drug abuse treatment. The figures for unmet need stood at 9% and 8% respectively. In this instance, participant interviews did include schedules assessing prevalence of mental disorders and 42% of participants were deemed to have a history of alcohol abuse, and 57% a history of substance misuse, leaving a substantial gap between needs and prevalence rate that will be revisited shortly.

Overall, the average number of needs for individuals in this sample stood at 6.0 whilst the figure for unmet needs was 2.7. These studies show that, in terms of overall need, the

MHIRT group fared similarly to the CMHT group in the Harty et al. (2003) study. However, whilst under a third of all needs were unmet in the CMHT group, this was the case for nearly half the needs in the MHIRT group, suggesting outcomes somewhere between CMHT and general prison populations. Considering that prison MHIRT were set up in order to provide care equivalent to that in the community, these findings are disappointing. It is also noteworthy that only 25% of participants from the MHIRT group suffered from a psychotic illness, whilst this was the case for all participants in the CMHT group. The authors noted that it was therefore difficult to determine whether higher rates of need and unmet need would have been observed if all participants from this sample had been suffering from psychosis. Conclusions about the comparability of outcomes would have been strengthened if the study of Harty et al. (2012) had included assessments of a comparative group of prisoners not known to prison MHIRT.

An important issue to consider is the organisational differences between prison MHIS and CMHTs/inpatient mental health services in meeting needs identified by service users due to the obvious differences between the settings, e.g. in hospital settings most matters of daily living are under the control of the hospital including nutrition, access to structured activities, deliberate self-harm observation regime, visiting procedures, phone calls, etc., whilst prison MHIS constitute just one part of the organisation around the prisoner, and cannot be expected to have the same degree of influence over many of the needs found to be unmet in these samples.

The government White Paper, *Equity and Excellence: Liberating the NHS* (DoH, 2010a) and the consultation document, *Healthy Lives, Healthy People: Transparency in Outcomes Proposals for a Public Health Outcomes Framework* (DoH, 2010b) emphasise the need to



transform NHS services through shared decision-making with patients, and the use of tools such as patient reported outcome measures and patient experience data. Focusing exclusively on such methods can prove problematic though, as is illustrated by Harty et al. (2012): results from both the alcohol and substance misuse schedules showed high-levels of alcohol and substance misuse by MHIRT patients (42% and 57%), but comparatively low levels of need. Given the strong body of evidence for an association between violence and substance misuse in mentally disordered people (Hodgins & Muller-Isberner, 2004; Walsh et al., 2002; Walsh et al., 2004), the potentially high level of unmet treatment need identified in the study is cause for concern, particularly as co-morbid substance abuse is known to be a predictor of future violence and recidivism (Monahan et al., 2006; Scott et al., 1998). The discrepancy between the findings from the two schedules compared in the CANFOR ratings of need in the areas of alcohol and substance misuse are significant and, as the authors concede, may be '... a manifestation of denial of problems by MHIRT prisoner patients in these areas.' This clearly has important implications for prisoner patients in terms of the treatments available for alcohol and substance misuse whilst they are in prison, the likely impact on reoffending/conviction rates following release, and future risk management in the community. It is therefore clear that the planning for mental health care provisions must be augmented by clinician appraisals of need. For the purposes of understanding the contribution each of these groups can make towards policy reforms, it might therefore be useful to describe the service-user ratings of need so far reviewed as 'demand'.

A second concern arising from the current needs literature and its utility for mental health provision planning is that none of the studies focus exclusively on mental health variables

and the different treatment options available to address them, obscuring the identification of appropriate allocation of resources.

The MRC Needs for Care Assessment (Brewin et al., 1987), which was chosen for the needs assessment in the current study, was designed to define the relationship between prevalence and treatment needs. It aims to standardise the application of clinical judgement (which otherwise has considerable potential to be idiosyncratic), in order to allow disorders to be linked to appropriate treatment through rules that operationalise need. This will inevitably reflect the level of service provision in primary care and psychiatric services. The instrument is comprehensive, in that it includes all major mental disorders as well as areas of clinical and social functioning. For each area of clinical and social functioning covered, the assessment specifies a minimum level of functioning and a set of appropriate interventions or items of care and records whether such interventions have been offered.

### 2.7.3 – Examples of prison service commissioned needs assessments

As mandated by the new policies, health authorities have started to commission mental health needs assessments, employing different methodologies. In HMP Whitemoor all prisoners were given self-report questionnaires asking them about any mental health issues they felt they had.

Overall, 35% of prisoners who returned the mental health questionnaire (29% of the total population) admitted to a mental health problem. They described their problems variously as depression, panic attacks, schizophrenia, stress, hearing voices and sleep problems. Only

26% of respondents had been seen by a doctor, nurse, prison psychologist or visiting psychiatrist, and 60% felt they needed further help.

Anthony and McFadyen (2005) used the CAN to develop a tool for assessing mental health needs in prison. They used data obtained from a mental health needs assessment commissioned by the PCTs then responsible for commissioning services in the five prisons of Leicestershire and Rutland. Due to financial constraints, self-completion surveys were chosen to obtain information. Whilst this method has the advantage of surveying large numbers of people relatively cheaply and without putting great strain on resources, there are also several drawbacks. Thus prisoners might not understand all items on a scale or it may not be user friendly, particularly where it has not been specifically developed for the use of lay-people. Poor reading and writing skills, which are quite common among prisoners, might prevent some prisoners from participating in surveys, and similar problems might affect the participation of prisoners whose first language is not English (Anthony & McFadyen, 2005).

Eventually the researchers decided to use CANSAS, a short version of the CAN, which is designed to be filled in by a health care professional after an interview with a participant/patient and takes about 25 minutes to complete. Since this would still have exceeded the available resources, it was decided to use the instrument as a self-completion tool, since it has been reported to be easily learned by staff members and used without specialist training (Evans et al. 2000). Table 2.1 shows the results for mental health related needs.

**Tabl: 2.7.3.1 – Mental health related needs reported using the CANSAS**

Items of CAN	No need (%)	Met need (%)	Unmet need (%)
Psychological distress	40	20.8	26.4
Psychotic symptoms	65.6	13.6	14.4
Drugs	63.9	13.7	17.7
Alcohol	69.4	9.8	16.4
Information on treatment	55.7	12.3	19.7

The fact that the figures in each row do not add up to 100% reflects methodological issues with using self-report measures, e.g the authors note that many prisoners expressed a need in a particular area by ticking the relevant box but did not select a numerical value to indicate whether it had been met or not, resulting in a significant amount of missing data.

The mean for met needs was 2.6, and for unmet needs 3.2. It is difficult to determine how representative these findings are, as the authors did not report the sample size and the distribution was heavily skewed. Furthermore these figures only represent data from one prison, as the response rate from the remaining four was too low (the response rate from the prison they did base their findings on was not given). Feedback from staff and prisoners indicated that this was due to the irrelevance of many items. The prison from which the above data were obtained contained a large proportion of remand prisoners, who, having recently been in the community, may have found the questionnaire of more relevance.

The difficulties experienced by these authors are an indication of the considerable resources required to mount studies of needs in the prison estate. As a result, they decided to devise a new instrument based on a subset of CAN items, the Prisoners' Mental Health Inventory (PMHI). Amongst the questions that were deemed irrelevant and were therefore dropped were items such as 'accommodation', 'use of the telephone' and 'childcare'. Eventually nine

items were retained, namely strong mood swings, hearing voices, other problems with thinking, depressed or anxious, alcohol, drugs, self-harm, aggression, and sexual problems related to mental health. The new tool also included open answer questions asking about what help had been received from whom, and what further help was required. Face and content validity, internal reliability, convergent validity and factor analysis were then measured. In this second survey the response rates of the prisons ranged from ten to 16% with the exception of one prison where 35% of prisoners returned the questionnaire (N=595). There were significant differences between prisons in the frequency of problems relating to strong mood swings, aggression, and self-harm, but not in other thinking, depression, anxiety, alcohol, drugs and sexual problems due to mental health issues. The internal reliability of the new tool was high, with a Cronbach alpha of  $\alpha=0.83$ . Factor analysis revealed two factors with an eigenvalue of  $1>$ . The first factor accounted for 43.7 of the variance and consisted of all items apart from those relating to drugs and alcohol, which loaded onto a separate factor accounting for a further 12.4 of the variance. Face and content validity were assessed with the help of a steering group comprising of the commissioners of the audit and mental health nurses from each of the five prisons. Based on this feedback, the instrument was shortened and modified and piloted on a relatively modest 11 prisoners. Out of these one prisoner had difficulties completing the questionnaire, and one could not read the questions. It is not specified what changes were made, how significant they were, and in what way the questionnaire was shortened. The rest of the data reported in the study were obtained using the initial version of the PMHI, and in the absence of more specific information about the changes made, it is difficult to determine if subsequent use of the modified instrument would yield comparable results.

The researchers also aimed to validate prevalence rates obtained from the questionnaires through staff interviews and pharmacy data on how many prisoners were on anti-psychotic and anti-depressant medication. Staff were asked to estimate the number of prisoners they believed to suffer from psychosis and offered figures of between 1-5%. Pharmacy records revealed that in fact 3-8% of the population in the participating prisons were on anti-psychotic medication (with the exception of one prison, where 0.3% of prisoners were on such medication and staff gave an estimate of 2%). The paper does not specify what types of staff were interviewed, i.e. whether they were health care related, such as doctors, nurses or social workers or whether they were part of the prison estate. A relatively small number of these interviews were carried out (n=17), and no information is provided on what the given estimates were based on. Using pharmacy data can prove similarly problematic, as the figures do not offer any information on the appropriateness of the prescribed medication or indeed on cases that may not have been detected. Such an observation was made by Hassan et al. (2014), who examined prescription patterns of psychotropic medication in four prisons and cautioned against relying on psychotropic medication prevalence as a measure for psychiatric morbidity. Citing evidence from Fazel & Danesh (2002) which indicates that rates of depression and psychosis are two to four times as high among prisoners than in the community, they found rates of drug prescription to be between 5.5 to 6 times higher among prisoners than in the community, suggesting an excess of such prescription in prison. Prescription rates may further obfuscate true rates of psychosis, as anti-psychotic medication in small doses can be used to treat anxiety. Discrepancies were certainly apparent when these figures were compared to symptoms reported by prisoners using the PMHI; 19% reported hearing voices, 37% reported strong mood swings and 27% complained about having other problems with thinking. Whilst these are the items that both

CAN/CANSAS and the PMHI use to elicit information on psychotic symptoms, they might of course also occur in the context of other mental health problems. Furthermore there did not seem to be good fit between these figures obtained via the PMHI, and those for the same items obtained from the CANSAS, where only 28% reported problems with strong mood swings and 28% also complained about hearing voices, which was much higher than the 19% who described such problems using the PMHI. In fact with the exception of depression and anxiety and other problems with thinking (where figures are nearly identical), data obtained from the two instruments vary considerably, as can be seen in Table 2.2

**Table 1: 2.7.3.2 - Symptoms reported with PMHI and CANSAS**

Symptom	PMHI (%)	CANSAS (%)
Depressed or anxious	47.0	47.2
Alcohol	43.1	26.1
Drugs	41.4	31.4
Strong mood swings	36.7	28.0
Self-harm	28.8	20.2
Other problems with thinking	26.6	28.0
Aggression	24.6	16.2
Hearing voices	19.0	28.0
Sexual problems related to mental health	11.8	23.6

Authors noted that there was ‘remarkable consistency’ between PMHI data and that obtained from the ONS prison survey (Singleton et al., 1998) but differences do seem apparent for some symptoms and comparisons between the two may be impeded by

differing methodologies. In addition the Anthony & McFadyen (2005) study did not distinguish between remand and sentenced prisoners, resulting in a potential sampling bias in that their sampling strategy relied on available prisoners, which may have skewed the sample towards prisoners with longer sentences. As discussed earlier, remand prisoners tend to display higher rates of psychiatric morbidity and therefore oversampling or undersampling this population can potentially skew results. For some symptoms, comparisons are difficult because of the way variables have been operationalised. For self-harm (actual or considered) for instance the PMHI reports rates of 28.7%. The paper does not describe whether respondents were instructed to think of a particular time frame when answering this question, which makes comparisons with ONS prison data difficult, where 46% of remand and 37% of sentenced male prisoners had contemplated suicide at any time, and 5% of remand and 7% of sentenced males prisoners had self-harmed during their current sentence (Singleton et al. 1998). Similar problems become evident when looking at psychosis. The figures for prisoners reporting psychotic symptoms and the problems with the definition of the items have been discussed above, and may go some way towards explaining why they are much higher than the ONS figures for psychosis, which were 7% for sentenced and 10% for remand prisoners. Figures for depression and anxiety were however much closer, with the PMHI reporting a prevalence rate 47.2%, in comparison to the ONS' 59% and 40% (for remand and sentenced prisoners respectively) for neurotic disorders. PMHI figures for drugs and alcohol were also high, but not as high as the ones in the ONS study. The PMHI reported 43.2% of respondents having alcohol problems, though again it is not clear how these are defined. The ONS figures show that 58% of remand and 63% of sentenced prisoners drank in a hazardous manner in the 12 months before coming to prison. The PMHI also showed that 41.8% of respondents had a drugs problem, again



without elaborating on how these were characterized. In this instance figures were similar to the ONS study, where 43% of remand prisoners and 51% of sentenced prisoners reported at least some drug dependency in the year prior to coming to prison. A major shortcoming of the PMHI is that it does not measure personality disorder at all, thus ignoring a source of potentially significant psychiatric burden. Whilst in the first phase of the study prisoners were asked to rate needs (see Table 2.7.3.1), this approach was dropped in the subsequent round of data collection using the PMHI. It is not clear why this decision was taken, but it arguably renders the results more relevant to the establishment of prevalence rates than to the determination of actual treatment needs.

In conclusion, this approach to needs assessment provides results that reflect the current literature on psychiatric morbidity, at least to the extent that it is high, but it does seem to miss some of the finer points. The authors do recognise this when they conclude that a 'cheap and quick assessment is problematic', but express concern over other approaches. They rightly argue that approaches such as interviews or the creation of validated mental health needs assessment tools specific to prisoners are expensive and time consuming, and that interviewing prisoners might be problematic because they would not feel confident that their anonymity would be preserved. Given the high response rates in the ONS prison study, the last concern at least seems unwarranted. Results from this study need to be interpreted with caution as it suffered from several methodological and conceptual issues. As noted earlier, there was evidence of a sampling bias the authors did not address, several components of the study did not include sample descriptions or response rates and the inclusion of psychotropic medication prescriptions as indicators of morbidity has also proved problematic. In addition the PMHI has limited utility as a needs assessment tool. It

does not include any diagnostic criteria, relies entirely on prisoner self-report, does not assess for specific disorders and does not include needs ratings for specific interventions.

A different approach to a mental health needs assessment is based on a 'toolkit' published by Marshall, Simpson & Stevens (2001). According to them the aim of a mental health needs assessment is to:

- Provide information in order to develop prison health improvement plans
- Negotiate changes in the way services are delivered to improve standards of care
- Establish current levels of service provision
- Create a baseline by which to measure progress

A good Prison Health Improvement Plan should be underpinned by a comprehensive Health Needs Assessment incorporating the following:

- Use of a combination of methods (epidemiological, comparative and corporate)
- Sets out a baseline (including resources)
- Assesses incidence, prevalence and effectiveness
- Makes use of the above to draw conclusions and recommendations
- Recommendations are used to inform the development of an action plan which is practical, prioritised and resourced

## **2.8 - Gender differences in psychiatric morbidity in prisoners**

There is a well rehearsed body of literature highlighting gender differences in rates of mental disorder. The World Health Organisation estimates that 41.9% of the disability from neuropsychiatric disorders among women is accounted for by depression, compared to 23.9% among men, and that, by 2020, depression will be the second leading cause of global disability burden (Chan, 2010). The lifetime prevalence rate for alcohol dependence is more than twice as high in men as in women. In developed countries, approximately 1 in 5 men and 1 in 12 women develop alcohol dependence during their lives. In Britain the 1993 national psychiatric morbidity survey showed that women were about two-thirds more likely than men to be depressed (Meltzer et al., 1995) with the biggest rate of difference occurring during reproductive years (Bebbington et al. 2003). Having reviewed evidence for several possible causes of these differences, such as hormonal, biological and stress response factors, Nazroo (2001) concluded that the most likely explanation can be found in gender differences in roles, with women at greater risk of depression in response to particular types of crisis. However there is also evidence to contradict this conclusion (Weich et al., 1998). There are no marked gender differences in the overall incidence and prevalence rates of severe mental disorders like schizophrenia and bipolar disorder, which affect less than 2% of the population (Kirkbride et al, 2012). However there are gender differences in the age of onset, first admission and symptoms of schizophrenia and other psychotic disorders. It is consistently reported that men develop schizophrenia and hence experience their first admission to hospital at a younger age than women (Angermeyer et al, 1988). They also experience more negative symptoms, while women experience more positive and affective symptoms (Maric et al., 2003). Course and outcome also vary

according to gender, with women tending to have a better prognosis with better functioning over time, more frequent periods of good functioning and fewer and shorter rehospitalisations (Grossman et al., 2006).

Findings from the British Psychiatric Morbidity Survey (Jenkins et al., 2003) suggest that one adult in 20 had experienced symptoms of alcohol dependence in the preceding year and one in 40 dependence on drugs. Men were more than three times as likely to be dependent on alcohol than women and twice as likely to be dependent on drugs. However, while men appear to be more likely than women to misuse drugs and alcohol, research with clinical samples of substance users has found no differences between women and men in severity of substance use, i.e the degree to which men are dependent on substances (mild, moderate or severe) is not worse for men than for women (Downey et al., 2003, Galen et al., 2000).

Comparing sociodemographic characteristics, patterns and effects of alcohol abuse and psychiatric morbidity in a clinical sample of men and women, Dunne et al. (1993) found that women were more likely to be binge drinkers, to have premorbid anxiety, and to be diagnosed with primary depression. Men cited social reasons for drinking, whereas women were more likely to drink to alleviate anxiety. Women were also more likely to have a family history of psychiatric disorder and/or alcohol misuse. More women drank at home alone than men, but almost as many drank openly with their spouses or friends. Women in the prison population report more severe substance misuse histories than male prisoners but also have higher rates of coexisting psychological problems (Messina et al., 2006). Similarly, Langan and Pelissier (2001) compared male and female prisoners taking part in a drug treatment program. The men in the sample were more likely to report that they had used

drugs for hedonistic reasons, while the women were more likely to report that they had used drugs to alleviate physical or emotional pain, meaning that substance misuse in this instance is best understood as a maladaptive coping mechanism as opposed to an isolated clinical problem.

However it should be noted that there is an argument against generalising gender differences in prevalence of mental health disorders and severity of substance use found in the community to imprisoned substance abusers, as pathways to substance use, treatment entry and possibly motivation for substance use vary between the two groups (Pelissier & Jones, 2006)

### 2.8.1 - Experiences of abuse and psychiatric morbidity

A significant predictor of adult onset of mental disorders is childhood physical and sexual abuse, and there are also significant gender differences in the prevalence of such abuse. A general population survey in the UK found that rates of child sexual abuse were more than twice as high in women than in men (16% and 7% respectively, May-Chahal & Cawson, 2005). Using data from the 2007 Adult Psychiatric Morbidity Survey of England (McManus et al., 2009), Bebbington et al. (2011) examined the relationship between childhood sexual abuse and a range of mental disorders, including psychosis, borderline personality disorder and anti-social personality disorder. They found that in all cases the overall association was highly significant. Taking into account different levels of severity of abuse (non-consensual intercourse being the most severe), it was found that non consensual touching and even uncomfortable sexual talk had highly significant associations with the disorders under

investigation. With regards to gender, it was found that, for common mental disorder, drug dependence, alcohol dependence and post-traumatic stress disorder (PTSD), the odds ratios were much greater for women than for men. The greatest difference in odds ratios was in relation to non-consensual intercourse. In males, the odds ratios were non-significant in relation to non-consensual intercourse for common mental disorder, drug dependence and PTSD. For PTSD this was also the case for contact abuse (Bebbington, private communication). PTSD scores however were obtained through screening rather than diagnostic tools, so prevalence rates were likely to be elevated. Examining the population attributable risk fraction, i.e. the proportion of psychiatric disorder attributed to sexual abuse, the distinction between men and women became greater, and the researchers concluded that sexual abuse is not only more common in women but its effects are also more severe.

The largest population-based case-control study of early trauma and psychosis yet conducted (Fisher et al., 2009) found that there was a significant effect for sexual abuse in both the female first episode psychosis group as well as the female general population control group. No such effect was found for men. It was also found that the effect for physical abuse in women was stronger and more robust than that of sexual abuse. Specifically, women suffering from psychosis were nearly three times more likely to report physical abuse than those in the control group, and twice as likely to report sexual abuse. The strengths of these associations were only marginally decreased by controlling for confounding variables such as age, ethnicity and parental mental illness. Neither of these associations were found in the male sample. Overall the prevalence rates found in this study replicated findings from the survey conducted by May-Chahal & Cawson, (2005).

Conducting research in a sensitive area such as sexual abuse has methodological implications. Problems may arise from having to rely on self report measures, the effects of memory, time and possibly shame. There is however evidence that reports of sexual abuse are reliable, even in those suffering from psychosis, who tend to be more affected by memory problems (Darves-Bornoz et al., 1995). Fisher et al. (2009) controlled for these problems by using an assessment tool with conservative cut-off points and therefore only included the most severe cases of abuse. The fact that this makes under-reporting more likely than over-reporting only emphasises the magnitude of prevalence rates they have found. In addition they limited the cases group to first episode psychosis sufferers, therefore controlling for the effects of chronic psychosis. Other potential confounding variables, such as social deprivation and substance misuse however were not controlled for, and might therefore explain part of the excess abuse rates (Fisher et al, 2009). Similarly Bebbington et al. (2011) consider that more minor forms of abuse, such as their category of 'uncomfortable sexual talk', might be more liable to being forgotten or repressed over time, again making under-reporting more plausible and yet even this comparatively 'minor' form of abuse was strongly associated with certain types of psychiatric disorder.

### 2.8.2 - Traumatic experiences and PTSD

In the context of gender specific approaches to custodial care, the role of traumatic experiences in female offenders' lives has attracted increasing attention. In particular it has been argued that many of the coping mechanisms of trauma survivors are criminalized (e.g. drug abuse) or at least increase the probability of coming in contact with the criminal justice system (DeHart, 2008). Survivors of abuse have often fled from broken homes, thus

rendering themselves vulnerable to additional violence living on the streets or through abusive relationships. They might use illegal substances to numb the pain of their experiences, or become involved in crimes such as theft or prostitution in order to provide for themselves (Harner et al., 2013). In the UK, research on the nature and impact of such experiences is still scant. A Home Office study in 1997 found that out of 234 imprisoned women a third had a history of child sexual abuse and a fifth had been abused both as children and as adults. Similar findings were reported in the National Prisons Survey under 'risk factors for psychiatric morbidity' (Singleton et al., 1997). However, PTSD was not included as a separate diagnostic category in the assessment schedule. In contrast, in the USA PTSD is the second most common diagnosis in incarcerated women after substance misuse (Teplin, 1996). Studies among remanded prisoners in the USA reveal prevalence rates of between 17% and 22% (Brindad et al, 2001, Green, et al. 2005). A lack of information with regard to convicted prisoners prompted Harner et al. (2013) to examine prevalence rates for this population, as well as exploring the association with other mental health conditions. It is possible that the process of being arrested, charged and remanded in custody in itself is traumatic, and findings may therefore be confounded by the acute distress experienced in such situations (Goff et al., 2007). This may be why there are important distinctions between remanded and sentenced populations. Harner et al. (2013) sampled 387 women in a maximum security prison and found that 45% met diagnostic criteria for current PTSD; 23% had severe symptoms, 58% moderate to severe symptoms, and 19% moderate symptoms. Compared with their non-diagnosed counterparts, respondents who met diagnostic criteria for PTSD were significantly more likely to have experienced both sexual and non-sexual assault by persons known or unknown, and sexual contact under the age of 18 with someone five or more years older. Because this study



employed a cross-sectional design with a non-probability sample and relied on self-report rather than clinician administered tools, findings are difficult to generalise, but the startlingly high rates of PTSD must give concern, particularly as more vulnerable prisoners such as those in segregation units and the mental health wing were excluded for security reasons. Inclusion of these samples would almost certainly have increased the rates of PTSD even further.

Given that, as has been demonstrated, childhood sexual abuse is an important predictor of PTSD and that rates of childhood sexual abuse amongst prisoners are high (Weeks & Widom, 1998), it is surprising that so few data has been collected about PTSD in prisoners. In a literature review, Goff et al. (2007) only found five studies that examined PTSD amongst prisoners, and excluded one of these on the basis that it sampled remand prisoners. The remaining four reported prevalence rates of 4%, 10% and 21% (two studies) amongst sentenced populations. The difference in rates could in part be explained because those studies with higher prevalence rates allowed for longer 'at risk periods' (i.e. symptoms could have been present up to 12 months prior to interview) and the study with the lowest prevalence rate did not include women. Gender again played an important role, as one of the studies with the higher prevalence rate consisted of a mixed sample (Butler & Allnut, 2003), and the difference between male and female participants was marked with 28.6% of women and 9.5% of men meeting diagnostic criteria for PTSD. This was also the study that assessed for the presence of symptoms 12 months prior to interview. The study with the intermediate prevalence rate of 10% also included women, and again the gender difference was evident, with 16.5% of women and 8.5% of men receiving a diagnosis of PTSD. There

are a number of reasons why the rates obtained by Harner et al. (2013) are significantly higher than those reported for the female samples here, such as the fact that they neither selected their sample randomly nor used a clinician administered assessment tool. It should be noted though that although the respondents filled out a self-report measure, researchers scored it to obtain a DSM-IV diagnosis. Harner et al.'s findings do mirror those of an earlier study: Zlotnick (1997) randomly sampled sentenced female prisoners in a Rhode Island prison (N=85), and found that 48.2% met criteria for PTSD using the Structured Clinical Interview for DSM-IV.

These figures stand in stark contrast to those found in the general population. The U.S. National Comorbidity Survey (NCS) (Kessler et al., 1995) estimated a 7.8% lifetime prevalence of PTSD (5% for men and 10.4% for women). The traumas most commonly associated with PTSD were combat exposure among men and rape and sexual molestation among women. Lifetime comorbidity rates were similar to those of the prison population, and ranged from 62% to 92%, with particularly strong associations with affective, anxiety and substance use disorders. The most prevalent trauma was sudden unexpected death of a close relative or friend (60%), followed by other injury or shocking experience (including natural disasters, witnessing a traumatic event or accidents, 59.8%). The 2007 household survey of psychiatric morbidity screened for current (not lifetime) PTSD, but only applied two of the criteria for PTSD. Rates were low: 2.6% in men, and 3.3% in women. They would have been lower still if all the criteria had been applied. The conversion to PTSD given a traumatic event was 10.4% in women, but only 7.5% in men. Men and women had a similar experience of traumatic events since age 16 (35.2% and 31.5%, respectively, McManus et al., 2007).

### 2.8.3 - Women in prison – England and Wales statistics

There has been a growing recognition that female prisoners differ qualitatively from their male counterparts on a range of criminological, social and historical variables, as the following data highlight.

As noted earlier mental health problems are significantly higher in remand than in sentenced populations (Singleton et. al., 1997). Nearly 20% of the adult female prison population is on remand. The number of women on remand increased by 105% between 1995 and 2005, compared with a 24% increase for men (Social Exclusion Task Force, 2009). Around one in five women held on remand before trial are acquitted and less than half of female remanded prisoners receive a prison sentence (Social Exclusion Task Force, 2009), meaning that a significant proportion of women held on remand in prison do not end up serving prison sentences, but suffer increased vulnerability in terms of their mental health and social circumstances (being able to look after their children, maintenance of social housing and benefits) by being put into prison. The last aspect is particularly pertinent, as 66% of women prisoners are mothers with dependent children under 18. Over 17,700 children a year are separated from their mothers by imprisonment. Only 5% of sentenced mothers are able to keep their children in their own homes. At least a third of mothers are single parents before imprisonment (Prison Reform Trust, 2010).

In addition there are fewer women's prisons and because of their geographical location, women end up incarcerated further from their homes than male prisoners, which has a negative impact on maintaining family ties, receiving visits, and resettlement back into

the community (Corston, 2007). In the last decade, the women's prison population has more than doubled. This is not because women commit more or worse crimes, but rather that they are now more likely to be imprisoned for offences that would previously not have resulted in imprisonment (Home Office 2006). A woman convicted of theft or handling stolen goods in the Crown Court is now twice as likely to go to prison as she was in 1991. In the Magistrates' Court, the rate of increase in the use of custody for women is even higher (Home Office 2006).

More than a third of women in prison have no previous convictions – double the figure for men (Prison Reform Trust, 2010). Women are responsible for only 6% of murders, 1.5% of attempted murders, 16% of manslaughters and 1.3% of sexual offences (Home Office, 2005). The majority of sentenced women and men received into custody in 2007 were serving short sentences of six months or less – 63% of women and 54% of men. Figures for less than 12 months were 74% and 63% respectively (Ministry of Justice 2009). This means that prisoners and women in particular will be in prison long enough to jeopardise the maintenance of their lives in the community, but not long enough to do any meaningful rehabilitation work whilst in prison, such as education, training or therapy, as resources are so thinly stretched that even where these options exist waiting times are so long that by the time prisoners reach their top they are nearing their release.

In terms of mental health 16% of women in prison self-harm, compared with 3% of men, and more than half of all recorded incidents of self-harm occur in the female estate, despite the fact that less than 6% of the prison population is female (Social Exclusion Unit, 2002) and 40% of women in prison have received help for a mental or emotional problem in the year prior to custody and 20% have been in care compared to 2% of the general population

(Social Exclusion Unit, 2002). It is therefore unsurprising that 70% of female sentenced prisoners suffer from two or more mental health disorders (Social Exclusion Unit, 2002).

These statistics highlight that women differ from men in their offending and incarceration profiles, pathways to prison and psychiatric morbidity. It is clear that reasons for imprisonment differ between men and women, as do the consequences of imprisonment.

The fact that the vast majority of offences committed by women are non-violent or property-related means that they do not represent a significant threat to the public and therefore do not require high-level prison security. Often these crimes committed by women, like for example theft, are directly related to poverty and the need to look after children (Taylor & Blanchette 2009). It could also be argued that the social cost of imprisoning women is higher than that for men (Corston 2007). Women tend to be the primary carers of children and going to prison often has adverse impact on their children.

The fact that women are more likely than men to be remand prisoners and serve shorter sentences when convicted often means that they are in prison long enough to lose their children, accommodation and benefits, but not long enough for any meaningful rehabilitation work to be undertaken. In addition, imprisoned women are more likely to have been poorly educated and have poor work histories. They often do not have access to primary care, and many become homeless upon release from prison (Williamson, 2007).

There are several possible reasons why the rate of imprisoned women has risen. As noted above this is not necessarily because women commit more crime. From a policy perspective, pressure for a more punitive criminal justice system, the effects of the 'war on drugs', and changes to the welfare system that have led to increased rates of poverty among women

are all likely to have contributed to the increase of custodial sentences, as well as to the number of female remand prisoners (Noblet, 2008). Additionally, the (probably erroneous) belief of the courts that prison provides an opportunity for engagement with drug and mental health services may have led to an increased imprisonment rates (MacDonald, 2013).

#### 2.8.4 - Recognition of gender specific needs

While the aforementioned facts seem bleak, a body of research has emerged over the last 15 years recognising that women do have specific needs requiring special consideration and solution. One of the areas that has received increased attention is the different pathways men and women take to prison and how they inform appropriate interventions. In this respect, the risk–needs model of criminal behaviour as developed by Andrews and Bonta has gained prominence in guiding research and practice in the criminal justice field (Andrews & Bonta, 1998, 2003). The risk–needs model stipulates that some aspects of an individual’s functioning are risk factors for offending. A distinction is made between ‘static’ and ‘dynamic’ risk factors: the former are historical while the latter refer to current functioning and should be targeted for change. Those dynamic features linked to offending, such as emotional functioning, substance abuse and financial position, are referred to as criminogenic needs. Andrews and Bonta do not specify whether the static or dynamic factors contribute most to the assessment of the risk of offending, but Gendreau et al. (1996) argue that dynamic factors have as much predictive validity as static factors. The

following have been identified as predictive factors of offending behaviour: Criminal history; lack of education/employment; financial difficulties; family/marital problems (including adverse and abusive family experiences in childhood, abusive relationships as an adolescent or adult and parenthood or single parenthood); lack of stable accommodation; lack of social network; alcohol/drug use; emotional/personal problems; and attitude/orientation. It is not always clear how the influence of each factor differs qualitatively for men and women. But for example, as men's criminal careers differ significantly from those of women (Moffitt & Caspi 2001), this factor has to be weighted differently for women. Parenthood is one factor that stands out as having potential to influence male and female behaviours in significantly different ways. Apart from the problems particularly relevant to women discussed earlier, Sorbello et al. (2002) argue that many women 'leave dependent children with dysfunctional relatives, and that the separation of mother and child is not conducive to the development of a strong parent-child relationship. Thus, for women, the period of imprisonment may perpetuate dysfunctional family patterns with their own children upon release'. In addition, women, particularly those who have suffered victimization or abuse, often derive a sense of identity and self-worth from motherhood (Moloney, et al., 2009), and so the separation may impact on the woman's psychological well-being during imprisonment. Parenthood is also linked to education, as many young women drop out of education because of pregnancy (Daly, 1992).

While there is considerable overlap in the needs of men and women, similar criminogenic needs do not necessarily mean that they are of equal severity and significance. Van Hooris et al. (2001) reviewed several criminogenic need and risk classification systems for women offenders and raised concerns over the fact that classification systems based on male

offenders may not give accurate estimates of need need in women offenders. With regards to actuarial classification systems measuring needs, Covington & Bloom (2003) note that the vast majority were developed for men, but are now being applied to women, despite the fact they may not be valid. It is further possible that the presence of a specific criminogenic need in men and women does not represent an equal association between the need and offending in men and women. The aetiology and development of criminogenic needs may be qualitatively different in terms of relation to offending and progress among male and female offenders.

For example, Blanchette's (1997) findings comparing the criminogenic needs of violent and nonviolent women prisoners support the view that violence perpetrated by women is likely to be qualitatively different from male violence (Shaw & Dubois, 1995). In light of such complex needs it can be hard for professionals to determine where to best start helping women but it seems clear that the silo thinking of serious mental illness services such as CMHTs or substance misuse services cannot be expected to address the needs of these women, given their interdependence (Bartlett, 2007).

The need for co-ordinated efforts to address these issues has been translated into various policy initiatives. The DAPHNE programme of research (EU Justice 2012) examines the care regimes for vulnerable female prisoners who have suffered physical and mental abuse and have as a consequence experienced mental health problems. The aim of the DAPHNE project is to identify healthcare requirements, policy responses and available treatments in six EU countries, including the UK. In a review of the findings, McDonald (2013) found that, in terms of key problems for women, the researchers identified many of the social care and mental health needs discussed earlier, such as disadvantaged upbringings, histories of abuse



and mental ill health. Whilst they too acknowledge the shortage of suitable clinical interventions, they highlight several initiatives that help with awareness raising and support. These 'multimodal programmes do not solely focus on substance abuse or criminality, but start to look a person's life from their own perspective'.

Two such programmes were identified in the UK. The *Freedom Programme* addresses domestic violence, and is currently running in five prisons. The fact that it runs for eight sessions over the course of four weeks means that it can be accessed even by those in prison only for a short period. The course follows a cognitive behavioural model designed to raise self-esteem and challenge internalised myths that their abusers have perpetuated. Staff who were interviewed were familiar with the project and how to refer women but a second programme, *Power to Change*, run by the charity Women's Aid, was less well known. It was noted however that support programmes tend to be project-based or short-lived initiatives that do not offer consistent services. Moreover, even where such groups are available, access can be limited where women are not identified as victims of abuse. In comparison to other countries, the UK has been commended for having the most systematic approach to information provision, with a variety of brochures and leaflets available in all prisons. Prisons were also praised for providing informal support to women, such as self-help books, referrals to named senior staff responsible for violence and abuse, and the use of informal therapeutic approaches, such as keeping mood diaries or expression through art or movement (McDonald, 2013). In terms of policy development, the UK was also singled out as being ahead of other countries. *The Future Organisation of Prison Healthcare* (Home Office, 1999), *The NHS Plan* (NHS, 2000) and *Changing the Outlook* (DoH, 2001) all featured sections (albeit brief) focusing on the particular needs of women. Whilst these documents

enshrined the key principles of equivalence, gender sensitive care and a holistic approach, they did not provide specific guidelines or suggestions as to how these values should be translated into service provision.

Since the publication of the Corston report (2007), action has been taken to develop policies specifically for women offenders. The prison service has established the Women's Policy Group, and initiatives to improve responses to women offenders. For example, in 2008, the National Offender Management Service (NOMS) and the MoJ produced the *National Service Framework: Improving Services for Women Offenders* (2008a), a policy paper which sets out a strategic framework aimed at reducing offending through the improvement of service delivery. At the same time NOMS and the Probation Service produced *The Offender Management Guide to Working with Women Offenders* (NOMS, 2008b), with the aim of 'promoting the best possible provision for this vulnerable offender group at all stages of their 'journey' through the criminal justice system, with the aim of breaking cycles of re-offending and, where appropriate, providing effective alternatives to custody for socially excluded women at risk of offending' (McDonald 2012). *Prison Order 4800 on Women Offenders* (HM Prison Service, 2008) provides prison staff with guidance on how to interact with women who have experienced domestic and sexual violence. The order was accompanied by *Supporting Women who have Affected by Violence: Guidelines for Staff* (NOMS, 2008), published by the Women and Young People's Team within NOMS.

While all these developments must be welcomed as a step in the right direction, it is questionable how far they translate into everyday practice. Prison staff in England and Wales are supposedly being provided with a variety of training courses, including self-harming training, identifying suicide risk training, *Women Awareness Staff Training* (WAST)

and the *Sex Workers in Custody and the Community programme* (SWICC). However, prison staff interviewed as part of the DAPHNE research reported that they had only received the two-day WAST training and that more specific training was patchy. The charities interviewed as part of the research did report providing more specialist training but rarely to prison staff, as opposed to specific groups of professionals, such as nurses and lawyers (McDonald, 2013). Again it seems that there is gap between policy development and implementation, which means, disappointingly, that despite the best of intentions, actual improvements on the ground may still be a long way off.

## **2.9 – Summary of the background literature**

### **2.9.1 – Psychiatric morbidity surveys in prison and the general population**

- Epidemiological surveys consistently show that psychiatric morbidity is high among prison populations. Reviews of studies conducted among prison population reveal that psychosis has a prevalence rate of between 4% and 14% in comparison to around 0.5% in the general population. Rates for depression ranged from 8%-21%, while in the general population this was found to be 2-3%. A major shortcoming of these studies was that they mostly focused on psychosis and personality disorder and occasionally included depression, therefore ignoring the fact that most mental disorders do not occur in isolation. Co-morbidity influences treatment strategies and has implication for the resources required to deliver adequate care.

- In the UK the ONS carried out a seminal study into the prevalence of mental disorders among prisoners. It was exhaustive in that it included all mental disorders and sampled prisoners proportionally from each prison in England and Wales according to their sex and sentencing status. Rates of psychiatric morbidity were strikingly high across the sample, but particularly so for remand and female prisoners.
- Prison mental healthcare has been historically characterised by variability in delivery, quality and funding. Reviews have commented on the poor training of staff, lack of clear management structures and a lack of secondary care. Successive reviewers were concerned about the divergent development of mental health care services between the prison system and the NHS and advocated that the latter should have at least some input into the delivery of prison healthcare and mental healthcare in particular.

### 2.9.2 – Policy development

- These reports resulted in major new policy papers that sought to address the inadequate levels of care in prison. The most important ones were *Patient or Prisoner*, *The National Service Framework*, *The Future Organisation of Prison Healthcare*, and *Changing the Outlook*.
- *Patient or Prisoner* advocated the consistency of care through alignment with NHS practices, better psychiatric training and an assessment of need. The National

Service Framework set the agenda for the improvement of adult mental health services. It set broad standards for the design and delivery of service models and introduced performance indicators against which progress could be measured. A five year evaluation showed good progress had been made in the implementation of the National Service Framework. *The Future Organisation of Prison Healthcare* focused on two key goals: The introduction of The CPA approach into prison healthcare and improved screening procedures at the point of reception into prison. Changing the Outlook operationalised the principles described in *The Future Organisation of Prison Healthcare*. This policy paper was wider in scope, it's key feature being the introduction of MHRTs, mirroring services in the community. Responsibility for the organisation was given to PCTs.

- However guidance on the implementation of these policies was kept deliberately non-prescriptive and resulted in variable standards of care. By 2007 102 in-reach teams had been established, but reviews of the standard of prison mental healthcare showed that their impact had been modest.

### 2.9.3 – The state of prison mental healthcare

- Surveys of MHIRTs revealed under-staffing in relation to the prison size, lack of multidisciplinary working and mission creep (MHIRTs were supposed to work with prisoners with severe mental illness but inadequate primary care resulted in an abundance of inappropriate referrals, the consequence of which was a reduced capacity to deliver therapeutic interventions). Even though commissioning of

services was now the responsibility of the NHS prison mental health was not seen as a priority.

- A survey carried out in London prisons reflected these findings: There were 7.5 WTE psychiatrists and one trainee employed, but no clinical or counselling psychologists.
  
- In 2008 Prison mental health spend stood at 11% of the total health care spend, as opposed to the 50% estimated in *Changing the Outlook*. There was a stark difference in levels of spending between regions, up to 130%. London prisons had the second highest spend on healthcare but came second to last with regards to mental health care. Spending in female prisons was noted to be particularly low. Prison mental health spending was substantially lower than mental health spending in the general population.
  
- Reviews highlighted the difficulties of replicating community models of care in prison and suggested that a shift from the 'principle of equivalence of care' to a 'principle of equivalence of outcome' ought to be considered.
  
- After 20 years of reform it became clear that too many policies had been rolled out in isolation from one another and the result was a disjointed offender pathway. Recognition grew that need will always remain greater than capacity in prisons and focus was needed to be directed towards better use of diversion from prison.

- The *Bradley Review* focused on the offender pathway as a whole rather than on smaller areas one at a time. The review made 72 recommendations to improve the offender pathway in the areas of early intervention, arrest, prosecution, court process, prison, community sentences and resettlement and delivering through partnership. Virtually all were accepted by the government (a review of the progress made in the adoption of these recommendations is due later in 2014).

#### 2.9.4 – The assessment of mental health needs

- All policy papers reviewed here called for an assessment of need to be carried out in order to inform the commissioning of mental health services in prison, but none specified how such an assessment is defined or ought to be carried out.
- In the academic literature Need is defined as a requirement for services based on professional judgement and assumes the existence of a potentially effective intervention. *Demand* is based on the clients' perspective, which will be influenced by their illness perception. Utilisation refers to the take-up of services and depends on their availability.
- Establishing prevalence of morbidity is an imperfect predictor of need, as the presence of a disorder assessed through diagnostic criteria alone does not always necessitate treatment (e.g. when the condition causes no distress or impairment), and an intervention may be rejected. Therefore clinicians do not base treatment strategies on diagnosis alone. They also consider the development of symptoms and

the level of impairment they cause, which can lead to different treatment approaches even when the same diagnostic criteria are met.

- Academic literature on need is sparse, particularly among prison samples. Studies that do exist reveal gaps in that they either assess need but not the extent to which it has been met, use tools that do not cover all mental disorders or specific interventions, or are based on service user views (therefore assess demand, not need). Some of the methodological problems in academic studies include the sampling of only mentally ill prisoners, therefore limiting generalisability of findings. Prison commissioned needs assessments do draw a general sample from the prison population but mostly rely-on self-report, with the implication that prisoner may not be able to participate, due to not fully understanding the scales used, not being able to read or not speaking English well enough. Each prison is responsible for it's own mental health assessment, meaning that there is great variability in the way that they are carried out.
- The MRC Needs for Care assessment tool was designed to help define the relationship between prevalence and treatment needs through standardisation of clinical judgement in order to allow disorders to be linked to treatments through rules that operationalise need. Unlike other assessment tools such as CAN, CANFOR or PMHI It includes all major mental disorders as well as areas of clinical and social functioning, relies on clinical judgement while also taking into account service user views and identifies requirements for specific interventions. It's major drawback however is that it is much more labour intensive in it's administration.



### 2.9.5 – Gender differences in psychiatric morbidity

A significant body of research indicates that there are gender differences in psychiatric morbidity. For example, in the general population depression is nearly twice as common in women than in men, whereas the lifetime prevalence of alcohol dependence is twice as high among men than it is in women.

- Men and women have similar rates of drug and alcohol abuse but use substances for different reasons. Women drink to alleviate anxiety and have higher rates of co-morbid psychiatric disorders whereas men were reported to primarily drink for social reasons.
  
- There are significant gender differences in the incidence of childhood sexual and physical abuse, both of which are predictors of adult onset of mental disorders. Childhood sexual abuse is more than twice as high among women as men. It has been argued that many coping mechanisms of survivors of trauma, such as substance misuse are criminalised and therefore may affect women disproportionately.
  
- Research shows that women have consistently higher rates of PTSD than men. Despite high rates of sexual abuse in clinical populations PTSD has not received as much attention as other mental disorders in the UK thus far. In the USA some studies show prevalence rates of up to 45% for PTSD in women and others report that it is the most common form of mental disorder after substance abuse.

- Female prisoners differ qualitatively from male prisoners on a range of variables such as psychiatric morbidity, offending pathways and severity of offences. Statistics show that 50% of self-harm occurs among female prisoners despite the fact that they account for 6% of the prison estate. 70% of female sentenced prisoners suffer from two or more mental disorders. In the last decade the female prison population has more than doubled. This is not because women commit more or worse crimes, but rather because they are now more likely to be imprisoned for offences that would previously have been given community sentences.
  
- Women also tend to be primary care givers to their children and thus their incarceration has significant effects on their wider family and higher social costs.
  
- A call for better co-ordinated efforts to address these differences has also been reflected in policy initiatives with a view to creating more holistic approaches to addressing the complex needs of women.

## **CHAPTER 3: RATIONALE**

The literature reviewed in chapter two demonstrated that mental health problems differ significantly between the general population and prisoners and that there are considerable differences in the incidence and development of mental disorders among men and women. While in the general population surveys of psychiatric morbidity tend to include most mental disorders among prison samples research has tended to focus on psychosis, depression and personality disorder (anti-social personality disorder in particular). There is a well established body of literature that describes the co-morbid nature of many mental disorders and therefore studying them in isolation runs a serious risk of underestimating the prevalence of psychiatric morbidity and the burden that such morbidity poses on mental health services. The 1997 National Prison Survey of Psychiatric Morbidity carried out by the

ONS was the first to address this issue by including all major mental disorder and in addition stratified prisoners by sex and sentencing status. The results of the survey showed that rates of mental illness were strikingly high, up to 70%, and that female and remand prisoners had the highest rates of mental illness.

In recognition of these very high rates of mental illness among prisoners successive governments have introduced numerous policies aimed at improving mental health care for prisoners; however goals of these policies have been poorly implemented to date. Nearly all policy papers addressing the provision of mental health care in prison mandate that it should be underpinned by assessments of mental health treatment needs. This is because prevalence rates alone provide only a rudimentary estimation of need. They do not contain information on the type of intervention required to meet a particular need, nor do they yield information on the impairment caused by an illness. In practice clinicians use their professional judgement to determine the most suitable type of intervention. However, the intervention is sometimes rejected by the service user, and in other cases clinicians may decide that, despite the presence of a diagnosable condition, no intervention is warranted. This implies that even people meeting diagnostic criteria for the same disorder may benefit from different types of treatment. This highlights the necessity of carrying out needs assessments in addition to morbidity surveys in order to quantify the adequacy of service provision. As such needs assessments, when carried out properly, create a meaningful relationship between prevalence and treatment by taking into account the course of symptom development, the degree of impairment caused by an illness, clinical judgement and service user views on appropriate treatment, as well as specific types of treatment which are required. The complexities involved in carrying out effective needs assessments include the practical (e.g. the resources required to carry out the assessments), and the

methodological (the selection of appropriate assessment tools). The current academic literature provides very few needs studies for mentally ill offenders, and none are comprehensive. Those that do exist are either set in forensic in-patient units and include only a small number of disorders (e.g. Maden et al., 1993, Coid & Kahtan, 2000), or they focus exclusively on psychotic prisoners and do not assess the need for specific interventions (e.g. Harty et al., 2003). Prisons are now also carrying out local needs assessments, as discussed in Chapter Two. However, without official guidelines or good examples from the academic literature, the methodology is often poor.

### **3.1 – Selection of assessment tools**

In order to address these gaps in knowledge, the MRC Needs for Care Assessment (Brewin et al, 1987) was chosen for the current study. This instrument was used in a series of household studies of psychiatric morbidity, and was adapted for the prison population. It is comprehensive, in that, unlike other needs assessment tools, it allows for ratings of nearly all types of mental disorder, and links particular disorders with associated levels of impairment and a detailed evaluation of possible interventions (items of care). The items of care actually provided are recorded and compared to those that would be appropriate, given the current literature on treatment efficacy. Deviations from appropriate provision are classed as 'unmet needs', and, together with the data for 'met need' (i.e. appropriate treatment is provided), 'no need' (no clinical problem exist) and 'no meetable need' (i.e. there is impairment but no acceptable treatment), the results obtained from this study should provide a much more complete picture of the treatment needs of mentally ill prisoners.

In order to compare findings from this study to those from the ONS in the National Prison Survey of Psychiatric Morbidity (Singleton et al., 1998) it was decided to use many of the same instruments. Based on the findings from that study and the existing literature, rates of psychiatric morbidity are expected to be high particularly among female prisoners and remand prisoners. In addition to collecting data through face-to-face interviews, which will give a fuller assessment of psychiatric morbidity, each interview will be transcribed into a vignette and presented to a panel of experts who will rate the treatment needs for each prisoners according to the Needs for Care assessment tool. This approach requires a much greater level of resources in comparison to previous needs studies, which have the advantage of being easily replicable by being relatively cost effective and quick to conduct, but the approach employed here will yield more comprehensive and detailed results and offer an in depth assessment of the differences in mental health problems and needs amongst male and female, and sentenced and remand prisoners. Given the pervasiveness of mental illness among prisoners and the serious gaps in service provision such an approach is warranted.

### **3.2 - Objectives of this research**

- To investigate the prevalence of mental health problems amongst prisoners in two large inner city prisons in North London
- To investigate the mental health treatment needs of these prisoners
- To investigate how prevalence rates relate to treatment needs.
- To investigate differences in mental health prevalence and treatment needs based on gender and sentencing status.

## **CHAPTER 4: METHODS**

### **4.1 - Setting**

The research was carried out in two inner London prisons: HMP Pentonville and HMP Holloway and reviewed by the NHS Thames Valley Reserach Ethics Committee (reference : 05/MRE/12/52)

HMP and Young Offender Institution Holloway is a local female prison which can accommodate 501 prisoners, though at the time of this research the daily average population was around 440. Prisoners are mostly accommodated in single cells with a few dormitories in use on each wing. HMP Holloway acts as a national resource for difficult-to-treat offenders, and accepts referrals from the other 11 female prisons in England. There is a comprehensive education, training and resettlement regime, meaning that most prisoners will be out of their cells and off the prison wings for six hours a day, and will be engaged in meaningful activity during this time. There is a Mother and Baby unit, where infants can stay with their mother up until the age of 9 months, and a Stage One Lifer Unit which has a higher level of access to psychological therapies. Young offenders are housed in a special wing, but due to over-crowding, new arrivals are often initially housed on the general wings. New inmates spend their night at the First Night Centre, a specialist wing where officers are supported by nurses who carry out observations during the night and where vulnerable prisoners can potentially be identified faster and referred appropriately. A specialist wing serves as a detoxification centre for prisoners with substance misuse problems. There is a high turnover, as many women are detained on remand and 61% of women are sentenced to custody for six months or less (Prison Reform Trust, 2010). The average length of stay at

HMP Holloway is therefore 28 days, which has major implications for assessment, education and treatment programmes.

HMP Pentonville is a category B<sup>2</sup> male prison serving local courts and the North London catchment area. Its operational capacity stands at 1150, but due to wing upgrades there are on average, 1100 prisoners on any given day. The cells are smaller than the ones in Holloway, but house two prisoners who share a barely screened toilet. About 60% of the population is on remand. Most prisoners serving longer sentences will be transferred to other prisons resulting in a high turnover of prisoners. One third of prisoners have a length of stay of one month, and two thirds have a length of stay of three months or less (Inspectorate of Prisons 2006). Daily prisoner arrivals often number 100 or more, with some 7,500 men a year starting a custodial sentence in Pentonville (Independent Monitoring Board, 2010). Pentonville has a detoxification unit and health centre with 22 inpatient beds. There are some training and education programmes, but they are not widely accessible, resulting in a lack of meaningful activity for a significant proportion of the population, many of whom will be locked in their cells for up to 20 hours a day.

Mental health services in both prisons were delivered by a number of providers during the period of this research. Local NHS trusts were responsible for psychiatric care, with mental health in-reach teams providing treatment for prisoners with psychosis. Mood disorders were mainly treated through primary care, with more severe cases being referred to the in-reach teams. A number of voluntary agencies and prison services also provided treatment. Other than the detoxification regimes described earlier, both prisons also had Counselling, Assessment, Referral, Advice and Throughcare (CARAT) teams. These were established in 1999 as a universal drug treatment service in every prison across England and Wales. CARAT



services (CARATs) are a major component of the Prison Service Drug Strategy (HM Prison Inspectorate, 1998). Prisoners can self-refer, and will be assessed within five days of referral. CARATs offer a range of interventions, including Alcoholics Anonymous style self-help groups, individual sessions with workers trained in basic counselling skills, and the Short Duration Programme (SDP), aimed at remand prisoners or those serving short sentences. In Holloway, the Forensic Therapies Charity piloted the Holloway Skills and Therapies (HoST) programme aimed at women with Borderline Personality Disorder (who were excluded from most other services in the prison, including the in-reach team).

The complicated configuration of services meant that a number of agencies might be involved with the same prisoner without knowing so. In addition, limited resources and high staff turn-over resulted in services being chaotic at times or even becoming unavailable. For example, in Pentonville, psychological services were unavailable for the duration of this research, and the in-reach team was without a permanent consultant for at least a year. Holloway did provide individual counselling and psychotherapy sessions, but had a waiting list of four months, meaning that most prisoners would have been released long before they were able to see a therapist.

## **4.2 – Design**

### **4.2.1 – Sample size calculation**

The original sample size was to be 600, with 150 in each group (male/female; remand/sentenced). Because the study did not depend on comparison between groups, the sample size requirement was based on a consideration of confidence limits. It was

estimated on the basis of community studies of needs for care (Bebbington et al., 1997; McConnell et al., 2002), and a comparison of psychiatric morbidity in the community and in prison (Meltzer et al., 1995; Singleton et al., 1998) that 20% of prisoners would have met needs, 30% unmet needs, and 10% unmeetable needs. Given an n of 150 and a confidence limit of 0.9 for a two-sided confidence interval, the expected confidence limits would be plus or minus 6% for a proportion of 30%, 5% for one of 20% and 4% for one of 10% (Dixon & Massey, 1983). Eventually however only 368 prisoners were recruited. This was due to unexpected operational issues of recruitment in prisons and the fact that a second researcher who was supposed to aid in the collection of data had to withdraw from the study. As a result there was enough statistical power to make two-way comparisons between groups, but not four-way.

#### 4.2.2 - Sampling methods

A random sample of prisoners was selected to participate in the study. A number of sampling methods were considered, e.g. recruiting a random sample at the point of reception or setting a set number of census days. In selecting a sample special consideration had to be given to the nature of this population. Prisoners in local prisons are a transient group. Remand prisoners in particular are liable to be moved at short notice, either to attend court, from where they can sometimes be released without returning to prison first, or to move to a different establishment. Sentenced prisoners are also frequently transferred due to space shortages, or because they are due to serve longer sentences and are moved to places more suitable for long-term stay. As discussed previously, remand prisoners present with higher rates of psychiatric morbidity, and are therefore likely to be a bigger

burden on resources. It was therefore important that this group was not under-represented in the sampling. Recruiting prisoners at the point of reception was dismissed as a sampling strategy, as it would not have provided the prisons with the opportunity to assess prisoners and provide them with adequate treatment, a key outcome measure of this study. Because of the transience of some prisoner groups discussed above it was decided that a single census date would be unfeasible and instead a sample of five sentenced and five remand prisoners was randomly generated at fortnightly census points from the Local Inmate Data System (LIDS), a database containing the names of all prisoners in an establishment, which is updated every day. Prisoner names were numbered sequentially according to type (sentenced/remand) and selected using a random number generator. These individuals were then approached by the researcher and provided with an information sheet, which was explained in detail by the researcher. Participants were then left with the information sheet during lunch time (when all prisoners had to remain in their cells). After the end of the break, usually 90 minutes, they were again approached to see if they had any questions and if so these were answered by the researcher. Participants were then asked if they were willing to participate in the study and those who agreed provided informed written consent. Prisoners who declined, or had been moved during the two week period without being seen by the researcher, as well as those who had already been sampled, were replaced by individuals subsequently selected from LIDS. All prisoners were eligible for participation in the study, including those with intellectual disabilities, although this was not formally assessed due to the time constraints of administering a sizeable assessment battery by a single researcher. Due to a lack of resources and logistical difficulties interpreters could not be engaged to assist with the research and so participants who did not speak English well enough had to be excluded from the study.

#### 4.2.3 - Data collection

Data were gathered through face to face interviews by the researcher over a 33 month period from September 2006 through to May 2009.

#### **4.3 - Instruments**

*The Revised Version of the Clinical Interview Schedule (CIS-R)* (Lewis et al., 1992) was used to assess neurotic symptoms and common mental disorders in the week preceding an interview. It defines 14 types of neurotic symptoms and six neurotic disorders, and provides a total CIS-R score indicating the overall severity of symptoms. Diagnosis was established by applying algorithms based on the ICD-10 diagnostic criteria for research (World Health Organisation, 1992) to the various sections of the CIS-R. The six disorders comprised depressive episode, generalised anxiety disorder, mixed anxiety and depressive disorder, phobia, panic disorder and obsessive-compulsive disorder. The instrument took on average about 25 minutes to administer.

*Schedules for Clinical Assessment in Neuropsychiatry (SCAN)* (Wing et al., 1990; WHO, 1992) comprise a set of instruments for evaluating the psychopathology associated with the psychiatric disorders of adult life. The principles of interviewing are those of a skilled, but standardised, clinical examination. A restricted number of SCAN sections were used here, covering expansive mood and ideation; hallucinations; subjectively described disorder of thought and experiences of replacement of will; and delusions. SCAN was used to cover the one-year period before interview, and the information gained was used to derive an ICD-10 diagnosis of psychosis. The instrument incorporates a short screening section that took about five minutes to complete. A section of the SCAN covering eating disorders was also

used. Participants were usually screened out, but if not, the full instrument took 20 minutes to an hour.

Personality Disorder was assessed, with the *Structured Clinical Interview for DSM-IV (SCID-II;* First et al., 1997). This is based on the DSM-IV Axis II classification system: the reasons for straying from the ICD-10 classifications are those set out in the ONS report (Singleton *et al.*, 1998). However, Singleton et al. employed a two-phase procedure, initially using the self-report screening version, administered by lay interviewers. Clinicians then administered the full version of the SCID to a 1-in-5 sub-sample. However, in the current study the full version was used with all participants in order to maximise validity. As in the ONS study, depressive and passive-aggressive personality disorders were omitted, as they were not included in DSM-IV. The SCID-II clinical interview covers each personality disorder category in turn and, within each category, each component criterion is evaluated by a specified question (or questions) and subsequent specified probes. It has 120 items, and the researcher must make a judgment of the rating for each item on a four point scale: 'inadequate information', 'negative', 'sub-threshold', and 'threshold'. The SCID-II has 12 modules (plus a 'not otherwise specified'), covering avoidant, dependant, obsessive compulsive, paranoid, schizotypal, schizoid, histrionic, narcissistic, borderline, antisocial, passive-aggressive, and depressive personality disorders. The instrument typically took around 35 minutes to complete.

Post-traumatic stress disorder was assessed with the *Posttraumatic Stress Diagnostic Scale Manual (PDS;* Foa, 1995). This is a self-report measure comprising 49 items. A short checklist identifies potentially traumatizing events experienced by the respondent. If they feel that

they have been affected by any symptoms occurring in response to a traumatic event in the preceding month, a range of symptoms associated with PTSD are assessed in terms of their onset and severity, and of their impact on skills of daily living. This information is used to make a diagnosis based on DSM criteria, i.e. a person must meet one or more criteria across each of six sets of diagnostic criteria. This instrument took around 20 minutes to administer.

Alcohol misuse and dependence. *Alcohol Use Disorders Identification Test (AUDIT)*, was used to assess alcohol misuse. The instrument was developed for a WHO project and has been shown to be a reliable indicator of hazardous drinking (Saunders et al., 1993). It defines hazardous alcohol use as an 'established pattern of drinking which brings the risk of physical and psychological harm'. Participants were advised to answer with regard to the year prior to incarceration. AUDIT consists of 10 questions. Answers to all questions are scored from zero to four and then added up to provide a total score ranging from zero to 40. A total score of eight or more indicates hazardous alcohol use. The questionnaire took around ten minutes to complete

Alcohol dependence was assessed using the *Severity of Alcohol Dependence Questionnaire (SAD-Q)* (Stockwell et al., 1983) and was administered to those with a hazardous drinking score of eight or above. The questionnaire consists of 20 questions covering a range of symptoms of dependence, and each item can be scored 0 to 3. Summing the scores from all questions gives a SAD-Q score of between zero and 60, indicating different levels of alcohol dependence. A total SAD-Q score of three or less indicates no dependence, mild dependence is indicated by a score of between four and 19, moderate dependence by a score of 20 to 34, and severe dependence by a score of 35 to 60. The reference period for

the questions on alcohol dependence was again the year before imprisonment, and the questionnaire took about 15 minutes to complete.

Drug dependence. Questions designed to measure drug use developed for the ONS survey of psychiatric morbidity in prison were used here. Information was collected on all types of drugs used by respondents in the year before interview. Information was sought in relation to cannabis, amphetamines, crack, cocaine, ecstasy, tranquilisers, opiates and volatile substances, such as glue. Five questions measured dependence on each individual drug. A positive response to any of the five questions was used to indicate drug dependence. Administration of this questionnaire took around 20 minutes

*The Life Events and Difficulties Schedule (LEDS)* (Brown & Harris, 1978). The inclusion of this technique for eliciting and rating social adversity informed a decision on whether affective symptoms represented an adjustment disorder. The schedule included questions on a number of adverse life events, such as bullying, domestic violence and sexual violence. For each category, the respondent was asked whether they experienced the event in childhood, as an adult, and within the last six months. The questionnaire took around 10 minutes to administer. In addition a number of socio-demographic variables, such as age, ethnicity previous mental health service use and psychiatric hospital admission were collected.

Participants were asked about psychiatric and psychological interventions they had received since their arrival in prison and, in cases where no such treatment was given, whether they would have chosen to accept them had they been offered. In addition electronic healthcare records for each participant were checked to collect corroborating information on offered

or rejected treatments as well as any assessments the participant had undergone at reception into the prison and any assessments for treatments they had been subsequently offered. This type of information was however not always recorded on the system. No notable discrepancies between prisoner accounts and electronic records were observed. This information allowed a decision on whether a need was unmet, or perhaps unmeetable in cases where the idea of treatment was rejected by the participant or where no appropriate treatment exists. In addition, these questions allow for a degree of service user involvement in the decision on appropriate treatments.

*The MRC Needs for Care Assessment* (Brewin et al., 1987, Brewin et al., 1994)

defines the relationship between prevalence rates and treatment needs. Each area of clinical and social functioning is assessed on whether a current clinically significant problem exists, and specifies a set of appropriate items of care. Needs are assessed by comparing the actual items of care provided with a model of what those items of care should be, based on current clinical consensus and the literature on treatment efficacy. Information on level of functioning is used to identify the appropriate actions to be taken by clinicians. The overall need status in each area of functioning falls into the categories: 'met need', i.e. appropriate action has been taken to address a problem; 'unmet need', i.e. there is some appropriate action which has not been taken; 'no need', i.e. there is no clinical problem; and 'no meetable need', i.e. there is disablement but no action that is both appropriate and feasible. For each of the items of care within an area of functioning, ratings are given that indicate whether an item is appropriate and provided, whether it is appropriate but not provided,



whether it has been offered but refused, whether it has been appropriately tried but is proving to be ineffective, or whether the item constitutes an overprovision. i.e. where a problem is no longer clinically significant or where symptoms have abated. A panel of experts makes judgements of treatment needs based of the available information. Although services in a given area may differ significantly in their care approach and in the availability of resources, in particular where psychological and social treatments are concerned, these differences are deliberately not taken into consideration. In order for services to be compared, unmet needs in a given service must be rated without considering either whether particular items of care are regularly provided, or whether resources to provide them exist.

The community version of the Needs for Care assessment does not include sections for PTSD and personality disorder. As these disorders were deemed to be highly relevant among this population based on the background literature, sections for these disorders were added to the instrument, in accordance with the same principles applied to all other sections of the instrument, i.e. the specification of a minimum level of functioning and appropriate items of care based on the current literature and clinical consensus.

The information collected during the interview together with any additional information collected from the Electronic Patient Record System was then transcribed into vignettes (see appendix II for example) for each participant and presented fortnightly to a panel comprising of the clinical leads for mental healthcare in HMP Holloway and HMP Pentonville (PB and NM respectively), who rated each participant in terms of their needs as defined by the Needs For Care tool. Vignettes were anonymised, so as to ensure participants were not

recognised by the assessors, which was quite unlikely to begin with, as they would only be familiar with a very small number of prisoners in their respective establishments due to their relatively small case loads. Rare disagreements between assessors were resolved through discussions until a consensus was reached.

**Table 2: 4.3.1 – Overview of assessment tools used**

<b>Instrument</b>	<b>Purpose of Assessment</b>	<b>Average time to complete (minutes)</b>
<b>CIS –R</b>	Depression Anxiety Phobias Panic	25
<b>SCAN</b>	Psychotic symptoms Eating disorders	20
<b>SCID II</b>	Personality disorder	35
<b>PDS</b>	Post traumatic stress disorder	20
<b>AUDIT</b>	Hazardous drinking	10
<b>SAD-Q</b>	Severity of alcohol dependence	15
<b>ONS drug dependence scale</b>	Drug dependence	20
<b>LEDS</b>	Adverse Life Events	10

All assessment tools were completed face-to-face, as it was feared that limited literacy (which is common in prison and has constrained previous needs assessments) would prevent some participants from self-completing assessment tools. The average interview

time was around two hours. Interviews with participants who had no disorders took around 70 minutes to complete but the figure varied depending on how many disorders were present, and it was sometimes necessary to complete the interview in two (and in rare cases three) sessions within the same week.

#### **4.4 - Data management**

Interviews were conducted with the aid of a laptop in order to avoid a lengthy data entry process. A workbook with individual spreadsheets for each assessment tool was created by the researcher in Microsoft Excel 2003 into which participants' responses were entered as they were given. The SCID II (First et al., 1997) and SCAN (WHO, 1992) were administered via computer, and include algorithms that perform screening functions and compute diagnoses. Software for both tools was installed on the laptop. The option of having a database similar to that used in the ONS study developed externally was explored but ultimately proved too costly. In order to ensure confidentiality, participants were assigned study numbers at the beginning of each interview so that their names would not appear in the data set or be stored anywhere else on the laptop. At the end of each week, data from completed interviews was checked for typing errors and taken from the laptop and added to a master-spreadsheet stored on a university computer. In order to ensure data security the laptop was password and bio protected, i.e. could only be accessed with the researcher's fingerprint. Consent forms were stored in a locked cabinet on university premises.

#### **4.5 - Data analysis**

Data were analysed using IBM SPSS Statistics software v. 20. Descriptive data were generated using frequencies and measures of spread for continuous variables. Comparisons between male and female prisoners and sentenced and remand prisoners were made using independent-samples t-tests for normally distributed data. Nominal data were compared using Chi square and Fisher's exact test.

#### **4.5 – Hypothesis**

Based on previous literature it was hypothesised that:

- 1) Rates of psychiatric morbidity would by far exceed those of the general population.
- 2) Rates of psychiatric morbidity would be significantly higher among women than men.
- 3) Rates of psychiatric morbidity would be significantly higher among remand than sentences prisoners
- 4) A significant proportion of treatment needs for prisoners would be unmet.

## CHAPTER 5: RESULTS

The results in this chapter will be presented in two parts. The first contains analyses based on the information obtained through the questionnaires used during the interviews, while the second will focus on data constructed through the 'needs-for-care' assessments conducted by the panel of experts, as described in chapter four.

The first section of the results presents basic information about response rates followed by socio demographic analyses comparing male and female prisoners, and sentenced and remand prisoners. These analyses are significant as they highlight differential access to this part of the criminal justice system.

### **5.1 Response rates**

Recruitment began in September 2006 at HMP Pentonville. Table 5.1 shows figures for recruitment and response rates.

Response rates for the study were high. The figures show that 431 out of 559 potential participants who were approached agreed to participate in the study, giving a response rate of 77%. Out of all those who agreed to participate 368 (85%) were interviewed. The most frequent reason for not being able to complete the research interview where people had agreed to be interviewed was unavailability due to sudden transfer to another prison or release.

**Table 3:5.1.1 – Recruitment figures by month and prison - Pentonville**

Month of Recruitment	Pentonville Sampled (Sentenced)	Pentonville Sampled (Remand)	Approached	Agreed to Interview	Interviewed
1	10	10	20	15	13
2	10	10	20	16	15
3	10	10	18	14	12
4	5	5	10	8	8
5	10	10	19	15	13
6	10	10	20	14	12
7	10	10	17	12	11
8	8	8	16	10	8
9	10	10	18	13	11
10	10	10	20	14	12
11	10	10	20	12	10
12	5	5	10	7	6
13	10	10	16	13	13
14	10	10	20	12	10
15	10	10	20	14	11
16	5	5	10	7	6
17	10	10	18	13	12
18	10	10	20	16	14
<b>Total</b>	<b>163</b>	<b>163</b>	<b>292 (89.6%)</b>	<b>225 (69%)</b>	<b>197 (60.4%)</b>

**Table 5.1.2 – Recruitment figures by month and prison - Holloway**

Month of Recruitment	Holloway Sampled (Sentenced)	Holloway Sampled (Remand)	Approached	Agreed to Interview	Interviewed
19	10	10	19	18	15
20	10	10	20	15	13
21	10	10	20	13	10
22	8	8	16	12	10
23	10	10	20	13	10
24	10	10	19	17	13
25	10	10	20	14	13
26	10	10	16	14	11
27	10	10	20	13	12
28	5	5	10	8	5
29	10	10	20	16	13
30	10	10	19	18	16
31	10	10	18	12	10
32	10	10	20	14	12
33	5	5	10	9	8
<b>Total</b>	<b>138</b>	<b>138</b>	<b>267 (96.7%)</b>	<b>206 (74.6%)</b>	<b>171 (62%)</b>
<b>Total combined</b>	<b>301</b>	<b>301</b>	<b>559 (92.9%)</b>	<b>431 (71.6%)</b>	<b>368 (61.1%)</b>

## **5.2 - Socio -demographic characteristics**

Tables 5.2.1 to 5.2.5 below provide demographic details of the participants.

Table 5.2.1 shows the ethnicity of the participants by gender. The ethnic profile of respondents differed slightly from previous prison surveys, with more black male prisoners and fewer black female prisoners in the current sample. This is considered further in the discussion chapter.

**Table 5.2.1 – Ethnic distribution of respondents by sex**

<b>Ethnicity</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b>White British</b>	91 (46.2%)	113 (66.1%)	204 (55.4%)
<b>White Irish</b>	2 (1%)	-	2 (0.5%)
<b>White Other</b>	9 (4.6%)	6 (3.5%)	17 (4%)
<b>Black British</b>	8 (4.1%)	5 (2.9%)	13 (3.5%)
<b>Black Caribbean</b>	35 (17.8%)	11 (6.4%)	46 (12.5%)
<b>Black African</b>	12 (6.1%)	7 (4.1%)	19 (5.2%)
<b>Black Other</b>	10 (5.1%)	3 (1.8%)	13 (3.5%)
<b>Indian</b>	2 (1%)	-	2 (0.5%)
<b>Pakistani</b>	4 (2%)	-	4 (1.1%)
<b>Bangladeshi</b>	4 (2%)	-	4 (1.1%)
<b>Asian Other</b>	1 (0.5%)	5 (2.9%)	6 (1.7%)
<b>Mixed Race White/Black Caribbean</b>	5 (2.5%)	10 (5.8%)	15 (4.1%)
<b>Mixed Race White / Black African</b>	2 (1%)	8 (4.7%)	10 (2.7%)
<b>Other</b>	11 (5.6%)	3 (1.8%)	14 (3.8%)
<b>Total</b>	<b>197 (100%)</b>	<b>171 (100%)</b>	<b>368 (100%)</b>



Table 5.2.2 shows the ethnicity of the participants by sentencing type. Again overall more black prisoners were included in the sample but within both groups the differing categories of ethnicity were represented in very similar proportions.

**Table 5.2.2 – Ethnic distribution of respondents by sentencing type**

<b>Ethnicity</b>	<b>Sentenced</b>	<b>Remand</b>	<b>Total</b>
<b>White British</b>	113 (58.2%)	91 (52.3%)	204 (55.4%)
<b>White Irish</b>	1 (0.5%)	1 (0.6%)	2 (0.5%)
<b>White Other</b>	10 (5.2%)	5 (2.9%)	17 (4.6%)
<b>Black British</b>	3 (1.5%)	10 (5.7%)	13 (3.5%)
<b>Black Caribbean</b>	27 (13.9%)	19 (10.9%)	46 (12.5%)
<b>Black African</b>	6 (3.1%)	13 (7.5%)	19 (5.2%)
<b>Black Other</b>	11 (5.7%)	2 (1.1%)	13 (3.5%)
<b>Indian</b>	1 (0.5%)	1 (0.6%)	2 (0.5%)
<b>Pakistani</b>	3 (1.2%)	1 (0.6%)	4 (1.1%)
<b>Bangladeshi</b>	2 (1%)	2 (1.1%)	4 (1.1%)
<b>Asian Other</b>	2 (1%)	4 (2.3%)	6 (1.7%)
<b>Mixed Race White/Black Caribbean</b>	7 (3.6%)	8 (4.6%)	15 (4.1%)
<b>Mixed Race White / Black African</b>	4 (2%)	6 (3.4%)	10 (2.7%)
<b>Other</b>	4 (2%)	10 (5.7%)	14 (3.8%)
<b>Total</b>	194 (100%)	174 (100%)	368 (100%)

Table 5.2.3 gives the age distribution of the sample by sex. As expected, there were significantly more women in the first age bracket as Holloway includes a Young Offenders Institution whereas Pentonville does not. The mean age of male prisoners was 34.6 (SD 11.2), that of female prisoners, 31.8 (SD 11.8). This difference was statistically significant ( $t[365]= 2.2, p= 0.03$ ).

**Table 5.2.3 – Age distribution of the sample by sex**

Age group	Men	Women	Total
18-20	2 (0.5%)	29 (7.9%)	31 (8.5%)
21-30	90 (24.6)	62 (16.9%)	152 (41.5%)
31-40	45 (12.3%)	35 (9.6%)	80 (21.9%)
41-50	42 (11.5%)	25 (6.8%)	67 (18.3%)
51 and over	17 (4.6%)	19 (5.2%)	36 (9.8%)
<b>Total</b>	196 (53.6%)	170 (46.4%)	366 (100%)

Table 5.2.4 shows the age distribution by sentencing type. The mean age of sentenced prisoners was 35 years (SD 12) and the mean age for remand prisoners was 31.6 years (SD 10.7). This difference was also statistically significant ( $t[365]=2.8$ ,  $p= 0.005$ ).

**Table 5.2.4 – Age distribution of the sample by sentencing type**

Age group	Sentenced	Remand	Total
18-20	18 (9.3%)	13 (7.5%)	31 (8.5%)
21-30	68 (35.2%)	84 (48.6%)	152 (41.5%)
31-40	45 (23.3%)	35 (20.2%)	80 (21.9%)
41-50	37 (19.2%)	30 (17.3%)	67 (18.3%)
51 and over	25 (13%)	11 (6.4%)	36 (9.8%)
<b>Total</b>	193 (100%)	170 (100%)	366 (100%)

### **5.3 Use of mental health services prior to imprisonment**

In order to explore further the relationship between mental health problems and behaviours that attract the attention of the criminal justice system, the mental health service use by the research participants prior to imprisonment was analysed.

Table 5.3.1 shows the proportion of prisoners who had been in contact with some form of mental health service in the 12 months prior to imprisonment. As expected, rates of

contact were high; a quarter had been in touch with mental health services, over 7% had been admitted to a psychiatric hospital, and over a third had been allocated to a keyworker (the definition of a keyworker included a mental health professional, a social worker from another service or a substance misuse worker).

However, there were differences between male and female prisoners in these data: twice as many male prisoners as female prisoners had experienced psychiatric admissions, whereas, excluding admissions, more female than male prisoners had had previous contact with mental health services. With the exception of having an allocated keyworker in the 12 months prior to imprisonment, these differences were not statistically significant.

**Table 5.3.1 - Rates of mental health service use in the 12 months prior to imprisonment by sex**

Service	Men	Women	Total	
<b>Contact with mental health services</b>	44 (22.3%)	49 (28.8%)	93 (25.6%)	$\chi^2 = 1.94$ df = 1 p = 0.16
<b>Psychiatric hospital admission</b>	18 (9.1%)	9 (5.3%)	27 (7.4%)	$\chi^2 = 2.02$ df = 1 p = 0.16
<b>Had a keyworker</b>	61 (31%)	78 (45.9%)	139 (38.3%)	$\chi^2 = 8.36$ df = 1 p = 0.004

Rates of contact with mental health services and hospital admission were similar between sentenced and remand prisoners; however more sentenced prisoners had an allocated keyworker in the 12 months prior to imprisonment. This difference was statistically significant.

**Table 5.3.2 - Rates of mental health service use in the 12 months prior to imprisonment by sentencing status**

Service	Sentenced	Remand	Total	
Contact with mental health services	48 (27.6%)	45 (23.2%)	93 (25.3%)	$\chi^2 = 0.06$ df = 1 p = 0.8
Psychiatric hospital admission	12 (5.2%)	15 (8.7%)	27 (7.4%)	$\chi^2 = 0.8$ df = 1 p = 0.48
Had keyworker	84 (43.3%)	55 (31.8%)	139 (37.9%)	$\chi^2 = 5.33$ df = 1 p = 0.021

#### **5.4 Prevalence of Disorders**

The next two tables show the prevalence of mental disorders (axis 1 and 2 disorders in DSM-IV parlance, American Psychiatric Association, 1994 ). Table 5.4.1 shows the prevalence of disorders established through the instruments used in the diagnostic part of the interviews with prisoners and includes figure from the ONS survey (Singleton et al, 1998) as a means of comparison. For a discussion on discrepancies between the two see chapter six. Prevalence rates were very high in both male and female prisoners, mirroring the high rates of contact with mental health services before incarceration. Rates were also strikingly similar between male and female prisoners, with the only significant differences in phobias and PTSD, which were higher in women. The similarity in diagnostic profiles was surprising, given that they differ in the general population (McManus et al., 2009)

**Table 5.4.1 - Proportion of male and female participants meeting diagnostic criteria for different psychiatric disorders. Figures from the ONS survey are given in bold.**

Disorder	Men	Women	Total	
<b>Psychosis</b>	28 (14.2%) <b>(8.5%)</b>	17 (9.9%) <b>(14%)</b>	45 (12.2%) <b>(11.3%)</b>	$\chi^2 = 0.99$ df = 1 p = 0.32
<b>Depression</b>	99 (50.3%) <b>(44.5%)</b>	98 (57.3%) <b>(57.5%)</b>	197 (53.8%) <b>(51%)</b>	$\chi^2 = 1.83$ df = 1 p = 0.18
<b>Anxiety</b>	58 (29.4%) <b>(27%)</b>	41 (24.3%) <b>(37%)</b>	98 (26.8%) <b>(32%)</b>	$\chi^2 = 1.4$ df = 1 p = 0.23
<b>Phobias</b>	13 (6.6%) <b>(16.5%)</b>	27 (16.1%) <b>(26.5%)</b>	40 (10.9%) <b>(21.5%)</b>	$\chi^2 = 7.98$ df = 1 p = 0.005
<b>Panic</b>	10 (5%) <b>(13%)</b>	10 (6%) <b>(20.5%)</b>	20 (5.5%) <b>(16.8%)</b>	$\chi^2 = 0.11$ df = 1 p = 0.74
<b>Post Traumatic Stress Disorder</b>	9 (4.6%) <b>(4%)</b>	20 (11.7%) <b>(7%)</b>	29 (7.9%) <b>(5.5%)</b>	$\chi^2 = 6.41$ df = 1 p = 0.01
<b>Personality Disorder</b>	70 (35.5%) <b>(71%)</b>	56 (32.7%) <b>(50%)</b>	126 (34.2%) <b>(60.5%)</b>	$\chi^2 = 0.32$ df = 1 p = 0.57
<b>Drug Dependency</b>	108 (54.8%) <b>(47%)</b>	102 (59.6%) <b>(47.5%)</b>	210 (57.1%) <b>(47.3%)</b>	$\chi^2 = 0.87$ df = 1 p = 0.35
<b>Alcohol Dependency</b>	63 (32%) <b>(60.5%)</b>	58 (33.9%) <b>(37.5%)</b>	121 (33.1%) <b>(49%)</b>	$\chi^2 = 0.16$ df = 1 p = 0.69

A statistically significant difference in diagnostic profile between sentenced and remand prisoners was found only for psychosis, which was twice as prevalent amongst those on remand. This is despite the fact that people who have been sentenced might be expected to

differ from those who are on remand. This is because they have been subjected to two processes (imprisonment on remand and sentencing) as opposed to only one. One might expect the second process to lead to the transfer of those people who were clearly mentally disordered and required treatment rather than incarceration.

**Table 5.4.2 - Proportion of sentenced and remand participants meeting diagnostic criteria for different psychiatric disorders.**

Disorder	Sentenced	Remand	Total	
Psychosis	17 (8.8%) _*	28 (16.1%) _*	45 (12.2%) _*	$\chi^2 = 4.59$ df = 1 p = 0.032
Depression	97 (50%) <b>(42%)</b>	98 (57%) <b>(60%)</b>	197 (53.8%) <b>(51%)</b>	$\chi^2 = 1.47$ df = 1 p = 0.23
Anxiety	55 (28.4%) <b>(26.5%)</b>	43 (25.1%) <b>(37.5%)</b>	98 (26.8%) <b>(32%)</b>	$\chi^2 = 0.62$ df = 1 p = 0.43
Phobias	23 (11.9%) <b>(17.5%)</b>	17 (9.9%) <b>(25.5%)</b>	40 (10.9%) <b>(21.5%)</b>	$\chi^2 = 0.41$ df = 1 p = 0.52
Panic	9 (4.6%) <b>(11.5%)</b>	11 (6.4%) <b>(22%)</b>	20 (5.5%) <b>(16.8%)</b>	$\chi^2 = 0.47$ df = 1 p = 0.49
Post Traumatic Stress Disorder	14 (7.3%) <b>(4%)</b>	15 (8.7%) <b>(7%)</b>	29 (7.9%) <b>(5.5%)</b>	$\chi^2 = 0.25$ df = 1 p = 0.62
Personality Disorder	58 (29.9%) _*	68 (39.1%) _*	126 _*	$\chi^2 = 3.43$ df = 1 p = 0.06
Drug Dependency	105 (54.1%) <b>(47.5%)</b>	105 (60.3%) <b>(47%)</b>	210 (57.1%) <b>(47.3%)</b>	$\chi^2 = 1.45$ df = 1 p = 0.23
Alcohol Dependency	65 (33.5%) <b>(51%)</b>	56 (32.9%) <b>(47%)</b>	121 (33.1%) <b>(49%)</b>	$\chi^2 = 0.07$ df = 1 p = 0.79

\_\* Rates according to sentencing status not given

The next two tables show the prevalence of individual personality disorders (axis 2 in DSM-IV). There is little difference in overall rates of personality disorder between the sexes (Table 5.4.3), and few differences in relation to the individual types of personality disorder.

Women had visibly higher rates of borderline personality disorder, but the only statistically significant differences were for anti-social personality disorder and histrionic personality disorder, although there were too few individuals in the latter category to draw definite conclusions.

**Table 5.4.3 - Frequency of Personality Disorder by type and sex**

PD type	Men	Women	Total	
<b>Avoidant</b>	8 (4.1%)	13 (7.5%)	21 (5.7%)	$\chi^2 = 2.13$ df = 1 p = 0.14
<b>Dependent</b>	3 (1.5%)	1 (0.6%)	4 (1.1%)	$\chi^2 = 0.124$ df = 1 p = 0.72
<b>Obsessive - Compulsive</b>	2 (1%)	7 (4.1%)	9 (2.4%)	$\chi^2 = 2.51$ df = 1 p = 0.11
<b>Paranoid</b>	2 (1%)	2 (1.8%)	4 (1.1%)	$\chi^2 = 0.31$ df = 1 p = 0.72
<b>Schizoid</b>	2 (1%)	6 (3.5%)	8 (2.2%)	$\chi^2 = 1.63$ df = 1 p = 0.2
<b>Schizotypal</b>	1 (0.5%)	1 (0.6%)	2 (0.5%)	Fisher's exact p = 1
<b>Histrionic</b>	-	4 (2.3%)	4 (1.1%)	Fisher's exact p = 0.046
<b>Narcissistic</b>	3 (1.5%)	-	3 (0.8%)	Fisher's exact p = 0.25
<b>Borderline</b>	21 (10.7%)	26 (15.2%)	47 (12.8%)	$\chi^2 = 1.7$ df = 1 p = 0.19
<b>Anti-social</b>	52 (26.4%)	30 (17.5%)	82 (22.3%)	$\chi^2 = 4.14$ df = 1 p = 0.04

Overall, personality disorders were more prevalent in the remand group (Table 5.4.4). Of all participants with at least one personality disorder, 55.1% were on remand and 45.9% had been sentenced, with Borderline and Antisocial PD being the most common. There were no statistically significant differences between the groups though, with the exception of histrionic and schizotypal personality disorder, although numbers in these categories were very low.

**Table 5.4.4 - Frequency of Personality Disorder by type and sentencing status**

PD type	Sentenced	Remand	Total	
<b>Avoidant</b>	13 (6.7%)	8 (4.6%)	21 (5.7%)	$\chi^2 = 0.71$ df = 1 p = 0.4
<b>Dependent</b>	4 (2.1%)	-	4 (1.1%)	Fisher's exact p = 0.13
<b>Obsessive - Compulsive</b>	3 (1.5%)	6 (3.4%)	9 (2.4%)	$\chi^2 = 0.8$ df = 1 p = 0.37
<b>Paranoid</b>	4 (2.1%)	1 (0.6%)	4 (1.1%)	$\chi^2 = 0.58$ df = 1 p = 0.45
<b>Schizoid</b>	7 (3.6%)	1 (0.6%)	8 (2.2%)	$\chi^2 = 2.67$ df = 1 p = 0.046
<b>Schizotypal</b>	-	2 (1.1%)	2 (0.5%)	Fisher's exact: p = 0.22
<b>Histrionic</b>	-	4 (2.3%)	4 (1.1%)	Fisher's exact: p = 0.049
<b>Narcissistic</b>	1 (0.5%)	2 (1.1%)	3 (0.8%)	$\chi^2 = 0.009$ df = 1 p = 0.92
<b>Borderline</b>	19 (9.8%)	28 (16.1%)	47 (12.8%)	$\chi^2 = 2.27$ df = 1 p = 0.07
<b>Anti-social</b>	38 (19.6%)	44 (25.3%)	82 (22.3%)	$\chi^2 = 1.72$ df = 1 p = 0.19



Table 5.4.5 shows the co-morbidity of the psychiatric disorders assessed by the diagnostic instruments used during face-to-face interviews (that is mental disorders, substance use disorders and personality disorders). Only 10.3% of the participants did not meet diagnostic criteria for at least one psychiatric disorder, 50% had two or more, and 11.7% met criteria for five or more disorders. Patterns of co-morbidity were similar in the two sexes: overall, male prisoners had a mean of 2.5 disorders (SD = 1.7) and female prisoners one of 2.6 disorders (SD = 2.6) . This difference was not significant.

**Table 5.4.5 – Co-occurrence of disorders by sex**

No of Psychiatric Disorders	Men	Women	Total
0	21 (10.7)	16 (9.8%)	37 (10.3%)
1	43 (21.9%)	31 (18.9%)	74 (20.6%)
2	39 (19.9%)	31(23.8%)	70 (20.6%)
3	38 (19.4%)	36 (22%)	74 (20.6%)
4	34 (17.3%)	30 (18.3%)	64 (17.8%)
5	9 (4.6%)	12 (7.3%)	21 (5.8%)
6	9 (4.6%)	5 (3%)	14 (3.9%)
7	2 (1%)	3 (1.8%)	3 (1.5%)
8	1 (0.5%)	-	1 (0.5%)

There were no marked differences in the prevalence of co-morbidity according to sentencing type (Table 5.4.6). Sentenced prisoners had on average 2.5 disorders (SD = 1.6) and remand prisoners had an average of 2.7, statistically non-significant. This finding again suggests that mentally ill prisoners are not diverted from prison at the point of sentencing.

**Table 5.4.6 – Co-occurrence of disorders by sentencing status**

No of Disorders	Sentenced	Remand	Total
0	19 (9.9%)	18 (10.7%)	37 (10.3%)
1	40 (20.9%)	34 (20.1%)	74 (20.6%)
2	44 (23%)	26 (15.4%)	70 (20.6%)
3	38 (19.4%)	36 (22%)	74 (20.6%)
4	34 (17.3%)	31 (18.3%)	64 (17.8%)
5	9 (4.7%)	12 (7.1%)	21 (5.8%)
6	5 (2.6%)	9 (5.3%)	14 (3.9%)
7	3 (1.6%)	2 (1.2%)	3 (1.5%)
8	-	1 (0.6%)	1 (0.5%)

Even the shortest clinical experience in prisons makes it obvious that many prisoners have personality difficulties, many have problems with substance abuse, and many have both.

The next section illustrates this by quantifying the relationship between these categories of disorder. Figure 5.1 shows that of all those with at least one personality disorder, 52.4% also had a problem with alcohol abuse, and 63.5% had some level of drug dependence, whereas only 34.6% of those with hazardous drinking and 38.1% of those with drug dependency also had a personality disorder. Out of all those who met diagnostic criteria for at least one of the disorders 16.1 % met criteria for all three categories of disorders. These data suggest there may be a non-reflexive relationship between personality disorder and substance abuse in prisoners: substance abuse disorders predicted the presence of a personality disorder less strongly than personality disorders predicted substance abuse disorders.

**Figure 5.1 – Co-morbidity of personality disorder, alcohol abuse and drug abuse**

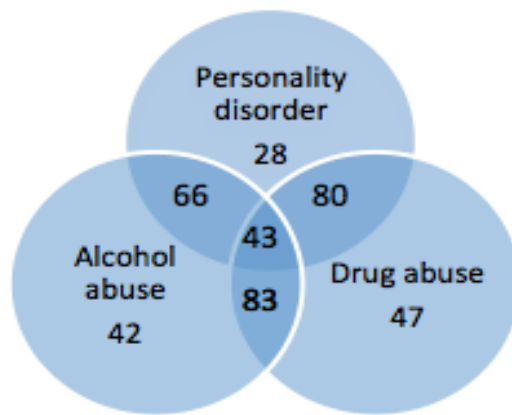
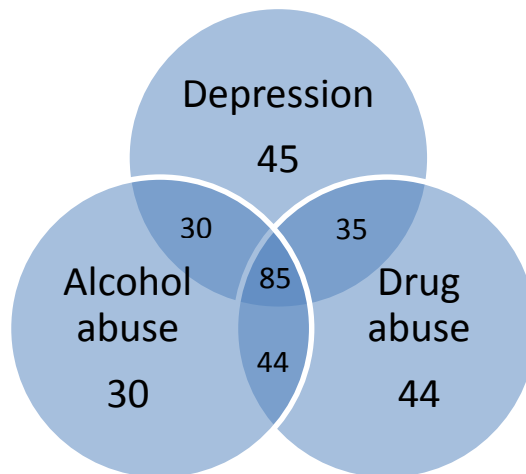


Figure 5.2 provides equivalent relationships for depression and substance abuse. Here the distributions in the diagram are symmetrical, with no suggestion of non-reflexive relationships. Of all participants who met diagnostic criteria for depression, 61.5% were also dependent on drugs to some extent and 59% were drinking hazardously prior to their imprisonment. In addition, 60.1% of those with alcohol problems 57.7% of those who abused drugs also had depression.

Out of all those who met diagnostic criteria for one of the three problems 27.2% met criteria for all three. Compared to personality disorders this figure was higher, but this is because personality disorders are less prevalent than depression.

**Figure 5.2 – Co-morbidity of depression, alcohol abuse and drug abuse**



**5.5 – Summary of findings based on the use of diagnostic instruments**

In all four groups (male and female and sentenced and remand prisoners) the observed differences were less than expected. Male prisoners had higher rates of hospital admission prior to incarceration but this difference was not statistically significant. Female prisoners were significantly more likely to have had a keyworker prior to imprisonment. In terms of diagnostic profiles, male and female prisoners were very similar. Female prisoners had somewhat higher rates of personality disorder and depression but the only statistically significant differences were that men had higher rates of psychosis and women had higher rates of post traumatic stress disorder. Rates of co-morbidity were high amongst both groups, but there was no significant difference between them.

There were even fewer differences between sentenced and remand prisoners. Sentenced prisoners were more likely to have had a key worker before imprisonment. Remand prisoners had somewhat higher rates of depression and personality disorder, but the only statistically significant difference was for psychosis, which was higher in remand prisoners.

### **5.6 - Results from the Needs for Care assessment**

The very high rates of different types of psychiatric morbidity in prisoners of both sexes and sentencing types suggest that they are likely to have high needs for treatment. In this section treatment needs and the extent to which they are met in the prison environment are evaluated.

The first findings I will present here concern the levels of impaired functioning as determined by the Needs for Care assessment tool (Table 5.6.1). This is not the same as the presence of a condition identified by the diagnostic instruments reported above. It reflects a more problem-based approach: some conditions that meet criteria for diagnosis may be too recent or too mild for treatments to be considered appropriate, while conditions falling short of diagnostic criteria may nevertheless be distressing or interfere with functioning, and thus merit some form of clinical intervention. Thus levels of impaired functioning will largely map onto diagnosed clinical entities, but will not overlap perfectly.

Levels of impairment were generally high but were particularly so for women. Women had significantly higher levels of impairment with regard to depression, alcohol and drug abuse,

PTSD, and dangerous and destructive behaviour, which includes deliberate self-harm and suicide attempts. This contrasts with the general similarity between the sexes in the prevalence of diagnosed disorders presented in sections 5.4 and 5.5. Comparisons with prevalence rates from table 5.4.1 show that overall rates of impairment were consistently lower (e.g. 12.2% overall prevalence of psychosis and 53.8% of depression, 34.2% of personality disorder). Levels of differences between male and female prisoners remained fairly similar irrespective of type of assessment used, with the exception of drug and alcohol dependency. Using the diagnostic instruments rates of alcohol and drug dependence were very similar among male and female prisoners, but looking at functional impairment in the table below it is clear that these were more commonly problems for women using the needs for care assessment.

**Table 5.6.1 - Level of impaired functioning by sex**

<b>Problem</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>	
<b>Psychosis</b>	18 (9.4%)	8 (4.7%)	26 (7.2%)	$\chi^2 = 2.77$ df = 1 p = 0.09
<b>Depression</b>	64 (33.3%)	70 (41.7%)	134 (37.2%)	$\chi^2 = 7.1$ df = 1 p = 0.008
<b>Anxiety</b>	16 (8.3%)	12 (7.1%)	28 (7.8%)	$\chi^2 = 2.77$ df = 1 p = 0.09
<b>Dangerous/ Destructive Behaviour</b>	2 (1%)	19 (11.3%)	21 (5.8%)	$\chi^2 = 17.34$ df = 1 p < 0.0001
<b>Adjustment Reaction</b>	8 (4.5%)	11 (6.5%)	19 (5.3%)	$\chi^2 = 1.05$ df = 1 p = 0.31
<b>Alcohol Abuse</b>	61 (31.8%)	71 (42.3%)	132 (36.7%)	$\chi^2 = 4.43$ df = 1 p = 0.035
<b>Drug Abuse</b>	73 (38%)	79 (47%)	165 (45.8%)	$\chi^2 = 5.23$ df = 1 p = 0.022
<b>Eating Disorders</b>	-	3 (1.8%)	3 (0.8%)	Fisher's exact p = 0.09
<b>Personality Disorder</b>	31 (16.2%)	33 (19.6%)	64 (17.8%)	$\chi^2 = 0.81$ df = 1 p = 0.37
<b>Post- Traumatic Stress Disorder</b>	9 (4.7%)	20 (11.9%)	29 (8.1%)	$\chi^2 = 6.41$ df = 1 p = 0.02

Table 5.6.2 shows levels of functional impairment by sentencing type. Overall remand prisoners had higher levels of functional impairment than sentenced prisoners. These differences were significant for psychosis (which was three times as high in the remand group), and for alcohol and drug abuse. Overall, the difference in levels of significant

problems was not as pronounced as between men and women. Again overall rates of impairment were generally lower than prevalence rates assessed through diagnostic measures. Personality disorder was higher among remand prisoners in table 5.4.2, this difference was not found looking at levels of impairment below. Alcohol and drug abuse occurred with very similar frequency in both sentenced and remand prisoners using the diagnostic assessment tool but caused higher levels of impairment among remand prisoners using the needs for care assessment.

**Table 5.6.2 - Level of impaired functioning by sentencing type**

Problem	Sentenced	Remand	Total	
<b>Psychosis</b>	7 (3.75%)	19 (11%)	26 (7.2)	$\chi^2 = 7.47$ df = 1 p = 0.006
<b>Depression</b>	64 (34.2%)	70 (40.5%)	134 (37.2)	$\chi^2 = 2.08$ df = 1 p = 0.15
<b>Anxiety</b>	10 (5.3%)	18 (10.4%)	28 (7.8%)	$\chi^2 = 3.57$ df = 1 p = 0.059
<b>Self-harm/ Destructive Behaviour</b>	8 (4.2%)	13 (7.5%)	21 (5.8%)	$\chi^2 = 1.91$ df = 1 p = 0.16
<b>Adjustment Reaction</b>	10 (5.3%)	9 (5.2%)	19 (5.3%)	$\chi^2 = 0.001$ df = 1 p = 0.97
<b>Alcohol Abuse</b>	60 (32.1%)	72 (41.6%)	132 (36.7%)	$\chi^2 = 4.36$ df = 1 p = 0.037
<b>Drug Abuse</b>	66 (35.3%)	86 (49.7%)	165 (45.8%)	$\chi^2 = 8.98$ df = 1 p = 0.0027
<b>Eating Disorders</b>	1 (0.5%)	2 (1.2%)	3 (0.8%)	$\chi^2 = 0.009$ df = 1 p = 0.92
<b>Personality Disorder</b>	32 (17.1%)	32 (18.5%)	64 (17.8%)	$\chi^2 = 0.23$ df = 1 p = 0.73
<b>Post- Traumatic Stress Disorder</b>	15 (8%)	14 (8.1%)	29 (8.1%)	$\chi^2 = 0.012$ df = 1 p = 0.912



Although the needs for care tool identified a higher proportion of prisoners without any functional impairment than the schedules used in the face-to-face interviews did, the prevalence of co-occurring problems in the sample using the needs for care assessment was still high. Overall, a quarter of the sample was assessed as having no significant impairment, while just over ten percent had four or more areas of impairment. On average, male prisoners had a clinically significant level of impairment in a mean 1.5 areas (SD = 1.4) and women in 1.9 areas (SD = 1.4). This difference was statistically significant ( $t[357] = -294, p = 0.004$ ). Less than a quarter of all women did not have a significant level of impairment in any area while for men this figure was just below a third.

**Table 5.6.3 – Number of co-morbid areas of impairment by sex**

No of disorders	Men	Women	Total
0	60 (31.2%)	33 (19.8%)	93 (25.9%)
1	51 (26.6%)	38 (22.8%)	89 (24.8%)
2	36 (18.8)	39 (23.4%)	75 (20.9%)
3	29 (15.1%)	36 (21.6%)	65 (18.1%)
4	10 (5.2%)	12 (7.2%)	22 (6.1%)
5	4 (2.1%)	7 (4.2%)	11 (3.1%)
6	2 (1%)	2 (1.2%)	4 (1.1%)
<b>Total</b>	<b>192 (100%)</b>	<b>167 (100%)</b>	<b>359 (100%)</b>

Comparison of the sample according to sentencing type showed few differences. The biggest difference between the two groups occurred amongst those who did not have any areas of impairment, around a third of sentenced prisoners but only a fifth of remand prisoners. In the remand sample 15.7% had four or more areas of clinically significant levels

of impairment whilst this was the case for only 5.3% of the sentenced sample. On average, sentenced prisoners had a mean 1.4 disorders (SD = 1.3) and remand prisoners had a mean 2 disorders (SD = 1.5). This difference was statistically significant ( $t[357] = -3.592, p = 0.000$ ).

**Table 5.6.4 – Number of co-morbid disorders by sentencing type**

No of disorders	Sentenced	Remand	Total
0	58 (31%)	35 (20.3%)	93 (25.9%)
1	48 (25.7%)	41 (23.8%)	89 (24.8%)
2	41 (21.9%)	34 (19.8%)	75 (20.9%)
3	30 (16%)	35 (20.3%)	65 (18.1%)
4	6 (3.2%)	16 (9.3%)	22 (6.1%)
5	3 (1.6%)	8 (4.7%)	11 (3.1%)
6	1 (0.5%)	3 (1.7%)	4 (1.1%)
7	<b>187 (100%)</b>	<b>172 (100%)</b>	<b>359 (100)</b>

### **5.7 - Level of met needs for individual areas of impaired functioning**

The next section presents analysis of need status for each area of impaired functioning as identified through the needs for care assessment. In a situation of inefficient delivery of care, more difficult or unusual problems are likely to receive less good care. It is thus worthwhile to examine the profile of need in different disorders. Although the prevalence of psychosis is remarkably high in prisoners, both in the national survey and in this survey, the fear is that this most severe form of psychiatric disturbance is receiving the worst care. It is expected that needs for types of intervention that are easiest to deliver, such as medication, will be better met than needs for more complex interventions.

### 5.7.1 - Psychosis

Table 5.7.1.1 shows that nearly half of all treatment needs for psychosis were not met and that men had higher levels of unmet need than women. This difference was not statistically significant ( $\chi^2[2, N=30] = 0.45, p = 0.8$ ).

**Table 5.7.1.1 – Overall levels of need status for psychosis by sex**

Need status	Men	Women	Total
<b>Met need</b>	10 (45.5%)	5 (62.5%)	15 (50%)
<b>Unmet need</b>	10 (45.5%)	2 (25%)	12 (40%)
<b>No meetable need</b>	2 (9%)	1 (12.5%)	3 (10%)
<b>Total</b>	<b>22 (100%)</b>	<b>7 (100%)</b>	<b>30 (100%)</b>

Around two thirds of the sample had their need for medication met whereas a third did not, mostly because these cases had not been detected by the prison service or in-reach services. Two participants had rejected offers of medication, which were classed as unmeetable needs. These differences were not significant ( $\chi^2[df1, N=20] = 0.28, p = 0.6$ ). An additional two women were receiving medication, which was rated as an overprovision because symptoms had decreased but medication had not been reviewed since reception in prison. They are therefore not included in the table. One male and one female case had a met need for medication review and one male and one female case had an unmet need for medication review.

Two men had met needs for support and reassurance while for a further two men this need went unmet.

One male prisoner had an unmet need for admission to hospital. Two cases had not yet received any treatment but were under active assessment.

**Table 5.7.1.2 Overall levels of need status for medication for psychosis by sex**

Need status	Men	Women	Total
Met need	7 (50%)	5 (83.3%)	12 (60%)
Unmet need	5 (35.7%)	1 (15.7%)	6 (30%)
No meetable need	2 (14.3%)	0	2 (10%)
<b>Total</b>	<b>14 (100%)</b>	<b>6 (100%)</b>	<b>20 (100%)</b>

Table 5.7.1.3 shows that just over half of all treatment needs for psychosis were unmet and that remand prisoners had more met needs than sentenced prisoners, however this difference was not significant ( $\chi^2$ [df2, N=30] = 0.52,  $p = 0.77$ ). Nonetheless this finding goes against expectation, as the fact that sentenced prisoners are in prison for longer might lead one to expect that their needs are better evaluated.

**Table 5.7.1.3 – Overall level of need status for psychosis by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	4 (36.4%)	11 (57.9%)	9 (50%)
<b>Unmet need</b>	5 (45.5%)	7 (36.8%)	12 (40%)
<b>No meetable need</b>	2 (18.2%)	1 (5.3%)	3 (10%)
<b>Total</b>	<b>11 (100%)</b>	<b>19 (100%)</b>	<b>30 (100%)</b>

Less than a quarter of the sample had unmet medication needs and there was no difference between the two groups ( $\chi^2[\text{df}1, N=20] = 0.54, p = 0.37$ ).

In addition one sentenced and one remand prisoner had an overprovision of medication and one remand prisoner had been appropriately given medication which was however not proving effective.

One sentenced and one remand prisoner had met needs for a medication change whereas in two sentenced prisoners this need was unmet.

One sentenced and one remand prisoner had met needs for support and reassurance while for two remand prisoners this need was unmet.

**Table 5.7.1.4 Overall levels of need status for medication for psychosis by sentencing type**

Need status	Sentenced	Remand	Total
Met need	4 (50%)	12 (70.6%)	16 (72.7%)
Unmet need	3 (35.7%)	3 (17.6%)	4 (18.19%)
No meetable need	1 (14.3%)	1 (5.9%)	2 (9.1%)
<b>Total</b>	<b>8 (100%)</b>	<b>17 (100%)</b>	<b>22 (100%)</b>

### 5.7.2 – Depression

More than half the sample had unmet treatment needs for depression, but the level of unmet needs was much higher in men than women, with three quarters of needs having been unmet. The difference was statistically significant ( $\chi^2[\text{df}1, N = 113] = 11.35, p < 0.001$ ).

**Table 5.7.2.1 – Overall level of met needs for depression by sex**

Need status	Men	Women	Total
<b>Met need</b>	10 (20%)	32 (50.8%)	42 (37.2%)
<b>Unmet need</b>	37 (74.%)	28 (44.4%)	65 (57.5%)
<b>No meetable need</b>	3 (6%)	3 (4.8%)	6 (5.3%)
<b>Total</b>	<b>50 (100%)</b>	<b>63 (100%)</b>	<b>113 (100%)</b>

Across all three main items of care for depression (shown in Table 5.7.2.2), around half the sample had unmet treatment needs. However, men had higher levels of unmet needs in all three categories.

In addition three men were given support and reassurance that was aimed at another clinical need.

Six men and eight women received medication primarily targeting other clinical problems.

Two men were receiving dynamic psychotherapy aimed at other clinical problems; this was also the case for two other men taking part in a structured programme.

One man and one woman were appropriately subject to watchful waiting.

**Table 5.7.2.2 - Level of specific met treatment needs for depression by sex**

Item of care	Needs status	Men	Women	Total	
<b>Support and reassurance</b>	Met need	2 (20%)	5 (83.3%)	7 (43.8%)	Fishers Exact Test: P=0.007
	Unmet need	8 (80%)	0	8 (50%)	
	No meetable need	0	1 (16.7%)	1 (6.3%)	
<b>Coping advice/ Psychological treatment</b>	Met need	16 (39%)	30 (60%)	46 (50.5%)	$\chi^2 = 3.12$ df = 1 p = 0.08
	Unmet need	21 (51.2%)	18 (36%)	39 (42.9%)	
	No meetable need	4 (9.8%)	2 (4%)	6 (6.5%)	
<b>Medication</b>	Met need	0	14 (60.9%)	14 (25.7%)	$\chi^2 = 8.88$ df = 1 p = 0.003
	Unmet need	11 (91.7%)	9 (39.1%)	20 (57.1%)	
	No meetable need	1 (8.3%)	0	1 (2.9%)	

Table 5.7.2.3 shows that there was virtually no difference in levels of met and unmet need between sentenced and remand prisoners in relation to depression

( $\chi^2$ df[2, N=113] =0.13, p = 0.94).

**Table 5.7.2.3 Overall need status for depression by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	21 (39.6%)	21 (35%)	42 (37.2%)
<b>Unmet need</b>	30 (56.6%)	35 (58.4%)	65 (57.5%)
<b>No meetable need</b>	2 (3.8%)	4 (6.6%)	6 (5.3%)
<b>Total</b>	<b>53 (100%)</b>	<b>60 (100%)</b>	<b>113 (100%)</b>

Table 5.7.2.4 shows that around half of all treatment needs for depression were unmet. In addition three remand prisoners were receiving coping advice targeted at other clinical problems, while two more were appropriately receiving coping advice, which was however not proving effective.

Two remand prisoners were receiving dynamic psychotherapy aimed at other clinical problems; this was also the case for two other remand prisoners taking part in a structured programme.

One sentenced and one remand prisoner were subject to watchful waiting.

**Table 5.7.2.4 - Level of met treatment needs for depression by sentencing type**

Item of care	Needs status	Sentenced	Remand	Total	
<b>Support and reassurance</b>	Met need	2 (20%)	5 (62.5%)	7 (43.8%)	Fishers Exact Test: P= 0.18
	Unmet need	5 (80%)	3 (37.5%)	8 (50%)	
	No meetable need	0	1 (12.5%)	1 (6.3%)	
<b>Coping advice/ Psychological treatment</b>	Met need	28 (56%)	18 (43.9%)	46 (50.5%)	$\chi^2 = 1.26$ df = 1 p = 0.26
	Unmet need	19 (38%)	20 (48.8%)	39 (42.9%)	
	No meetable need	3 (6%)	3 (7.3%)	6 (6.5%)	
<b>Medication</b>	Met need	10 (45.5%)	4 (30.8%)	14 (40%)	$\chi^2 = 0.16$ df = 1 p = 0.69
	Unmet need	12 (54.5%)	8 (61.5%)	20 (57.1%)	
	No meetable need	0	1 (7.7%)	1 (2.9%)	

### 5.7.3 – Anxiety

There were also high levels of unmet treatment needs for anxiety, the majority of which were in the male sample, although the gender difference was not significant (Fisher’s exact:  $p = 1$ ). In interpreting these data, it is important to note that, since anxiety disorders mostly co-occurred with other disorders, the panel had to make a decision as to which condition was the appropriate primary target for any intervention. In consequence, most treatment needs for anxiety were subsumed under treatment needs for other diagnostic/clinical categories. This was true for coping advice/psychological therapy in 12 out of 15 cases (three men and nine women) and seven out of 14 cases with a need for medication. Three men were attending a structured programme for a different clinical problem that also addressed their anxiety.



**Table 5.7.3.1 -Overall levels of met need for anxiety disorders by sex**

Need status	Men	Women	Total
<b>Met need</b>	2 (25%)	1 (33.3%)	3 (37.2%)
<b>Unmet need</b>	6 (75%)	1 (33.3%)	7 (57.5%)
<b>No meetable need</b>	0	1 (33.3%)	1.1 (5.3%)
<b>Total</b>	<b>8 (100%)</b>	<b>3 (100%)</b>	<b>11 (100%)</b>

The figures for need status with regard to anxiety disorders were consistent across sex and sentencing type.

In terms of specific items of care, needs for coping advice/psychological therapy for seven sentenced and eight remand prisoners were subsumed under different clinical problems.

This was also the case for medication needs in two sentenced and five remand prisoners.

**Table 5.7. 3.2- Overall met levels of need for anxiety disorders by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	2 (50%)	1 (14.3%)	3 (27.2%)
<b>Unmet need</b>	2 (50%)	5 (71.4%)	7 (63.6%)
<b>No meetable need</b>	0	1 (14.3%)	1 (9.1%)
<b>Totals</b>	<b>4 (100%)</b>	<b>7 (100%)</b>	<b>11 (100%)</b>

#### 5.7.4 – Alcohol abuse

Requirements for the treatment of alcohol abuse were high (as indicated by the high proportion of the sample that had a clinically significant problem of alcohol abuse in table

5.6.1.) The proportion of met need in this area was similar to other areas of impaired function, at around 50%. However, the level of *unmet* needs was lower than other areas of need, due to a relatively high number of participants with no meetable needs, i.e. people who had rejected (or would reject) treatment even if an intervention was offered to them. There was a marked difference in the proportions of men and women who had met needs in this area, being higher for female prisoners ( $\chi^2[df2, N = 113] = 6.69, p < .035$ ).

**Table 5.7.4.1 – Overall level of need status for alcohol abuse by sex**

Need status	Men	Women	Total
<b>Met need</b>	20 (35.1%)	38 (57.6%)	58 (47.2%)
<b>Unmet need</b>	28 (49.1%)	19 (28.8%)	47 (38.2%)
<b>No meetable need</b>	9 (15.8%)	9 (13.6%)	18 (14.6%)
<b>Total</b>	<b>57 (100%)</b>	<b>66 (100%)</b>	<b>123 (100%)</b>

There was virtually no difference in overall need status between sentenced and remand prisoners. Slightly more remand prisoners rejected the notion of treatment than their sentenced counterparts.

**Table 5.7.4.2 – Overall level of need status for alcohol abuse by sentencing type**

Need status	Sentenced	Remand	Total
-------------	-----------	--------	-------

<b>Met need</b>	27 (49.1%)	31 (45.6%)	58 (47.2%)
<b>Unmet need</b>	23 (41.8%)	24 (40.8%)	47 (38.2%)
<b>No meetable need</b>	5 (9.1%)	13 (13.6%)	18 (14.6%)
<b>Total</b>	<b>55 (100%)</b>	<b>64 (100%)</b>	<b>113 (100%)</b>

Judgments on needs for a particular intervention were made in a hierarchical fashion, i.e. in cases where alcohol consumption was not deemed to contribute significantly to the overall clinical picture, simple advice and education were judged to be a sufficient intervention. In contrast, cases where alcohol posed a more serious problem or cases of a more complex nature were deemed to require a more serious intervention. Judgements on the seriousness of the substance misuse problem and its contribution to the clinical picture were made by the assessment panel based on the information contained in the vignette. The prison system has several such interventions, including self-help groups such as Alcoholics Anonymous and manualised prison run group interventions. For those arriving in prison with withdrawal symptoms due to excessive alcohol consumption, a detoxification regime is available. Women prisoners in our sample tended to have higher rates of met need, but the differences between individual items of care were not significant.

In addition to the cases in the table below, four men and two women had individual counselling for other problems underlying their alcohol abuse, one person had been attending a self-help group for some time without any effect, and one man and one woman were attending group therapy for problems with alcohol abuse arising from other clinical problems.

Two men were given medication, and one man was judged to have a need for medication that was unmet.

**Table 5.7.4.3 - Level of met treatment needs for alcohol abuse by sex**

Item of care	Needs status	Men	Women	Total	
<b>Simple advice and education</b>	Met need	4 (22.2%)	3 (30%)	7 (25%)	$\chi^2 = 0.07$ df = 1 p = 0.93
	Unmet need	13 (72.2%)	7 (70%)	20 (71.4%)	
	No meetable need	1 (5.5%)	0	1 (3.6%)	
<b>Individual counselling</b>	Met need	3 (42.9%)	3 (60%)	6 (46.2%)	$\chi^2 = 0.05$ df = 1 p = 0.82
	Unmet need	5 (71.4%)	2 (40%)	7 (53.8%)	
	No meetable need	0	0	0	
<b>Self-help group</b>	Met need	10 (90.9%)	7 (70%)	17 (81%)	$\chi^2 = 0.27$ df = 2 p = 0.6
	Unmet need	1 (9.1%)	1 (10%)	2 (9.5%)	
	No meetable need	0	2 (20%)	2 (9.5%)	
<b>Group therapy</b>	Met need	10 (55.6%)	23 (67.6%)	33 (81%)	$\chi^2 = 1.2$ df = 1 p = 0.27
	Unmet need	7 (38.9%)	8 (10%)	8 (23.5%)	
	No meetable need	1 (5.6%)	3 (20%)	2 (5.9%)	
<b>Detoxification</b>	Met need	5 (71.4%)	21 (91.3%)	26 (86.7%)	$\chi^2 = 1.83$ df = 2 p = 0.75
	Unmet need	1 (14.3%)	1 (4.3%)	2 (6.7%)	
	No meetable need	1 (14.3%)	1 (4.3%)	2 (6.7%)	

There was no statistically significant difference between sentenced and remand prisoners in terms of met and unmet needs in regard to specific items of care for alcohol abuse. Overall levels of met need were relatively high in comparison to other clinical problems.

Four sentenced and two remand prisoners were receiving individual counselling primarily targeted at a different clinical problem, but which was collaterally addressing their alcohol abuse.

One sentenced prisoner attended a self-help group that was not judged to be effective, and two sentenced and one remand prisoners were attending group therapy targeted at other primary needs.

One sentenced and one remand prisoner were receiving medication, and one remand prisoner had an unmet need for medication.

**Table 5.7.4.4 - Level of met treatment needs for alcohol abuse by sentencing type.**

Item of care	Needs status	Sentenced	Remand	Total	
<b>Simple advice and education</b>	Met need	4 (28.6%)	2 (15.4%)	7 (25%)	$\chi^2 = 0.63$ df = 1 p = 0.8
	Unmet need	10 (71.3%)	10 (76.9%)	20 (71.4%)	
	No meetable need	0	1 (7.7%)	1 (3.6%)	
<b>Individual counselling</b>	Met need	4 (50%)	2 (60%)	6 (46.2%)	$\chi^2 = 0.048$ df = 1 p = 0.82
	Unmet need	4 (50%)	3 (40%)	7 (53.8%)	
	No meetable need	0	0	0	
<b>Self-help group</b>	Met need	13 (86.7%)	4 (80%)	17 (81%)	$\chi^2 = 0.002$ df = 2 p = 0.96
	Unmet need	1 (6.7%)	1 (20%)	2 (9.5%)	
	No meetable need	2 (13.3%)	0	2 (9.5%)	
<b>Group therapy</b>	Met need	15 (65.2%)	18 (62.1%)	33 (63.5%)	$\chi^2 = 0.006$ df = 1 p = 0.93
	Unmet need	7 (30.4%)	8 (27.6%)	15 (28.4%)	
	No meetable need	1 (4.3%)	3 (10.3%)	4 (7.1%)	
<b>Detoxification</b>	Met need	11 (84.6%)	15 (93.8%)	26 (86.7%)	Fishers exact test p = 1
	Unmet need	0	1 (6.2%)	2 (6.7%)	
	No meetable need	2 (15.4%)	0	2 (6.7%)	

### 5.7.5 – Drug abuse

Drug abuse was the most frequent area of clinical need, and had the highest rate of met needs of all areas of clinical need, although this still only represented 60% of the sample.

There was a high level of treatment rejection, meaning that less than a third of the

population had unmet needs due to the high proportion classified as unmeetable. Women had much higher levels of met needs than men, but overall there was no statistical significance between them ( $\chi^2$ [df1, N = 140] = 3.44, p = 0.064).

**Table 5.7.5.1 – Overall level of need status for drug abuse by sex**

Need status	Men	Women	Total
<b>Met need</b>	35 (53.8%)	48 (73.8%)	83 (59.3%)
<b>Unmet need</b>	24 (36.9%)	16 (24.6%)	40 (28.57%)
<b>No meetable need</b>	6 (9.2%)	11 (16.9%)	17 (12.1%)
<b>Total</b>	<b>65 (100%)</b>	<b>75 (100%)</b>	<b>140 (100%)</b>

Although sentenced prisoners had nearly twice the level of unmet needs as remand prisoners there was overall no statistical difference between the two groups ( $\chi^2$ [df2, N= 140] = 2.71, p = 0.26). More remand prisoners rejected the notion of treatment than their sentenced counterparts.

**Table 5.7.5.2 - Overall level of need status for drug abuse by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	32 (52.5%)	51 (64.6%)	83 (59.3%)
<b>Unmet need</b>	19 (31.1%)	21 (26.6%)	40 (28.57%)
<b>No meetable need</b>	10 (16.4%)	7 (8.9%)	17 (12.1%)
<b>Total</b>	<b>61 (100%)</b>	<b>79 (100%)</b>	<b>140 (100%)</b>

Judging appropriate items of care was done in a hierarchical manner as described under alcohol abuse problems. Women were more than twice as likely to have a met need for simple advice and education, while men were twice as likely to have met need for a self-help group, but there were no statistical differences between the two groups. Overall levels of met need were relatively high, particularly for detoxification and medication. The

commonest need was for group therapy, which was met in just over half of cases. In a number of cases, items of care that were provided were targeted at other conditions. Four men and one woman were receiving individual counselling for other clinical concerns. Four men were attending group therapy for a different primary need.

**Table 5.7.5.3 – Level of met treatment needs for drug abuse by sex**

Item of care	Needs status	Men	Women	Total	
<b>Simple advice and education</b>	Met need	5 (31.3%)	6 (75%)	11 (45.8%)	$\chi^2 = 3.36$ df = 1 p = 0.19
	Unmet need	10 (62.5%)	1 (7.5%)	11 (45.8%)	
	No meetable need	1 (6.3%)	1 (7.5%)	2 (8.3%)	
<b>Individual counselling</b>	Met need	3 (50%)	9 (69.2%)	12 (63.2%)	$\chi^2 = 0.09$ df = 1 p = 0.77
	Unmet need	3 (50%)	4 (30.8%)	7 (36.8%)	
	No meetable need	0	0	0	
<b>Self-help group</b>	Met need	8 (61.5%)	1 (33.3%)	9 (56.3%)	$\chi^2 = 0.16$ df = 1 p = 0.69
	Unmet need	4 (30.8%)	2 (66.7%)	6 (37.5%)	
	No meetable need	1 (7.7%)	0	1 (6.25%)	
<b>Group therapy</b>	Met need	19 (66.5%)	32 (68.1%)	51 (67.1%)	$\chi^2 = 0.015$ df = 1 p = 0.87
	Unmet need	7 (24.1%)	11 (23.4%)	18 (23.7%)	
	No meetable need	3 (10.3%)	4 (8.5%)	7 (9.2%)	
<b>Detoxification</b>	Met need	19 (95%)	26 (96.3%)	26 (92.9%)	Fishers exact p = 0.43
	Unmet need	1 (5%)	0	1 (3.6%)	
	No meetable need	0	1 (3.6%)	1 (3.6%)	
<b>Medication</b>	Met need	7 (87.5%)	21 (95.5%)	28 (92.9%)	Fisher's exact p = 0.28
	Unmet need	1 (12.5%)	0	1 (3.6%)	
	No meetable need	0	1 (4.5%)	1 (3.6%)	

While there were no significant differences between the two sentencing groups in terms of levels of met need for individual items of care, remand prisoners had higher rates of met need for group therapy and individual counselling. Virtually all needs for medication and detoxification were met. The most common need was group therapy, more than two thirds of which was met.

**Table 5.7.5.4 - Level of met treatment needs for drug abuse by sentencing type**

Item of care	Needs status	Sentenced	Remand	Total	
<b>Simple advice and education</b>	Met need	4 (44.4%)	5 (38.4%)	9 (40.9%)	$\chi^2 = 0.109$ df = 1 p = 0.74
	Unmet need	3 (33.3%)	8 (61.5%)	11 (50%)	
	No meetable need	2 (22.2%)	0	2 (9.1%)	
<b>Individual counselling</b>	Met need	4 (44.4%)	5 (71.4%)	9 (56.3%)	$\chi^2 = 0.38$ df = 1 p = 0.57
	Unmet need	5 (55.6%)	2 (28.6%)	7 (43.8%)	
	No meetable need	0	0	0	
<b>Self-help group</b>	Met need	4 (50%)	4 (50%)	8 (53.3%)	$\chi^2 = 0.06$ df = 1 p = 0.94
	Unmet need	2 (20%)	4 (50%)	6 (40%)	
	No meetable need	1 (10%)	0	1 (6.7%)	
<b>Group therapy</b>	Met need	21 (58.3%)	30 (75%)	51 (67.1%)	$\chi^2 = 2.13$ df = 1 p = 0.15
	Unmet need	11 (31.4%)	7 (17.5%)	18 (23.7%)	
	No meetable need	4 (11.4%)	3 (7.5%)	7 (9.2%)	
<b>Detoxification</b>	Met need	25 (95%)	20 (95.2%)	45 (95.7%)	Fishers exact test p = 0.46
	Unmet need	0	1 (4.8%)	1 (2.1%)	
	No meetable need	1 (5%)	0	1 (2.1%)	
<b>Medication</b>	Met need	9 (90%)	19 (95%)	28 (93.3%)	Fishers exact test p = 0.34
	Unmet need	1 (10%)	0	1 (3.3%)	
	No meetable need	0	1 (5%)	1 (3.3%)	

### 5.7.6 – Personality disorders

While there was no statistically significant difference in the levels of need between men and women overall in regard to personality disorder ( $\chi^2$ [df1, N = 33] = 0.55 p = 0.46), men had slightly higher levels of unmet needs, and across the whole sample only a third of needs for interventions were met. The main type of intervention indicated for personality disorder was psychological intervention. The figures for met needs are given in Table 5.7.6.2.



**Table 5.7.6.1 – Overall level of need status for personality disorder by sex**

Need status	Men	Women	Total
<b>Met need</b>	4 (25%)	7 (36.8%)	11 (31.4%)
<b>Unmet need</b>	11 (68.7%)	11 (57.9%)	22(62.9%)
<b>No meetable need</b>	1 (6.3%)	1 (5.3%)	2 (5.7%)
<b>Total</b>	<b>16 (100%)</b>	<b>19 (100%)</b>	<b>35 (100%)</b>

While there was no difference between men and women in rates of unmet needs for psychological treatment ( $\chi^2$ [df1,  $N = 33$ ] = 0.168  $p = 0.68$ ), the overall rate of unmet need was high.

In addition to the needs for psychological intervention, two men and two women had met needs for an assessment of personality disorder, while for four men and one women this need was not met.

Two men had, respectively, a met need and an unmet need for assessment of risk to self and others .

One woman had a met need for coping advice and another one a met need for medication.

**Table 5.7.6.2 – Overall level of need status for psychological intervention for personality disorder by sex**

Need status	Men	Women	Total
<b>Met need</b>	2 (28.6%)	4 (28.6%)	6(28.6%)
<b>Unmet need</b>	5 (71.4%)	9 (64.3%)	14(66.7%)
<b>No meetable need</b>	0	1 (7.1%)	1 (4.8%)
<b>Total</b>	<b>7 (100%)</b>	<b>14 (100%)</b>	<b>21 (100%)</b>

There was no marked difference in the level of need status between sentenced and remand prisoners ( $\chi^2$ [df1,  $N = 33$ ] = 0.016,  $p = 0.89$ ).

**Table 5.7.6.3 – Overall level of need status for personality disorder by sentencing type**

Need status	Sentenced	Remand	Total
Met need	7 (33.3%)	4 (28.6%)	11 (31.4%)
Unmet need	13 (61.9%)	9 (64.3%)	22(62.9%)
No meetable need	1 (4.8%)	1 (7.1%)	2 (5.7%)
<b>Total</b>	<b>21 (100%)</b>	<b>14 (100%)</b>	<b>35 (100%)</b>

In addition to the cases presented in table 5.7.6.4, a further two sentenced and two remand prisoners had a met need for assessment of personality disorder, while for three sentenced and two remand prisoners this need was unmet. One sentenced prisoner had a met need for medication, and one a met need for coping advice.

**Table 5.7.6.4 – Overall level of need status for psychological intervention for personality disorder by sentencing type**

Need status	Sentenced	Remand	Total
Met need	4 (30.8%)	2 (25%)	6(28.6%)
Unmet need	9 (69.2%)	5 (62.5%)	14(66.7%)
No meetable need	0	1 (12.5%)	1 (4.8%)
<b>Total</b>	<b>13 (100%)</b>	<b>8 (100%)</b>	<b>21 (100%)</b>

### 5.7.7 – Post traumatic stress disorder

The rate of PTSD in this sample was high, as was the level of unmet need. The majority of cases were women but there was no significant difference between the two groups (Fisher's exact test,  $p = 0.47$ ). None of the cases rejected the notion of treatment.

The most appropriate treatment for PTSD is cognitive behaviour therapy. Table 5.7.7.2 shows the levels of met need for this intervention.

**Table 5.7.7.1 – Overall level of need status for PTSD by sex**

Need status	Men	Women	Total
Met need	1 (20.%)	1 (7.1%)	2 (10.5%)
Unmet need	4 (80%)	13 (92.9%)	17(89.5%)
No meetable need	0	0	0
<b>Total</b>	<b>5 (100%)</b>	<b>14 (100%)</b>	<b>19 (100%)</b>

The vast majority of psychological treatment needs for PTSD were unmet. One additional man had an unmet need for coping advice, and one woman had a met need for medication.

**Table 5.7.7.2 – Overall level of met levels of need for psychological intervention for PTSD by sex**

Need status	Men	Women	Total
Met need	1 (25.%)	0	1 (5.6%)
Unmet need	3 (75%)	14(100%)	17 (94.4%)
No meetable need	0	0	0
<b>Total</b>	<b>4 (100%)</b>	<b>14 (100%)</b>	<b>18 (100%)</b>

Again there was no difference between sentenced and remand prisoners in their need status for PTSD.

**Table 5.7.7.3 – Overall level of need status for PTSD by sentencing type.**

Need status	Sentenced	Remand	Total
<b>Met need</b>	1 (10.%)	1 (11.1%)	2 (10.5%)
<b>Unmet need</b>	9 (90%)	8 (88.9%)	17(89.5%)
<b>No meetable need</b>	0	0	0
<b>Total</b>	10 (100%)	9 (100%)	19 (100%)

There were few differences between sentenced and remand prisoners in the degree to which needs for psychological intervention for PTSD were met.

In addition one sentenced prisoner had a met need for coping advice, and one remand prisoner had a met need for medication.

**Table 5.7.7.4 – Overall level of met need for psychological intervention for PTSD by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	0	1 (11.1%)	1 (5.6%)
<b>Unmet need</b>	9 (100%)	8 (88.9%)	17 (94.4%)
<b>No meetable need</b>	0	0	0
<b>Total</b>	9 (100%)	9 (100%)	18 (100%)

### 5.7.8 – Adjustment reaction

Table 5.6.1 shows that the rate of adjustment disorder was low in this sample (N=19). The fact that most of the identified needs in this category were unmet is probably a reflection on the relative mildness of the condition, which makes it easy to overlook.

Most ratings of need were for emotion focused counselling. Out of ten prisoners who were deemed to have such a need, only two women had received this form of intervention. In five men and two women the need went unmet. This difference was not significant

( $\chi^2[2, N=12] = 3.11, p = 0.21$ ). In addition one man had a met need for problem focused counselling and one man was attending group-therapy for an alcohol problem which was judged to also address his adjustment reaction. Adjustment disorder is by definition self-limiting, and in five cases no further action was deemed necessary.

**Table 5.7.8.1 – Overall level of need status for adjustment reaction by sex**

Need status	Men	Women	Total
<b>Met need</b>	0	2 (33.3%)	2 (16.7%)
<b>Unmet need</b>	5 (83.3%)	4 (66.7%)	9 (75%)
<b>No meetable need</b>	1(16.7%)	0	1 (8.3%)
<b>Total</b>	<b>6 (100%)</b>	<b>6 (100%)</b>	<b>12 (100%)</b>

There was no difference in need status between sentenced and remand prisoners

( $\chi^2[df2, N=12] = 1.11, p = 0.57$ ). One sentenced prisoner was attending group therapy for

alcohol, which was also thought to address his adjustment reaction and one remand prisoner had a met need for problem-focused counselling.

**Table 5.7.8.1 – Overall level of need status for adjustment reaction by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	1(16.7%)	1 (16.7%)	2 (16.7%)
<b>Unmet need</b>	4 (66.7%)	5 (83.3%)	9 (75%)
<b>No meetable need</b>	1(16.7%)	0	1 (8.3%)
<b>Total</b>	<b>6 (100%)</b>	<b>6 (100%)</b>	<b>12 (100%)</b>

5.7.9 – Dangerous and destructive behaviour

Needs for dangerous and destructive behaviour were recorded where they related to mental health problems and required specific interventions, such as close observations. Most cases of such behaviour involved an element of self-harm. Interventions that address such behaviour are part of the prison routine and it is therefore less surprising that few needs in this category were unmet. The most common met need was for a secure environment. Five female prisoners were receiving a psychological intervention for depression which also addressed their self-harming behaviours. Three female prisoners had their needs for dangerous and destructive behaviour met in ways that were not specified in the needs for care assessment. There was no difference in need status between male and female prisoners ( $\chi^2$ [df1, N=18] = 0.35,  $p = 0.56$ ).

**Table 5.7.9.1 – Overall level of need status for dangerous and destructive behaviour by sex**

Need status	Men	Women	Total
<b>Met need</b>	3 (75%)	10 (71.4%)	13 (72.2%)
<b>Unmet need</b>	1 (25%)	3 (21.4%)	4 (22%)
<b>No meetable need</b>	0	1 (7.1%)	1 (5.6%)
<b>Total</b>	<b>4 (100%)</b>	<b>14 (100%)</b>	<b>18 (100%)</b>

Overall, more remand than sentenced prisoners had a met need for their dangerous and destructive behaviour. Four remand and two sentenced prisoners were receiving psychological treatment for depression which also addressed their self-harm. This was rated as a met need

Two remand and one sentenced prisoner had their needs for dangerous and destructive behaviour met in ways that were not specified in the needs for care assessment. There was however no significant difference in need status between sentence and remand prisoners ( $\chi^2[df1, N=18] = 0.5, p = 0.48$ )

**Table 5.7.9.1 – Overall level of need status for dangerous and destructive behaviour by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	5 (62.5%)	8 (80%)	13 (72.2%)
<b>Unmet need</b>	3 (37.5%)	1 (10%)	4 (22%)
<b>No meetable need</b>	0	1 (10%)	1 (5.6%)
<b>Total</b>	<b>8 (100%)</b>	<b>10 (100%)</b>	<b>18 (100%)</b>

### **5.8 - Summary of findings from the needs for care assessment**

The needs for care assessment revealed some differences between the sexes and the prisoner types. In terms of prevalence of impaired functioning, female prisoners had significantly higher rates of depression, alcohol and drug abuse, dangerous and self-destructive behaviour and PTSD.

Remand prisoners had significantly higher rates of impairment in the categories of psychosis, alcohol and drug abuse.

In terms of overall need status, male prisoners tended to have higher rates of unmet needs than women. There was a significant difference in the categories of depression and alcohol abuse. Male prisoners also had significantly higher levels of unmet need for medication for depression. In addition male prisoners also had substantially lower levels of met need for drug abuse but this difference was not statistically significant, although nearly ( $p = 0.064$ ).

Sentenced prisoners had significantly lower levels of overall met needs for psychosis, which goes against expectation. Sentenced prisoners also had substantially higher levels of unmet needs for group therapy for drug abuse, but this difference was not statistically different.

### **5.9 Overall need status**

This section presents findings on the individual level and not in relation to specific disorders. In total 139 out of 168 (82.7%) female prisoners had at least one need for psychiatric treatment which was also the case for 141 out of 192 (73.4%) male prisoners. This difference was significant ( $\chi^2[1, N=360] = 4.48, p= 0.034$ ). On average female prisoners had



1.4 treatment needs and male prisoners had 1.2 treatment needs. Table 5.9.1.1 shows the overall need status for psychiatric treatment. In total, nearly half of all needs were unmet: men had significantly higher rates of unmet needs ( $\chi^2[\text{df}1, N=360] = 16.67, p= 0.002$ ).

**Table 5.9.1 – Overall status of need for psychiatric treatment by sex**

Need status	Men	Women	Total
<b>Met need</b>	85 (36.5%)	144 (53.7%)	229 (45.7%)
<b>Unmet need</b>	126 (54.1%)	98 (36.6%)	224 (44.7%)
<b>No meetable need</b>	22 (9.4%)	26 (9.7%)	48 (9.6%)
<b>Total</b>	<b>233 (100%)</b>	<b>268 (100%)</b>	<b>501 (100%)</b>

All in all, 140 out of 188 (74.5%) sentenced prisoners and 130 out of 171 (75.1%) remand prisoners had a psychiatric treatment need. This difference was not significant

( $\chi^2[\text{df}1, N=361] = 0.22, p= 0.89$ ). On average, sentenced prisoners had 1.3 treatment needs, and remand prisoners 1.5 treatment needs. Table 5.9.1.2 shows the overall need status for psychiatric treatment. In total, nearly half of all needs were unmet. Sentenced prisoners had higher rates of unmet needs: however this difference was not significant ( $\chi^2[1, N=361] = 2.2, p= 0.33$ ).

**Table 5.9.2 – Overall status of need for psychiatric treatment by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	102 (43%)	129 (48.7%)	231 (47.6%)
<b>Unmet need</b>	114 (48.1%)	110 (41.5%)	224 (43.2%)
<b>No meetable need</b>	21 (8.9%)	26 (9.8%)	48 (9.2%)
<b>Total</b>	<b>237 (100%)</b>	<b>265 (100%)</b>	<b>502 (100%)</b>

In total, 132 prisoners had at least one need for medication. Nearly two thirds of all needs for medication were met in the sample. Female prisoners had slightly more medication needs than male prisoners, but male prisoners had significantly higher rates of unmet needs for medication ( $\chi^2[1, N=366] = 11.53, p= 0.003$ ).

**Table 5.9.3 – Overall status of need for medication by sex**

Need status	Men	Women	Total
<b>Met need</b>	28 (43.8%)	51 (73.9%)	79(59.4%)
<b>Unmet need</b>	33 (51.6%)	17 (24.6%)	50 (37.6%)
<b>No meetable need</b>	3 (4.7%)	1 (1.4%)	4 (3%)
<b>Total</b>	<b>64 (100%)</b>	<b>69 (100%)</b>	<b>133 (100%)</b>

The rate for met needs was slightly lower when the sample was compared according to sentencing status. Remand prisoners had more needs for medication, and the level of met needs for medication was very similar in sentenced and remand prisoners. However these differences were not statistically significant ( $\chi^2[df1, N=364] = 0.267, p= 0.88$ ).

**Table 5.9.4 – Overall status of need for medication by sentencing type.**

Need status	Sentenced	Remand	Total
<b>Met need</b>	34 (57.6%)	35 (53%)	69(55.2%)
<b>Unmet need</b>	21 (35.6%)	26 (39.4%)	47 (37.6%)
<b>No meetable need</b>	4 (6.8%)	5 (6.1%)	9 (7.2%)
<b>Total</b>	<b>59 (100%)</b>	<b>66 (100%)</b>	<b>125 (100%)</b>

In total, 79 prisoners had at least one need for psychological treatment. Although female prisoners had much higher levels of need for psychological treatment ( $\chi^2[1, N=366] = 11.53, p= 0.003$ ), male and female prisoners had similar levels of unmet treatment needs.

**Table 5.9.5 – Overall status of need for psychological treatment by sex**

Need status	Men	Women	Total
<b>Met need</b>	8 (27.6%)	16 (32%)	24(30.1%)
<b>Unmet need</b>	21 (72.4%)	33 (66%)	54 (68.4%)
<b>No meetable need</b>	0	1 (2%)	1 (1.3%)
<b>Total</b>	<b>29 (100%)</b>	<b>50 (100%)</b>	<b>79 (100%)</b>

Sentenced and remand prisoners had similar overall levels of psychological treatment needs, as well as of unmet psychological treatment needs ( $\chi^2[df1, N=366] = 0.15, p= 0.7$ ).

**Table 5.9.6 – Overall status of need for psychological treatment by sentencing type**

Need status	Sentenced	Remand	Total
<b>Met need</b>	13 (30.2%)	12 (33.3%)	25(31.6%)
<b>Unmet need</b>	30 (69.8%)	23 (63.9%)	53 (67.1%)
<b>No meetable need</b>	0	1 (2.8%)	1 (1.3%)
<b>Total</b>	<b>43 (100%)</b>	<b>36 (100%)</b>	<b>79 (100%)</b>

The data presented in this chapter shows that differences between comparison groups were more pronounced between male and female prisoners than between sentenced and

remand prisoners. However differences between these groups were not as marked as anticipated. Overall levels of psychiatric morbidity and corresponding treatment needs were strikingly high in the sample. Based on these results Hypothesis 1 was confirmed, as rates of psychiatric morbidity in this sample by far exceeded those found in the general population. Hypothesis 2 had to be rejected. Rates of psychiatric morbidity were not significantly higher among women than men based on diagnostic assessment tools, with the exception of phobias and PTSD. When impairment was judged with the Needs for Care assessment however women did have significantly higher rates of impairment than men. Hypothesis three was rejected as remand prisoners did not have significantly higher rates of mental disorder than sentenced prisoners, with the exception of psychosis and personality disorder. Hypothesis 4 was confirmed as nearly half of prisoners surveyed in this sample had unmet treatment needs. The implications of these finding are discussed in chapter 6.

## CHAPTER 6: DISCUSSION

This chapter discusses the data presented in chapter 5.

### **6.1 – Findings from the study**

#### **6.1.2 - The problems of recruitment**

Recruitment was more difficult than initially expected. Practical concerns delayed the start of the recruitment period. In Pentonville nearly four months were spent obtaining a key that would allow independent movements through the prison. Alternatives, such as remaining based in an office in the healthcare wing and having prisoners escorted from the main prison site were deemed impractical, as this would have put a considerable strain on staff who were low in numbers to begin with. Prisoners who had a job during the day were also reluctant to take part in the research, as this meant a loss of earnings. Eventually an agreement was made with the head of prison resettlement that prisoners who missed work in order to participate in the research would still be paid for those missed hours. In contrast to Pentonville, Holloway had a very structured daily regime of education and skills training, which nearly all prisoners participated in and which they were reluctant to miss. However, the biggest impediment to recruitment was the sudden movement of prisoners. Many were serving short sentences, and were either released or transferred without much notice. In a number of instances, interviews were not completed because a prisoner was no longer at the establishment.

## **6.2 - Characteristics of the sample**

### **6.2.1- Ethnicity**

There was an over-representation of black groups in men in comparison to the ONS 1997 National Prison Survey of Psychiatric Morbidity (NPSPM) data (Singleton et al., 1998), but an under-representation in women. In this sample, 17.7% of men and 7.1% of women described themselves as black, whereas this was the case for 11.5% of men and 16.5% of women in the NPSPM. Data from the Ministry of Justice (2012) shows that, between 2008 and 2012, the proportion of black prisoners has remained fairly constant at between 13% and 15.1%. In this survey 6.8% of respondents identified themselves as mixed race whilst Ministry of Justice (2013a) figures show this number to be consistently around 3.5%. One possibility for these slight discrepancies is that the figures from the NPSPM and Ministry of justice come from a national sample, whereas the figures here are obtained from a London sample, which will be more diverse than the rest of the country. This does not however explain the under-representation of black women

### **6.2.2 - Age**

The NPSPM found about two thirds of the sampled population to be 30 years and under. According to figures from the House of Commons Library, 7% of the prison population is aged between 18 and 20, 32% between 21 and 29, and 54% are 30 and over (Berman & Dar, 2013). The data presented here are therefore in line with the national data available for England and Wales.

### 6.2.3 - Previous service use

This sample had high rates of previous contact with mental health services. Overall 25.6% had been in touch with mental health services in the 12 months prior to imprisonment and 7.4% had been admitted to a psychiatric hospital. These figures are in line with findings reported by the Prison Reform Trust, showing that in the year prior to imprisonment about 20% of prisoners have had contact with mental health services. Results from the ONS study (Singleton et al., 1998) put this figure at 29%. Singleton et al. (1998) Also report on previous psychiatric admission, which was higher than in this sample at 13%, however they recorded psychiatric admissions 'at any time prior to imprisonment' as opposed to the 12 months time frame employed here. They also show Women were found to be more likely to have had a key worker in the community as were sentenced prisoners. In the general population figures from the Health and Social Care Information Centre (2013) show that in 2011/12 2.4% of the general population in England had been in touch with specialist mental health services and 0.16% had a hospital admission.

### **6.3 - Prevalence rates of disorders based on diagnostic questionnaires**

There were some differences in psychiatric morbidity between the participants in this study and those of the NPSPM. The biggest difference was for personality disorders, the rate of which was nearly twice as high in the NPSPM sample. This difference can be explained by the fact that in this sample the full version of the SCID II was administered, whereas in the NPSPM survey a screening version was used, increasing the possibility of false positives as the SCID II has intentionally high rates of false positives, in order to diminish the risk of false

negatives by increasing the proportion of items that require assessment by a clinician (First, 1997). Part of the reason why rates of antisocial-personality disorder in prison are commonly found to be high is that one of the diagnostic criteria for anti-social personality disorder is having broken the law and another is having spent any time in prison. Whilst there was a small difference in the number of women and men who met diagnostic criteria for Borderline personality disorder, a bigger proportion of men had Anti-social personality disorder. At the time of NPSPM The DSPS service had not yet been created and it is therefore likely that a significant number of personality disordered prisoners had been diverted to one of these specialist units, giving lower rates of personality disorder in this sample.

The prevalence rate for Psychosis overall was very similar to that of the NPMPS, however whilst in this sample the rate of Psychosis was higher in men than in women (14.2% and 9.9% respectively), the opposite was true in the NPSPM sample where 8.5% of men and 14% of women were found to display psychotic symptoms. In the community prevalence of psychosis between men and women is much lower and very similar at 0.3% and 0.5% respectively (MCManus et al, 1997).

Rates of depression were very similar in both samples (around 60%), but those for anxiety disorders differed. Rates for anxiety amongst men were very similar in both samples but women in the NPSPM survey were found to have higher rates of anxiety (37% in comparison to 24.2% in this sample). The biggest difference was in phobias and panic which were reported much more frequently in the NPSPM sample amongst both sexes (21.5% of the total NPSPM sample met criteria for phobia, twice the rate of the current sample, and 16.8% met criteria for panic, nearly triple the rate of the current sample. In the general population



rates for common mental disorder (all forms of depressive and anxious disorders) are 12.5% for men and 19.7% for women (McManus et al, 2009)

Rates for alcohol dependency also varied between the two samples. However, in the NPSPM, hazardous drinking behaviour was defined by an AUDIT score of 8 or more, whereas the figures above refer to actual dependency (mild, moderate or severe) as defined by the presence of specific symptoms. Applying the NPSPM criteria for hazardous drinking to the current sample, 103 men (52.3%) and 88 women (51.5%) scored 8 or higher on the AUDIT. This means that in this sample slightly fewer men reported hazardous drinking behaviour than in the NPSPM, but more women did so. Again these figures are much higher than those found in the general population, where 33.2% of men and 15.7% of women have a hazardous drinking score of 8 or more.

Rates for drug abuse were nearly identical to the sample than in the ONS study. There, 47.3% of the sample reported some level of drug abuse, with rates among male and female prisoners virtually identical, whereas in this sample 54.8% of male and 59.6% of female prisoners reported some form of drug abuse (57.1% in total). These figures stand in stark contrast to the general population, where overall 3.4% of people (4.5% of men and 2.3% of women) are dependent on drugs (McManus et al., 2009)

More women than men were classed as suffering from PTSD in this sample; rates for men were nearly identical to those in the NPSPM. The NPSPM relied on ICD-10 criteria for diagnosing PTSD, whereas in this study DSM-IV criteria were employed. ICD-10 criteria specify that that symptoms related to PTSD must occur within six months of the traumatic event, whereas no such time limit was applied in the PDS used here. This is likely to have resulted in the more conservative prevalence rates in the NPSPM. There are only a limited

number of studies examining PTSD in prisoners and most of them have been conducted in the US. Prevalence rates tend to be higher in those studies at between 17% and 22% (Green et al., 2005, Brindad et al., 2001), but is difficult to compare these to current as they assess for life-time prevalence of PTSD or were conducted in high-security prisons, implying that the available sample consisted of more behaviourally challenging and therefore possibly more unwell prisoners. In the general population, the rate of PTSD was found to be 3%, just over a third of the rate found in this sample, with no significant difference between men and women (McManus et al., 2009). This figure was based on the presence of only two out of four diagnostic criteria and the true rate is therefore likely to be even lower in the general population. The fact that women in this sample had higher rates of personality disorder, alcohol abuse and PTSD than in the NPSPM is likely to be due to the fact that HMP Holloway acts as a national resource for female offenders that are difficult to manage elsewhere. A further reason why finding from this study differ from the NPMPS is that mental health service provision in the community has changed significantly since the NPMPS. A key innovation was the advent of IAPT (Improving Access to Psychological Services). Taking into account earlier evidence that prisoners, and female prisoners in particular, are more likely to have contact with mental health services prior to imprisonment it is possible that more prisoners would have accessed psychological interventions. In particular these changes could account for the difference in anxiety disorders, a primary target for IAPT services. Table 6.3.1 shows prevalence rates from this study in comparison to the NPSPM according to sex as given in chapter 5. It is included here for purposes of ease in comparing findings from the two studies.

**Table 6.3.1 - Proportion of respondents who met diagnostic criteria for the disorders assessed by sex. Figures from the NPSPM are given in bold**

Disorder	Men		Women		Total	
Psychosis	28 (14.2%)	<b>(8.5%)</b>	17 (9.9%)	<b>(14%)</b>	45 (12.2%)	<b>(11.3%)</b>
Depression	99 (50.3%)	<b>(44.5%)</b>	98 (57.3%)	<b>(57.5%)</b>	197 (53.8%)	<b>(51%)</b>
Anxiety	57 (28.9%)	<b>(27%)</b>	41 (24.2%)	<b>(37%)</b>	98 (26.8%)	<b>(32%)</b>
Phobias	13 (6.6%)	<b>(16.5%)</b>	27 (16.1%)	<b>(26.5%)</b>	40 (10.9%)	<b>(21.5%)</b>
Panic	10 (5%)	<b>(13%)</b>	10 (6%)	<b>(20.5%)</b>	20 (5.5%)	<b>(16.8%)</b>
Personality Disorder	70 (35.5%)	<b>(71%)</b>	56 (32.7%)	<b>(50%)</b>	126 (34.2%)	<b>(60.5%)</b>
Drug Dependency	108 (45.4%)	<b>(47%)</b>	102 (42.9%)	<b>(47.5%)</b>	210 (57.1%)	<b>(47.3%)</b>
Alcohol Dependency	63 (32%)	<b>(60.5%)</b>	58 (33.9%)	<b>(37.5%)</b>	121 (33.1%)	<b>(49%)</b>
Post Traumatic Stress Disorder	9 (4.6%)	<b>(4%)</b>	20 (11.7%)	<b>(7%)</b>	29 (7.9%)	<b>(5.5%)</b>

Overall gender differences between the two groups were not as marked as expected in the current sample. In fact morbidity rates were fairly consistent between sexes, and, with the exception of PTSD, there was no statistically significant difference between them. In contrast, in the general population, men report significantly higher levels of alcohol abuse and psychosis and women have higher rates of common mental disorder.

There were patterns of similarity in this population when examined according to sentencing type. Rates for depression were similar in the NPSPM and this study and while anxiety rates were similar in sentenced prisoners (28.4% and 26.5%), the remand population in the NPSPM reported higher levels of anxiety than in this sample (37.5% vs. 25.1%). Drug dependency was high in both samples and both sentencing categories, although remand prisoners in this survey reported higher rates of drug dependency than their counterparts in the NPSPM (47% vs. 60.3%). Figures for alcohol dependency also varied between the two

data sets but these differences disappeared when comparing the scores for hazardous drinking. In the current sample, 51.5% of sentenced prisoners and 52.3% of remand prisoners had a hazardous drinking score of 8 or more, which is very similar to figures from the NPSPM (51% and 47% respectively). Table 6.3.2 shows prevalence rates from this study in comparison to the NPSPM according to sentencing status

**Table 6.3.2 - Proportion of respondents who met diagnostic criteria for the disorders assessed by sentencing status. Figures from the NPSPM are given in bold**

Disorder	Sentenced		Remand		Total	
Psychosis	17 (8.8%)	-*	28 (16.1%)	-*	45 (12.2%)	-*
Depression	97 (50%)	<b>(42%)</b>	98 (57%)	<b>(60%)</b>	197 (53.8%)	<b>(51%)</b>
Anxiety	55 (28.4%)	<b>(26.5%)</b>	43 (25.1)	<b>(37.5%)</b>	98 (26.8%)	<b>(32%)</b>
Phobias	23 (11.9%)	<b>(17.5%)</b>	17 (9.9%)	<b>(25.5%)</b>	40 (10.9%)	<b>(21.5%)</b>
Panic	9 (4.6%)	<b>(11.5%)</b>	11 (6.4%)	<b>(22%)</b>	20 (5.5%)	<b>(16.8%)</b>
Personality Disorder	58 (29.9%)	-*	68 (39.1%)	-*	126 (34.2%)	*
Drug Dependency	105 (54.1%)	<b>(47.5%)</b>	105 (60.3%)	<b>(47%)</b>	210 (57.1%)	<b>(47.3%)</b>
Alcohol Dependency	65 (33.5%)	<b>(51%)</b>	56 (32.9%)	<b>(47%)</b>	121 (33.1%)	<b>(49%)</b>
Post Traumatic Stress Disorder	14 (7.3%)	<b>(4%)</b>	15 (8.7%)	<b>(7%)</b>	29 (7.9%)	<b>(5.5%)</b>

\*Rates according to sentencing status not given

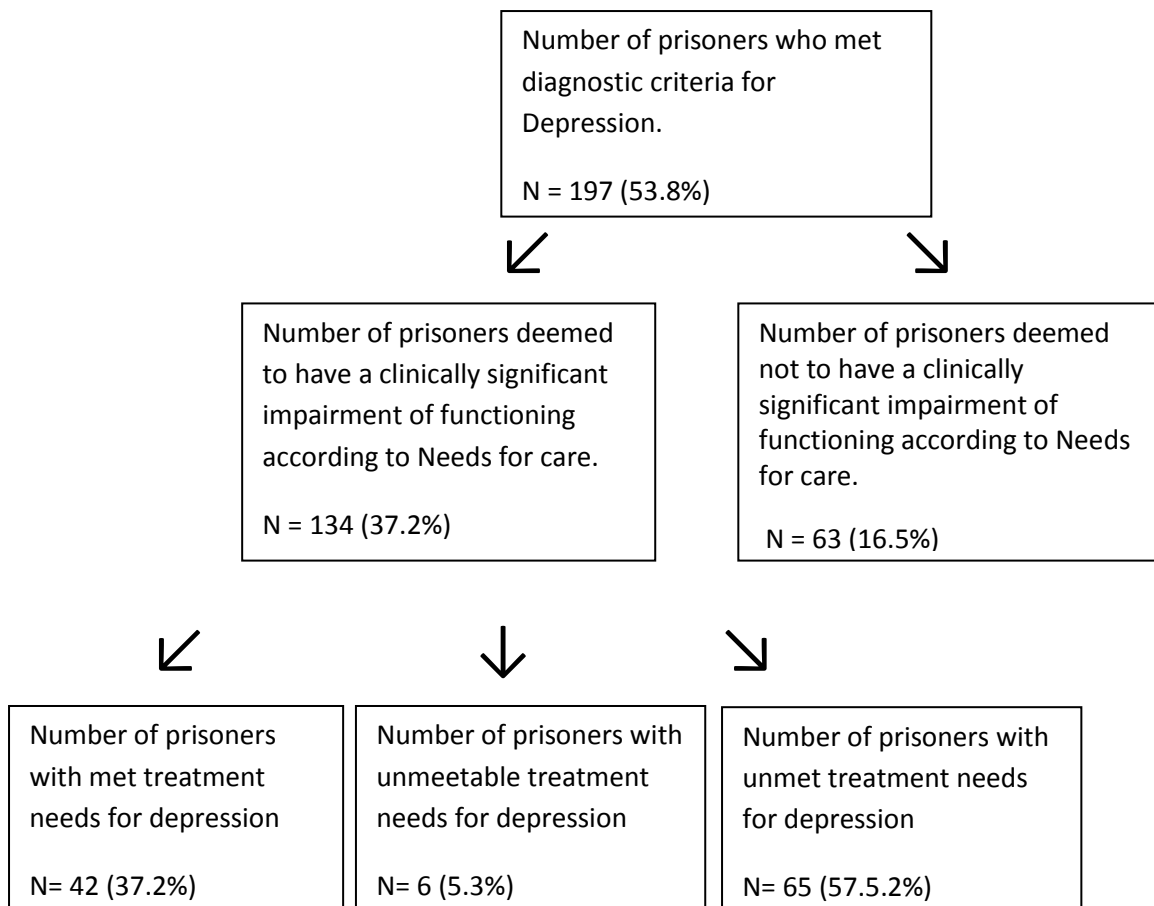
The fact that these rates of prevalence of mental disorders differed so drastically to those found in the general population indicate that there is a differential filtering system whereby men and women with mental health problems come preferentially into the prison system. Findings from this study are consistent with previous research in confirming the disproportionately high rates of psychiatric morbidity.

## **6.4 - Results from the needs for care assessments**

### **6.4.1 – Levels of impaired functioning and the diagnosis of mental disorders**

As expected, levels of impaired functioning were consistently high in the prison sample. However, levels of impairment in the needs for care assessment were lower than the prevalence rates obtained through the use of diagnostic instruments. For example 53.8% of the sample had met diagnostic criteria for depression, whereas only 37.2% were considered to have clinically significant levels of impairment in this area in the Needs for Care Assessment. Figure 6.1 illustrates this.

**Figure 6.1**



For anxiety, the corresponding figures were 37% for assessment through diagnostic criteria and 7.1% for assessment with the Needs for Care, and for personality disorder 60.5% and 17.8% respectively. These differences confirm the notion that presence of a set of diagnostic criteria are not synonymous with treatment needs. For personality disorder in particular, the difference can be explained because 1) as discussed previously, the fact of the participants' presence in prison contributes to the diagnosis, and 2), in the Needs for Care Assessment, personality disorder is only considered a clinically relevant problem when a judgement is made that the presence of the disorder contributes to a person's mental state and behaviour in a manner that requires treatment. In contrast, the rates for alcohol and drug dependency and for PTSD were similar in the two modes of assessment, reflecting judgements of the seriousness of these conditions and their impact on a person's life in the Needs for Care Assessment.

However, in contrast to the diagnostic data, there were significant sex differences in levels of impairment derived from the needs for care ratings. Female prisoners had significantly higher rates of impairment relating to depression, alcohol and drug abuse, PTSD and dangerous and destructive behaviour. It is worth noting that, while the *overall* rate of dangerous and destructive behaviour was similar to that of self-harm in the general population (4.9%, McManuset al., 2007), there was a stark difference between male and female prisoners (1% and 11.3% respectively); figures from the Ministry of Justice (2013) show that 6% of men and 25% of women in prison self-harm. The discrepancies in these rates reflect the same issue as that discussed with regards to diagnostic criteria assessments, i.e. that the needs for care does not merely count all occurrences of an event,

but, only those that cause impairment severe enough to require intervention. In the general population there was no sex difference.

The contrast in the sex differences for diagnosis and judgements of impairment may be explained by the fact that the Needs for Care Assessment only rates a mental disorder as causing a significant level of impairment when it is sufficiently distressing to require treatment. It is therefore possible that more severe disorders are over-represented in women.

Likewise the similar prevalence of diagnosed conditions in remand and sentenced prisoners stands in contrast to the higher rates in the former of impairment in relation to psychosis, alcohol and drug abuse.

The fact that levels of identified impairment were less than those of diagnosed disorders had an inevitable effect on rates of co-morbidity. Using diagnostic instruments only 10.3% of participants had no disorders, while this figure was 25.9% for the Needs for Care Assessment. While rates for one, two and three co-morbid disorders were similar under the two procedures, there was a difference in four or more co-morbid disorders. Just under a third of the sample had four or more co-morbid diagnosed disorders, whereas impairment in four or more areas of functioning based on needs for care judgments occurred in just over 10% of the sample. Nevertheless, under both systems of evaluation rates are strikingly high, and this poses challenges for the effective delivery of mental health provision and evaluation in prison, particularly if the disorders are of a different type (such as mental disorders and substance abuse disorders). While there was no statistical difference between male and female prisoners in the levels of co-morbid diagnosed disorders, ratings of impaired functioning indicate that female and remand prisoners had higher levels of co-

morbidity. This provides tangential evidence that the Needs for Care tool is a more sensitive indicator of treatment needs than prevalence rates alone. There were some significant differences between the comparison groups, mostly between male and female prisoners and less so between sentenced and remand prisoners.

The most common disorders in this study were depression, alcohol and drug abuse. Depression was identified in around 40% of the sample, but was more prevalent among women. There was considerable overlap between depressive and anxious symptoms; however, depressive symptoms were often judged to be more significant in the overall clinical picture. They were thus identified as the primary target for treatment, which explains the lower rates of anxiety in this study based on the Needs for Care Assessment. Severity of disorder is not formally recorded in the Needs for Care Assessment, but it does influence decisions on recommended treatments. In some cases of mild depressive or anxious symptoms, a decision was made to record them as adjustment disorder. Depressive symptoms are a common early reaction to imprisonment, and where it was thought that they were likely to resolve reasonably quickly, they were not recorded as adjustment disorders warranting treatment.

Between 40% - 50% of the sample had alcohol and drug abuse problems, and prisoners often had both. This relationship has been noted by others. The Inspectorate of prisons for example found that nearly three quarters of female prisoners (78%) and just under half of male prisoners (48%) who reported alcohol problems also had a drug problem (Inspectorate of prisons, 2010).



#### 6.4.2 - Levels of unmet treatment needs

Based on the frequency of clinical problems, the Needs for Care Assessment allows the estimation of needs for specific items of care. In total, 78.1% of the sample (82.7% of female and 73.4% of male prisoners) had at least one treatment need. This difference was significant. Overall, about half of all treatment needs were met. This suggests that, while some attempts were made to provide treatment to mentally ill prisoners, the prison procedures for identifying needs was flawed and there were insufficient resources to meet all treatment needs. The identification of needs depends on effective interaction between staff at different levels in the prison (reception, on the wings, healthcare) and prisoners. It may fail because staff don't ask and prisoners don't tell, but the very low rates of unmeetable needs (i.e. the rejection of the notion of treatment) indicates that failure of detection is a more likely cause for the high rates of unmet treatment needs.

Table 6.4.1.1 compares overall levels of need found in this study to two studies carried out in the general population, one in Camberwell, inner London (Bebbington et al, 1997) and one in Derry, Northern Ireland (McConnel et al., 2003).

**Table 6.4.11 – Overall levels of need in prison and in the general community.**

Study	Proportion of the sample requiring treatment	Met needs	Unmet needs	No meetable needs	Total
<b>Current</b> (N = 368)	287 (78.1%)	168 (45.7%)	164 (44.7%)	36 (9.6%)	287 (100%)
<b>Bebbington et al., 1997</b> (N = 408)	65 (16.6%)	18 (27.7%)	37 (56.9%)	10 (15.4%)	65 (100%)
<b>McConnel et al., 2003</b> (N = 307)	92 (30%)	25 (27.2%)	27 (29.3%)	40 (43.5%)	92 (100%)

The difference in rates of people requiring treatment is remarkable. It is noteworthy that both studies took place in areas of considerable social deprivation. Camberwell had a large proportion of ethnic minorities and Derry had seen 30 years of civil unrest and historically had unemployment rates of up to 37% (Evans, 1985). What is also striking that only less than a third of all treatment needs were met among both samples, less than in the prison system. The authors note that the considerable difference in unmet and unmeetable need can largely be explained by differing methodologies. In the Derry study people who had not sought treatment were deemed to have unmeetable needs whereas in Camberwell they were asked additional questions probing their willingness to accept treatment. It could be argued that things have improved in the general population since the 1990s, but not necessarily in the prison population. There is evidence from the National Psychiatric Morbidity Surveys that antidepressant prescribing almost doubled between 1993 and 2000, and then held steady in 2007 (this is particularly salient as the majority of needs identified in Camberwell and Derry were in relation to depression and anxiety), while psychological treatments did not increase between 1993 and 2000, but take-up then became considerably greater between 2000 and 2007 (Singleton et al., 2001, McManus et al., 2009). The latter change might be due to the introduction of the NHS Improving Access to Psychological Therapies (IAPT) programme.

Findings from this study show high levels of unmet need found in previous research.

In a study of 980 prisoners in five prisons the Offender health Research Network (2010) found that that only 64% of prisoners with a mental illness were documented to have seen the prison GP at reception and 12% saw a mental health professional. Rates of contact with mental health services at reception were highest amongst prisoners with psychosis (27%). Personality disorder and PTSD were not included in the assessments, meaning that the overall rate of prisoners with a mental illness would have been even higher. Of those diagnosed with psychosis by the research team, the same diagnosis was found documented in prison clinical records in only 23% of cases. For other types of diagnosis this figure was 21%. Of those prisoners with a documented diagnosis of mental illness and/or substance misuse, prisoners with a diagnosis of psychosis had the highest rates of contact with mental health services after reception (68%) whilst those with a diagnosis other mental illnesses were less likely to be seen (38%). Of those mentally ill prisoners receiving medication 45% did not see either the prison GP or mental health services whilst in custody. Overall, 63% of those with a documented diagnosis of substance misuse had contact with CARATs and 70% were prescribed medication for substance dependence. Similar to results from this study, prisons tended to most frequently address substance misuse issues and psychosis. This is reflective of the fact that these are the easiest to screen for (in the case of substance misuse) and often have the most florid symptoms (psychosis). What the findings presented here highlight are the inadequate screening methods currently employed by prisons. Detecting mentally ill prisoners who do not present with flagrant symptoms once they are housed in their locations is exponentially more difficult and therefore efforts to identify such prisoners when they first arrive in an establishment must improve. However even

where mental disorders had been identified by the prisons, subsequent contact with mental health services was low. While the authors do not specify a reason for this, a lack of resources common in all prisons to some degree, is the most likely explanation, together with inadequate care pathways that ensure that those who have been identified as potentially having a mental illness are followed up appropriately. Similar results were obtained in a study of 549 men received into HMP Durham (Birmingham et al., 1996). Of 148 prisoners identified by the researchers as having a mental illness (excluding substance misuse) only 34 were also identified by the screening process in prison. Of the 24 men who were identified as being actively psychotic, abnormality of mental state was only identified in six by the prison screen. Of the 50 men identified as requiring an urgent intervention by the researchers 17 were identified by the prison screen and placed in the prison hospital.

Overall, male prisoners had significantly more unmet treatment needs than female prisoners (54.1% and 36.6% respectively). This is likely to reflect the superior infrastructure at Holloway for the delivery of mental health treatment, which may, in turn, point towards a tendency to assign mental health problems a greater role in the overall treatment of female prisoners. In contrast, there was no significant difference in overall levels of met treatment needs between sentenced and remand prisoners. In fact, remand prisoners had slightly higher rates of met need. This was surprising, as one would expect sentenced prisoners to have more met needs: they have been through a sentencing process which may have identified any treatment needs and their longer time in prison should increase the likelihood that mental health issues will be detected. However, in this sample even sentenced prisoners spent very short amounts of time in prison (in Pentonville, a third of prisoners

were serving sentences of one month or less, and nearly two thirds sentences of three months or less, this information obtained from a database in the Pentonville resettlement department). Another possible explanation for this finding is that the wealth of research highlighting the vulnerability of remand prisoners has led to an increased focus on this population, resulting in better identification of mental health problems, while in sentenced populations focus is directed towards behaviour management.

A third of the sample had a need for medication and two thirds of all needs for medication were met; however male prisoners had significantly higher rates of unmet medication needs than female prisoners. One fifth of the sample had a need for psychological treatment. Female prisoners had higher levels of needs for psychological interventions, but there was no significant difference in levels of unmet needs between male and female prisoners. Needs for medication and psychological intervention did not differ according to sentencing status.

The most frequently met treatment needs were those identified for drug and alcohol abuse, with only around a third of the sample having unmet needs. This reflects the fact that both prisons had relatively well- developed mechanisms for delivering interventions (mostly group interventions delivered by CARATs). However male prisoners had significantly higher levels of unmet needs for alcohol abuse; they also had higher rates of unmet needs for drug abuse, but the difference was not statistically significant. The biggest difference between male and female prisoners with regard to particular items of care was in male prisoners' greater unmet need for group therapy in relation to alcohol abuse; however this difference was not statistically significant. Drug and alcohol abuse was also associated with by far the highest rates of unmetable need, although this was still relatively low at around 13%. This

was most probably a reflection of the fact that prisoners in this group did not feel that they had a problem with alcohol or drugs severe enough to merit treatment, if at all. Overall remand prisoners had higher rates of met needs for drug abuse, but this difference was not statistically significant. In particular remand prisoners had more met needs for group therapy and medication in relation to drug abuse, but this was not significant.

At the other end of the spectrum, needs for PTSD were met particularly poorly, with 90% of treatment needs having been unmet. While the proportion of needs unmet was very similar for men and women, these high levels of unmet need were likely to have impacted particularly badly on female prisoners, who were three time more likely to have a treatment need in relation to PTSD than male prisoners. No differences were found between sentenced and remand prisoners.

On the other hand, men had a much higher rate of unmet need for depression, a statistically significant difference. In particular they had significantly higher unmet needs both for anti-depressant medication, and for support and re-assurance. This finding may perhaps be explained by the fact that men find it more difficult to talk about mental illness in general and depression in particular. In addition, depressive symptoms are more difficult to detect, particularly when considering that a third of the population in Pentonville is there for less than a month. The short duration of stay can also mean that, even when an appointment for primary care is made, prisoners may often be released or transferred before their assessment. Overall rates of treatment needs for depression were very similar in sentenced and remand prisoners; sentenced prisoners had slightly higher rates of met need for psychological treatment and medication, but these were not statistically significant.

Male prisoners had higher levels of unmet treatment needs for psychosis than female prisoners, particularly in relation to medication, but this difference was not statistically significant. Overall a third of all medication needs went unmet, a high figure given the relative ease with which medication can be administered. Compared with remand prisoners, sentenced prisoners had slightly higher rates of unmet needs in relation to psychosis, particularly for medication; again the differences were non-significant.

While unmet treatment needs for personality disorder were common, the level of identified treatment needs for this disorder was surprisingly low, given that most prison surveys find high rates of personality disorder. However the Needs for Care Assessment considers personality in terms of a set of additional characteristics: it does not deem criminality an indicator for treatment need on its own.

### **6.5 – Summary of findings**

- Rates of mental illness and service use in this sample were remarkably high. A quarter of the sample had been in touch with mental health services in the 12 months prior to imprisonment, roughly ten times the rate in the general population and 7.4% had had a psychiatric hospital admission, 45 times the rate in the general population.
- In comparison to the NPSPM overall rates for psychosis, depression, anxiety and PTSD were similar in this sample, based on diagnostic instruments. Rates for drug abuse were lower in the NPSPM and rates of phobia, panic and personality disorder were lower in this sample.

- Men in this sample had higher rates of psychosis than women, opposite to the NPSPM, but in line with the general population. Women had lower levels of anxiety than in the NPSPM and higher levels of personality disorder, alcohol abuse and PTSD.
- Remand prisoners had higher levels of depression than sentenced prisoners in both samples, but the margin in this sample was smaller.
- In this sample men had statistically significant higher rates of psychosis than women and women had significantly higher rates of phobias and PTSD. Remand prisoners had significantly higher rates of psychosis than sentenced prisoners.
- The Needs for Care Assessment showed that levels of impairment were lower than prevalence rates based on diagnostic instruments. The most frequent areas of impairment were depression and drug and alcohol abuse.
- 25% of the sample did not have any impairments of functioning in comparison to 10.3% who did not meet diagnostic criteria for any mental disorders. A third of the sample met diagnostic criteria for four or more disorders while 10% had impaired functioning in four or more areas.
- Women had significantly higher rates of impairment in relation to depression, drug and alcohol abuse, PTSD and dangerous and destructive behaviour. Based on the Needs for Care Assessment women had significantly higher rates of co-morbidity.
- 78.1% of the sample had at least one treatment need. Women had significantly more treatment needs than men. Overall about half of all treatment needs were met.
- Men had significantly higher rates of unmet treatment needs than women. There was no significant difference between sentenced and remand prisoners, although



remand prisoners had slightly higher rates of met need this difference was not significant.

- A third of the sample had a need for medication. Two-thirds of these had been met. Men had significantly higher unmet medication needs.
- One fifth of the sample had a need for psychological treatment. More than two thirds of these needs were unmet. Women had higher levels of need for psychological treatment but this difference was not significant. Neither medication nor psychological treatment needs varied by sentencing status.
- The most frequently met needs were for alcohol and drug abuse. About a third of treatment needs in these areas were unmet.
- Levels of unmet treatment needs for PTSD were the same for men and women but women were three times more likely to have a treatment need for PTSD.
- Men had significantly higher unmet treatment needs for depression.
- Medication was the most common treatment requirement for psychosis. . Men had slightly higher rates of unmet medication needs for psychosis, but this difference was not significant.
- Two thirds of treatment needs for personality disorder were unmet. Overall the level of required treatment for personality disorder was low in relation to it's high prevalence.
- Rates of unmeetable need were consistently low. Drug and alcohol abuse had by far the highest rates of unmeetable treatment needs at 13%

## **6.6 - Organisational aspects of mental healthcare in prisons**

What these findings highlight is the prime importance of detecting cases of mental illness in prison. It is clear that some attempts were made in both prisons to provide treatment, but the number of people not receiving it was still high. The relatively low rates of rejection of treatment mean that unmet needs were far more likely to occur because of a failure to offer treatment in the first place than because of rejection. Detection can occur at various stages of the prison experience, at reception or through staff interaction, but it requires the continuous alertness of staff to the possibility of symptoms of mental ill health, and to the reluctance of prisoners to disclose them. This is challenging in an environment where the tensions of providing therapeutic interventions are set against the operational and security demands of prison life. Prisons can be hostile places, and prisoners may be reluctant to seek help for mental health problems for fear of stigmatisation. One way of combating these effects would be to improve the ease and speed of access to services through less rigid referral mechanisms, ideally before distress escalates. Of course such mechanisms can only be effective if the services they relate to are sufficiently resourced to respond to treatment needs. Prison officers are at the 'coalface' of prison life, but are often overstretched. In 1977 Anthony & Carkhuff called for the training of 'Functional Professionals', defined as 'a person who, lacking formal credentials, performs those functions usually reserved for credentialed mental health professionals'. The argument was not based on a suggestion that these professionals should replace doctors and nurses but the authors did observe that on a number of outcome criteria the clients of functional professionals did just as well as the clients of mental health professionals. In particular they suggested that for prison officers the roles of 'supportive counsellor' and 'skills trainer' were most appropriate, the former only requiring non-specific training in human relationships whilst the latter would entail the

training in the specific skill to be taught. To date however there is little academic evidence on how providing officers with mental health training would improve the detection and referral of cases of mental illness, although it might be an efficient and economical way of doing so. Better communication between and within establishments could also lead to improved detection. Research on screening efficacy reviewed earlier highlighted staff carrying out health screens at reception complaining about prisoners arriving without medical notes from other prisons and prisoners becoming un-cooperative due to the frustrations of repeating previous assessments. A centralised patient database for prisons could help overcome these obstacles. In terms of internal communications formal pathways into mental health care need to be established, with clear guidelines on referral mechanisms.

While resources are deliberately not considered in the Needs for Care Assessment, they have very real implications for the service provision within a prison. Holloway had a greater health spend than Pentonville, which had no psychology service at all for the duration of this study. This meant that, in cases requiring intervention other than medication, treatment was unlikely to be available. Some individual counselling was available for drug and alcohol abuse, but this was provided by the CARAT team. Holloway on the other hand had a counselling service (although it is worth noting that waiting lists for this service were four months), a psychology team, and group intervention aimed at prisoners with borderline personality disorder. Recent inspection in both prisons provided little evidence that much had changed since the currently reported study. While Holloway's inpatient unit and in-reach staff were praised, the physical environment was deemed inadequate, contributing to a general sense of insecurity on the part of staff and prisoners alike (Inspectorate of Prisons,

2010). Pentonville has fared much worse however: an unannounced visit in September 2013 led the chief inspector of prisons to conclude that 'it cannot operate as a modern 21<sup>st</sup> century jail. Staff shortages were so severe that the prison was running an 'emergency core day'. This meant that a quarter of prisoners would remain locked in their cells, which were in any case overcrowded. Further staff cuts were expected to result in an even more basic regime, leaving prisoners without access to purposeful activity and education. Prisoners struggled with basic needs such as access to showers, telephones and cleaning materials. The physical condition of the prison was very poor, with men sharing small, dirty, badly ventilated, single cells, with broken furniture and, in some cases, broken windows (Inspectorate of Prisons, 2013). It is clear that the responsibility for addressing mental health needs cannot be expected to be met by prisons alone.

### **6.7 – Strengths and limitations of the study**

The study sample was smaller than initially intended: this has restricted the power of some analyses, particularly in relation to individual items of care in the Needs for Care Assessment. In consequence, there were very low numbers in some individual categories. However, the levels of need turned out to be greater than the initial estimates and there was therefore still sufficient power to support the findings presented here, even in this reduced sample. The reduction in sample size can be attributed to two reasons: first, a second researcher employed to collect data had to withdraw from the study, and, secondly, the interviews took considerably longer than expected due to the complexity of the problems prisoners reported, and the logistical issues associated with having to conduct interviews over multiple sessions. The former however did remove the needs to assess

inter-rater reliability. Although the sampling procedure was designed to identify participants quickly and efficiently, it is possible that people in prison for particularly short periods of time might have been under-represented. A very small number of sampled prisoners could not be approached, as they were held in segregation units: it is possible that the behavioural difficulties associated with this sanction might have been due to mental health problems. However neither of these considerations suggest a systematic sampling bias of any great size.

The needs assessment carried out here addresses several gaps identified in previous reports of needs assessments. First, it focuses exclusively on mental health issues and considers all major types of disorder. Secondly, judgements of needs are made on the basis of validated diagnostic instruments as opposed to self-report measures, and are augmented by clinical judgement. A drawback of this thorough approach is that it is very labour-intensive, meaning that the high cost may dissuade prisons and future researchers from replicating this survey.

### **6.8 - New approaches to diversion**

Virtually all policy papers and government reviews discussed in chapter two emphasise that, while prison mental health services do need to be improved, the problem of excessive mental illness in prison can only be addressed through the provision of adequate and innovative approaches to diversion that ensure mentally ill people are not sent to prison in the first place. In the United States, some such approaches have been implemented, and new ones are being tested. Yin (2011) reported on a programme developed in Miami Dade County in Florida. Local police were given a 40hr crisis intervention training that enabled

them to respond to psychiatric emergencies, with impressive results: After 3300 officers received the training, Miami Dade County saw the largest reduction in arrests (>17%) of any county in the United States. The average county jail population had dropped by 24%, to 5500 from 7200 in 2009, primarily because of successful police intervention. It is reported that in the first 6 months of 2011, 2321 mental health calls were answered by the specialist officers, resulting in 751 diversions to crisis units and just 1 arrest. Yin (2009) concludes that 'given that Miami-Dade county jail spends \$59 million to house inmates with mental illness, there are clearly significant savings for the tax-payer to be had'. Given that Her Majesty's Inspectorate of Constabulary (HMIC, 2013) recently published a report highlighting the widespread and inappropriate use of police custody cells as safe places, and that officers voiced serious concerns of feeling ill-equipped to deal with mental illness, such a scheme would also be highly relevant here in the United Kingdom.

A more established form of diversion is the Mental Health Court. Defined as a 'forum of highly limited jurisdiction to which all of the cases of a particular type are introduced', their main focus is to enable certain categories of defendants to gain access to treatment (Dreyfuss, 1995). Mental health courts have been the most common response to the diversion of mentally ill offenders in the United States of America, with over 300 mental health courts now operation (Council of State Governments Justice Centre, 2013).

However in the United Kingdom has primarily used court-based mental health diversion schemes are primarily used to direct offenders into mental health treatment (James, 2006). Court diversion schemes seek to admit people to hospital while mental health courts are mainly concerned with treatment in the community, and can be seen as a way of engineering compulsory treatment in the community (James, 2006). For court diversion

schemes, direct admission rights to hospital beds, particularly on general psychiatry wards, are key to ensuring efficacy: given the scarcity of such beds, this is a serious limitation. Research into Mental Health Courts is showing some encouraging findings. Studies have reported high levels of satisfaction and feelings of fairness by participants with the procedure and treatment received in a mental health court and low levels of perceived coercion (Poythress et al., 2002); reduced recidivism after participation in a mental health court (Christy et al., 2005; McNiel & Binder, 2007); fewer days spent in jail by those in the mental health court system than those processed in the traditional court system (Boothroyd et al., 2003); and improvements in outcomes such as reduced homelessness, psychiatric hospitalizations, frequency and levels of substance and alcohol abuse and improvements in psychosocial functioning (Cosden et al., 2005; O'Keefe, 2006).

The National Association for the Care and Resettlement of Offenders (NACRO) has carried out several surveys of liaison and diversion schemes. In 1999 they identified 150 such schemes in England and Wales. Findings from the surveys show that suggest that they have declined in numbers and their functioning is frequently hampered by inadequate staffing and financing. In the 2004 survey (NACRO, 2005), 50% did not have access to a psychiatrist, with 72% citing a lack of psychiatric beds as a prominent obstacle to their effective functioning. In addition 78% of services surveyed were unable to collect statistics describing their function. Twentyfive percent of schemes reported a decreased staffing levels in the preceding 12 months. A similar survey was carried out for the Bradley review and found that of the 100 schemes in operation at courts and police stations, only 13 regularly received excellent scores on a set of performance criteria. Lord Bradley concluded that schemes had developed “despite the lack of national drive and investment”, that “many schemes owe

their existence to the enthusiasm and dedication of individual members of staff”, and that this is no basis for such an important service to rely upon (Bradley, 2009). The Government accepted the vast majority of Lord Bradley’s recommendations and a five year review of the Bradley review gives cause for cautious optimism Bradley (2014). According to the new review the coalition government invested £50 million into 100 diversion programmes over the last five years. A new Offender Health Collaborative (OHC) has supported the national development programme and in 2013 produced a standardised Operating Model for liaison and diversion services. The OHC is now supporting 10 pilot sites in embedding this all age operating model. The government has provided a further £25 million to support this programme. The 10 pilot sites are subject to an evaluation, which is supporting a business case for full roll out to all police custody and courts of this all age approach, and this is anticipated for 2017 (Centre for Mental Health, 2014). The Commission found evidence of various mental health training initiatives across several police forces, but reported that nevertheless many officers felt ill equipped to effectively deal with mental illness.

Commissioners found that psychiatric court reports were still causing delays in the courts but noted that the new Operating Model allows for less detailed reports where appropriate, in the hope of speeding up the system. With regards to the Mental Health Treatment Requirement (part of a sentencer’s option when creating a community order) the commission found that there was improvement in educating courts about its availability but that it was still under-used. The commission concluded that the most fundamental challenge in having the mental health treatment requirement used more frequently is ‘no longer a legislative or technical one but rather the same challenge that faces liaison and diversion services in creating diversion pathways from police custody and court, and the same challenge that faces prisoners on release from prison, which is the willingness of



mainstream care and support providers to engage with criminal justice agencies and the people who have contact with them as part of the community they serve'. The original Bradley review recommended the adoption of 14 day timeframe for the transfer of the most unwell prisoners into hospital. This recommendation was not adopted and the new review found transfer times to still be unsatisfactory and subject to a 'postcode lottery'.

In 2009, Mental Health Courts were piloted in Stratford, East London and Brighton, with the aim of developing a model to identify offenders with mental health problems and to offer appropriate interventions. The pilot also sought to assess the cost of implementing such a model if applied across the wider criminal justice system. The pilot ran until January 2010, and in September 2010 the new coalition government commissioned a feasibility study of an impact evaluation. The results were that carrying out such a study would be problematic. The Ministry of justice concluded that the 547 strong sample was too small to detect any effects, and that the pilot would therefore need to be extended at additional cost. A view was also taken that assessing mental health outcomes at 1-year follow-up would be too difficult, and would be impeded by ethical issues, as such assessments 'could bring to the fore problems that previously been under control'.

A process evaluation was however undertaken, and found that the pilot encouraged innovative multi-agency collaborations that addressed previously unmet needs (Winstone et al., 2010). In addition to analysis of the 547 cases, there were 69 semi-structured interviews with mental health and justice professionals, and 14 structured interviews with offenders who had received community orders. Overall, 4000 defendants were screened, of whom 547 were deemed to require a formal mental health assessment. Of these, 181 (33%) were

found to not have any mental health problems. A total of 394 mental health assessments were completed. Participants with dual diagnosis were included, but those for whom substance misuse was the primary problem were excluded and signposted to relevant services. Out of 185 convicted offenders with a mental health issue, 55 were given community orders with mental health requirements, 86 received other sentences, and 131 were signposted. Nine people breached their orders. There was no definitive answer as to why the rate of community orders was so low, but one possible explanation was that for some offenders their offending is either too serious or not severe enough to warrant a community sentence. However, the reviewers conclude that, even for those who did not receive community orders, a great deal of referral and liaison did take place. The offenders who were interviewed reported that they valued the supervision activities highly, and they specifically mentioned the holistic support offered pre-and post sentencing; some praised the process as having given them 'a voice'. They also commented on activities that were not specifically assessed, such as addressing loneliness, helping with contacting services, and filling out forms. The reviewers noted that the range of activities undertaken by the teams was impressive, and concluded that it was often these non-clinical interactions that fostered trusting relationships: some interviewees reported they felt a personal responsibility to not let the teams down after all the efforts made on their behalf. The reviewers estimated that the combined operational costs for both sites would be less than £300,000, but were unable to conduct a break-even analysis of costs for a national roll out. In their conclusion, the authors remark that the work carried out at the mental health courts was in line with recommendations from the Bradley report, and identified examples of best practice, such as the daily availability of a mental health court practitioner, multi-agency agreements for information sharing, identification and engagement with local resources,

and high-involvement of service users. They praise the commitment at both pilot sites, which identified them as areas of best practice, and note that one of the criminal justice interviewees stated that going to back to pre-mental health court arrangements was 'unthinkable'. It was advised that the outcome of the pilot should be shared with commissioning bodies, and that a resource pack, developed over the course of the trial period, should be made widely available.

### **6.8 - Future trends for policy**

Justice Reinvestment has become a popular concept among progressive thinkers in the criminal justice field. It aims to reduce the prison population through the re-allocation of resources from incarceration towards rehabilitation measures in the most deprived areas and a devolution of prison and probation budgets towards local partnerships that invest in the rehabilitation of offenders. In addition such investments are also made in areas outside of the criminal justice system in fields that are known to contribute to criminality, such as poor education attainment, lack of housing, mental health problems and unemployment. Before the 2010 election this approach was endorsed by the Justice Select Committee (2010), which believed that the financial crisis marked an opportunity to re-examine the spending plans and ethos of the prison-building programme. The committee concluded that the current trajectory was unsustainable and that after reviewing Justice Reinvestment efforts in other jurisdictions it came to the conclusion that criminal justice innovation would provide a more prudent, effective and humane way of addressing the near crisis-levels of the prison population.

These were some of the key policy priorities identified by the committee:

- Creating community based services that intervene before potential offenders enter the criminal justice system.
- Putting in place a suitably funded, nationally available but locally responsive system of community sentences that reduce re-offending and target low-level but persistent offenders
- A commitment to a reduction of the prison population
- The establishment of a body that provides guidance and assesses the efficacy of criminal justice interventions in a manner akin to that of the of the National Institute for Clinical Excellence (NICE) in health care

Unfortunately evidence is mounting that these ideas have been abandoned. Despite promising language of a 'rehabilitation revolution' and 'Justice Transformation' from the Coalition Government there has been no discernible change in the prison landscape. In spite of a promise to reduce levels of over-zealous criminalisation, in the year to May 2012 292 new criminal offences were created, over three quarters of which carried custodial sentences (Allen, 2013). The so called 'rehabilitation revolution' was based on a commitment to more effective sentencing structures, an overhaul of rehabilitation approaches and a focus on new treatment based secure accommodation for mentally ill offenders and those with substance misuse issues. The savings from reducing the prison population in this manner would pay for programmes aimed at reducing re-offending provided by the private sector (Allen 2013). With the need to cut costs across all government ministries however these policies were soon watered down and in 2012 Justice minister Chris Grayling very clearly indicated what his priorities for the future of the prison

estate would be when he stated that 'We have to focus on making the prison system cheaper not smaller' (Chris Grayling , speech on November 20<sup>th</sup> 2012). A look at the Ministry of Justice's flagship policy 'Breaking the cycle: Effective Punishment, Rehabilitation and Sentencing of Offenders, 2010) clearly laid out a blue print for achieving this goal. The cornerstone of the green paper was the introduction of 'payment-by -results' i.e. the outsourcing of services to the private and voluntary sector and paying them for meeting agreed standards. Paying-by-results was to be introduced to various parts of the criminal justice system, from administering financial penalties to running work programmes for offenders, managing community sentences and community pay-back schemes. The emphasis on the financial aspect of reform was further evidenced by a call to make much greater use of financial penalties as sentencing options, increasing the victim surcharge in order to pay for victim services and implementing the Prisoners' Earnings Act which allows the government to make deductions from prisoner's earnings in order pay for reparations to victims and communities alongside 'exploring other options for making deductions from prisoner pay'. The government argued that this approach would foster innovation through competition and enable smaller and/or local enterprises to share their expertise, provide greater flexibility and responsiveness to local needs and would give communities ownership of their approach to tackling crime and rehabilitation. The other controversial aspect of the new policy saw a fundamental re-structuring of probation services. A 'leaner', more effective probation service was promised through the privatisation of the probation service in 21 areas of England and Wales where low-medium risk offenders would be managed, whilst the new public sector National Probation Service would oversee the management of the most serious offenders. The changes, which were subject to a two month consultation process in 2013, were supposed to come into effect in April 2014 but have been delayed by

two months after advisors to Chris Grayling have warned him of concerns over risks to public safety. The plans have also come under attack by the Public Accounts Committee as it felt that they were being implemented on a short time scale and were rolled out nationally untested. There was also concern that due to the fact that for the first time offenders with sentences of less than 12 months would be offered probation services the number of people being managed by such services would increase by 22%, without any indication how this additional burden would be accommodated (BBC news report, 2014). This means that rather than scrapping ineffective and expensive short-term prison sentences the Offender Rehabilitation Bill proposes a minimum additional 12 months statutory supervision for offenders on their release, meaning that relatively minor crimes can lead to increased time spent in the criminal justice system. Such a rise in the number of people managed by probation services and the increased length of time they will be in contact with services for will also make inevitable an increase in numbers of those who breach their license agreement and will have to be recalled to prison, possibly increasing the prison population even further.

In addition chairs of three probation trusts have warned that these plans are being rushed through and did not allow enough time to ensure the safe transfer of all cases on top of existing workloads and with changes to the management structure (Travis, 2013).

The Howard League for Penal Reform (2013) has also criticised the plans. Amongst other things they noted that:

- The proposals may not make the savings the government envisages as they require a large-scale re-organisation and a national tendering and contracting process.

- 'The current budget for probation is approximately £800 million per year, equalling a ten year budget of £8 billion. The House of Commons library has estimated the ten year cost of outsourced probation contracts to be £5-20 billion, which does not include the budget for the remaining public sector probation service. This suggests a significant increase in costs.'
  
- 'The new system could create perverse incentives for private companies. Reducing reoffending will be measured through cohorts, rather than measured on an individual level. This could result in „cherry-picking“ where providers work only with those least likely to reoffend and fail to invest resources in those with significant risk factors in order to meet targets. Providers will continue to be paid if people breach their conditions and are recalled to custody. A recent report published by the Justice Select Committee stated that perverse incentives arising from the payments by results system could be a particular problem for the provision of services for women offenders, who are often classified as presenting a lower risk of reoffending or harm but have a high level of need and require more intensive, costly intervention'.

Particular concern was also expressed for how women would fare under the new plans:

- 'The proposed payment-by-results system poses a particular threat to the supervision of women. Probation interventions for women are usually successful because they are small, local and holistic – they look at each woman as an individual with problems and needs rather than simply as an offender. This approach has a proven track record in helping women turn their lives around as well as reduce

reoffending. Private companies are very unlikely to subcontract with many women's services as they are small (and will therefore not provide services across an entire contract area), and more expensive than non-gender specific services. The Howard League is concerned that women will be assigned to community interventions designed only for men with detrimental consequences for their safety, levels of offending and the health and wellbeing of the women involved. Some of these concerns were echoed by the Justice Select Committee's recent inquiry into Women Offenders. '

- 
- 'After much delay the Ministry of Justice published its review of the women's custodial estate on 25 October 2013. The review stated that two of the 12 women's prisons would close and that all remaining prisons would become resettlement prisons. As there will be 21 contract package areas but only 10 remaining women's prisons a substantial number of female prisoners will be released into an area different to the prison. The review contains no information on how the resettlement prison system will work for women. Female prisoners are being shoehorned into a system designed for men.'

There is legitimate reason to question the efficacy of the payment –by- results approach. After all the nationally rolled out £5bn Work Programme proved to be 'worse than doing nothing' (Swinford, 2013) with the government missing every target it set itself. Figures showed that in 50% of areas participating in the scheme, people would have been more likely to get a job if they hadn't taken part in the programme.



Furthermore it was found that half of all providers only got around 30% of young people into work, not a convincing result given that the Department for work and pensions had estimated that 30% of people could be expected to find jobs without involvement in the scheme. Other figures showed that just one in 20 people on sickness benefit who were on the programme found work. The target was one in six (Swinford, 2013). Similar trends are detectable in the criminal justice system. The Ministry of Justice published an interim evaluation of the payment by results schemes piloted in Doncaster and Peterborough showing the impact of payment-by-results to be non-existent despite additional resources and efforts (Howard League for Penal Reform, 2013). Another Ministry of Justice pilot based in Manchester and four London Boroughs showed similarly disappointing results. An independent evaluation of the first years' activities showed that although some new models for commissioning were developed, particularly in Manchester, the local agencies generally considered incentives insufficient to inspire investment in innovation (Wong, 2013). While the team in Manchester did project that the scheme could offer benefits of £250mil over five years for an investment of £30mil by reducing demand for prison places there was no mechanism to re-invest the surplus into community based activities after the pilot period and the independent reviewers noted that even during the trial period only a fraction of the savings made to the prison service found their way back to the services that brought them about.

This must make one question the decision to dismantle a successful public service (re-offending is down by 5% according to the Ministry of Justice [2013] and a recent report by the National Offender Management Service rated the performance of all 35 probation trusts

in England and Wales as either 'good' or 'excellent' [2013]) and replace it with an untried system that is not evidence based at breakneck speed.

'Good' and 'excellent' are incidentally not words that have been associated with the companies that have so far received some of the biggest government contracts in the criminal justice system. G4S and Serco were both accused of overcharging the government for services delivered in relation to electronic tagging. Initial estimates for the excessive charges (made in relation to people who had been returned to prison, left the country, died or were never fitted with a tagging device to begin with) were around £20m (Travis, 2013) At this point both companies were still allowed to bid for the £450mil worth of offender rehabilitation contracts but were barred when the actual figure was found to be closer to £180mil (Travis 2014). While both companies are being investigated by the Serious Fraud office Serco has undergone a process of 'corporate renewal' and may soon be allowed to bid for government contracts again (Travis, 2014).

This raises the problem of who can compete for these government contracts. Larger companies are able to significantly underbid competitors as they have a greater amount of capital, existing infrastructure and cover larger areas. This makes it difficult for smaller firms or charities to compete in the bidding process. It is also unlikely that smaller providers can cover extensive areas or that each area will have the capacity provide the needed service. There is even Evidence in Breaking the Cycle (Ministry of Justice, 2010) that the diversification of providers may not always be feasible despite this being a goal of the policy. Community orders for example can include requirements from a range of 12 possible components such as meaningful activity, mental health treatment, accredited programmes and curfew requirements. The paper states it is impractical to contract for different

objectives separately and therefore will contract with one provider allowing them to sub-contract. This means that the government expects to only award contracts to a small number of firms and relying on them to award appropriate sub-contracts that will eat into their profits and will not be overseen by the government. All the best practice evidence suggests that the best results are achieved through multi-agency collaboration and it is questionable that this approach would foster such set-ups as smaller local or specialist services may not feel incentivised to participate in the process of service innovation if they are not provided with sufficiently attractive sub-contracts. Structuring the new plans in this way may also involve putting out to tender those sub-contracts, involving additional cost.

The emphasis on de-centralisation and a focus on local services that cater to local need, whilst also a key component of the Justice Reinvestment philosophy, does pose some significant risks. While locally commissioned services could offer the advantage of creating a bespoke service that is relevant to each areas' specific needs (provided that enough of them can be created) such an approach has also been responsible for the variability in services or for inaction. Historically a lack of robust direction by central government has been the cause of slow and patchy progress in implementing reform policies.

In economically challenging times budgets everywhere must be restrained but the near obsessive dedication to making prisons run cheaper, largely by cutting staff costs and overcrowding them, has had serious consequences and the results of these cuts as well as privatisation of the prison system must make one fear for the future of rehabilitation services who are now awaiting a similar fate. The UK has the most privatised prison system in Europe. In England and Wales there were 13,449 people (16% of the prisoner population) held in private prisons at the end of March 2014 (the United States holds 8.7% of its

prisoners in private prison facilities (Prison Reform Trust 2014). In 2012-13 an average of 19,626 people were held in overcrowded accommodation, accounting for 22.8% of the total prison population (Ministry of Justice 2014). Private prisons have consistently held a higher percentage of their prisoners in overcrowded accommodation than public sector prisons. This has been the case every year for the past 15 years. In 2012-13 the private prisons average was 29.3%, compared to 21.8% in the public sector, with two private prisons holding more than 40% of prisoners in overcrowded accommodations and for a further two this figure was at over 60% (Ministry of Justice, 2014). HM Chief Inspector of Prisons has stated that overcrowding presents a serious obstacle to ensuring that prisoners receive appropriate input from staff, have access to education and other resources that are designed to keep them purposefully occupied and reduce the likelihood they will reoffend, stating that "...resources are now stretched very thinly [...] there is a pretty clear choice for politicians and policy makers - reduce prison populations or increase prison budgets." Incidentally the ratio of prison officers to staff has been declining. In 2000 this ratio was 1:2.9, by the end of September 2013 this had increased to 4.8 prisoners for each prison officer (Prison Reform trust, 2014). In addition the average gross salary for a private sector prison officer in 2011 was 23% less than public than the public sector equivalent. (Prison Reform Trust, 2014). This persistent refusal to tackle the size of the prison population is baffling considering it would be an obvious way to reduce cost and would also reflect the reduction of crime levels, including violent crime in recent years. This would go some way towards addressing the National Audit Office's finding that there is no consistent correlation between prison numbers and levels of crime (National Audit Office, 2012).

These policies reflect a lack of interest in investment into the criminal justice system that will undoubtedly have an impact on mentally ill offenders. It would seem the government has subtracted political cost from economic gain and decided that prisoners were easy targets for their cuts. After all they don't vote and there are few votes in treating them fairly, particular in times of austerity. It is clear at this point that there has not been a shortage of new policies, services and schemes but without a commitment from successive governments to implement these, changes on the ground have not been felt.

## **CHAPTER 7: CONCLUSIONS**

Despite good intentions that have led to sensible analyses and proposals for action, and despite nominal governmental acceptance and agreement to progress the development of effective mental health services, there has been little obvious progress in such developments, and there may even have been deterioration in aspects of the service. This is despite the fact that such services would serve criminal justice aims as well as medical ones. The literature about delivery of services reviewed in chapter two is based on an acknowledgement that ineffective services are unlikely to be able to address the needs of individual prisoners. However, this is an inference which lacks empirical substantiation. The rationale for this study was to establish the direct consequences of poor service delivery for prisoners, through the assessment of individual needs and experience of treatment. There are several methodological issues that require consideration when carrying out needs assessments and a lack of guidance on appropriate modes of their establishment has resulted in their variable quality. This study provides an in-depth assessment of the mental

health treatment needs of prisoners. It confirms the high prevalence of mental health problems in prison. Drug abuse, alcohol abuse and depression were particularly common. Psychosis was nearly 20 times higher than in the general population and one in 12 prisoners had PTSD. Over 80% of female and 70% of male prisoners had at least one treatment requirement for a psychiatric disorder. Rates of unmetable need were very low in this sample, meaning that the high level of unmet needs (around 40%) were not due to the rejection of treatment but rather a failure to provide treatment. In total around half of all treatment needs were met. Medication was the most frequently met need and psychological treatment needs were most frequently unmet. Women had significantly higher levels of impaired functioning in a number of areas but men had higher levels of unmet need. Men suffering from symptoms of depression fared particularly badly as these often went unrecognised, with the consequence that the relatively simple treatment need of medication was unmet in two thirds of the cases. While overall half of all treatment needs for alcohol abuse were met women had a higher proportion of their needs met than men. Treatment for drug abuse was slightly better than for alcohol abuse and was the only area where men received treatment that was equal to women.

A lack of resources and infrastructure must be seen as a key factor in identifying the causes for the very high incidence of mental illness in prison. However not all suggestion for improvement must necessarily come at prohibitive cost. A basic step towards the improvement of treatment of mental disorders is their detection. There are currently protocols in place which set standards for the screening of prisoners at the point of reception into the prison. However these screening procedures do not address mental illness in sufficient detail in order to allow for appropriate referrals in all cases. Currently

they included one question about previous psychiatric treatment and self-harm. The person performing the screen is also required to note any impression of depressive or anxious symptoms they detect but this is clearly not sufficient to identify more serious disorders such as psychosis, personality disorder or PTSD.

It is however impossible to ignore the question of resources when examining the nature of prison healthcare provision. Mental health In-reach Teams have been tasked with managing severe mental disorders originally dealt with by their community counterparts. However community services have since moved on to more specialist models of carer (e.g. early intervention and crisis care), while most prisons still operate a 'one-size-fits-all' model that was not properly implemented to begin with. This issue must be addressed if the principle of equivalence of care is to be adhered to. In addition to resourcing In-Reach teams properly (i.e. with a full complement of multidisciplinary staff) primary care must also perform properly in order to allow in-reach services to fulfil the purpose they were initially created for. Primary care services must play their part as gate keepers to in-reach services. Currently too many inappropriate referrals are made to In-Reach teams, requiring a screening assessment at the very least. This further infringes on their already barely existent capacity to deliver interventions that go beyond assessment and liaison services for those prisoners they are meant to care for.

The fact this study identified such a large number of prisoners with mental health issues must to some extent reflect a failure of court diversion systems. Some of the prisoners seen as part of this study were very ill indeed. Once they are received into prison option for transferring them to psychiatric care is limited and often subject to delays. Prisoners with

short sentences, of whom there are many are particularly unlikely to access mental health services in prison and this ought to be considered at the sentencing stage.

## **ACKNOWLEDGEMENTS**

I would like to thank my supervisors - Professor Paul Bebbington, whose dedication to inveterate tinkering may have finally taught me how to punctuate prose, and Professor Helen Killaspy whose dedication does not stop at sending comments on a Sunday night. I am grateful for their continued encouragement and constructive criticism.

I would also like to thank all the prisoners who have participated in this research and the staff who have facilitated their participation.



I am grateful to University College London and the Department of Mental Health Sciences who have funded this PhD.

Finally I would like to thank my family and friends. I am indebted to my mother for her limitless support and motivational speeches and to my sister for her humour and Word expertise. I wish to thank my friends for their distractions and for not abandoning me despite prolonged periods of absence.

## References

- A. Perkonig, R. C. K., S. Storz, H.U. Wittchen. (2000). Traumatic events and posttraumatic stress disorder in the community: prevalence, risk factors and comorbidity. *Acta Psychiatrica Scandinavica*(100), 46-59.
- Akiskal, H. S., Chen, S. E., Davis, G. C., Puzantian, V. R., Kashgarian, M., & Bolinger, J. (1985). Borderline: an adjective in search of a noun. *Journal of Clinical Psychiatry*.
- Allen, R. (2014). *Justice reinvestment: Empty slogan or sustainable future for penal policy?* London: Transform Justice.
- Andrews, D. A., & Bonta, J. , & Anderson. (1998). *The psychology of criminal conduct (2nd Edition)*. Cincinnati OH: Anderson.
- Angermeyer, M. C., Goldstein, J. M., & Kuehn, L. (1989). Gender differences in schizophrenia: rehospitalization and community survival. *Psychol Med*, 19(02), 365-382.

- Anthony, D., & McFadyen, J. (2005). Mental health needs assessment of prisoners. *Clinical Effectiveness in Nursing, 9*(1), 26-36.
- Appleby, L. (2004). *The National Service Framework for Mental Health – Five Years On.*: Department of Health.
- Association, A. P. (1989). *DSM-III-R Casebook: A Learning Companion to the Diagnostic and Statistical Manual of Mental Disorders, Rev*: American Psychiatric Press.
- Bartlett, A. (2007). Women in prison: concepts, clinical issues and care delivery. *Psychiatry, 6*(11), 444-448.
- Bebbington, P., Brewin, C. R., Marsden, L., & Lesage, A. (1996). Measuring the need for psychiatric treatment in the general population: the community version of the MRC Needs for Care Assessment. *Psychol Med, 26*(2), 229-236.
- Bebbington, P., Brugha, T., Meltzer, H., Jenkins, R., Ceresa, C., Farrell, M., & Lewis, G. (2003). Neurotic disorders and the receipt of psychiatric treatment. *Int Rev Psychiatry, 15*(1-2), 108-
- Bebbington, P., Jonas, S., Kuipers, E., King, M., Cooper, C., Brugha, T., Jenkins, R. (2011). Childhood sexual abuse and psychosis: data from a cross-sectional national psychiatric survey in England. *Br J Psychiatry, 199*(1), 29-37. doi: 10.1192/bjp.bp.110.083642
- Bebbington, P. E., Marsden, L., & Brewin, C. R. (1997). The need for psychiatric treatment in the general population: the Camberwell Needs for Care Survey. *Psychol Med, 27*(4), 821-834.
- Berman, G. D., A. (2013). *Prison Population Statistics* London: House of Commons Library.
- Blanchette, K. (1997). *Risk and need among federally-sentenced female offenders: A comparison of minimum-, medium-, and maximum-security inmates*: Correctional Service of Canada Canada.
- Boardman, J. P., M. (2007). *Delivering the government's mental health policies*. London: The Sainsbury Centre for Mental Health.
- Bonta, J., & Andrews, D. (2003). A commentary on Ward and Stewart's model of human needs. *Psychology Crime and Law, 9*(3), 215-218.
- Boothroyd, R. A., Poythress, N. G., McGaha, A., & Petrila, J. (2003). The Broward Mental Health Court: process, outcomes, and service utilization. *Int J Law Psychiatry, 26*(1), 55-71.

- Bradley, K. (2009). *The Bradley Report: Lord Bradley's review of people with mental health problems or learning disabilities in the criminal justice system*: Department of Health London.
- Brewin, C., Wing, J., Mangen, S., Brugha, T., & MacCarthy, B. (1987). Principles and practice of measuring needs in the long-term mentally ill: the MRC Needs for Care Assessment. *Psychol Med*, 17(04), 971-981.
- Brooker, C., Duggan, S., Fox, C., Mills, A., & Parsonage, M. (2008). *Short-changed: Spending on prison mental health care*. London: Sainsbury Centre for Mental Health.
- Brooker, C., Ricketts, T., Lemme, F., Dent-Brown, K. and Hibbert, C. Sheffield. ( 2005.). *An evaluation of the prison in-reach collaborative*. UK: : University of Sheffield School of Health and Related Research.
- Brooker, C., & Ullmann, B. (2008). *Out of sight, out of mind-the state of mental healthcare in prison*: Policy Exchange.
- Brooker, C. G., D. (2009). The second national survey of mental health in-reach services in prisons. *The Journal of Forensic Psychiatry & Psychology*, 20(S1), S11-S28.
- Brown, G. H., T. (1978). *Social origins of depression: A study of psychiatric disorder in women*. London: Tavistock.
- Brugha, T., Singleton, N., Meltzer, H., Bebbington, P., Farrell, M., Jenkins, R., Lewis, G. (2005). Psychosis in the community and in prisons: a report from the British National Survey of psychiatric morbidity. *American Journal of Psychiatry*, 162(4), 774-780.
- Bulletin, H. O. S. (2005). *Homicides, Firearm Offences and Intimate Violence 2005/2006* London: Home Office.
- Butler, T., & Allnutt, S. (2003). *Mental illness among New South Wales prisoners*: Corrections Health Service Sydney, NSW.
- Centre, C. o. S. G. J. (2013) Retrieved 26.05.2014, from <http://csgjusticecenter.org/mental-health-court-project/>
- Centre, H. a. S. C. I. (2013). Mental Health Bulletin: Annual report from MHMDS returns - England, 2011-12, further analysis and organisation-level data Retrieved 27.04.2014, from <http://www.hscic.gov.uk/catalogue/PUB10347>
- Chan, M. (2010). Mental health and development: targeting people with mental health conditions as a vulnerable group. *World Health Organization*. Retrieved from

[http://www.who.int/mental\\_health/policy/mhtargeting/development\\_targeting\\_mh\\_summary.pdf](http://www.who.int/mental_health/policy/mhtargeting/development_targeting_mh_summary.pdf).

- Chiswick, D. (1992). What mentally ill offenders need. *Bmj*, 304(6822), 267-268.
- Christy, A., Poythress, N. G., Boothroyd, R. A., Petrila, J., & Mehra, S. (2005). Evaluating the efficiency and community safety goals of the Broward County Mental Health Court. *Behav Sci Law*, 23(2), 227-243. doi: 10.1002/bsl.647
- Coid, J., Kahtan, N., Cook, A., Gault, S., & Jarman, B. (2001). Predicting admission rates to secure forensic psychiatry services. *Psychol Med*, 31(3), 531-539.
- Committee, H. o. C. J. (2010). *Cutting crime: the case for justice reinvestment*. London: The Stationery Office.
- Constabulary, H. M. s. I. o. (2013). *A Criminal Use of Police Cells?* .
- Corston, J. (2007). *The Corston Report: A Report of a Review of Women with Particular Vulnerabilities in the Criminal Justice System*. London: Home Office.
- Cosden, M., Ellens, J., Schnell, J., & Yamini-Diouf, Y. (2005). Efficacy of a Mental Health Treatment Court with assertive community treatment. *Behav Sci Law*, 23(2), 199-214. doi: 10.1002/bsl.638
- Covington, S., & Bloom, B. (2003). Gendered justice: Women in the criminal justice system. *Gendered justice: Addressing female offenders*, 3-24.
- Daly, K. (1992). Women's pathways to felony court: Feminist theories of lawbreaking and problems of representation. *S. Cal. Rev. L. & Women's Stud.*, 2, 11.
- Darves-Bornoz, J. M., Benhamou-Ayache, P., Degiovanni, A., Lepine, J. P., & Gaillard, P. (1995). [Psychological trauma and mental disorders]. *Ann Med Psychol (Paris)*, 153(1), 77-80; discussion 80-71.
- DeHart, D. D. (2008). Pathways to prison: Impact of victimization in the lives of incarcerated women. *Violence Against Women*, 14(12), 1362-1381.
- Forensic Psychiatry*, 14(3), 600-614.
- Department of Health (1999). *National Service Framework for Mental Health: Modern Standards and Service Models*. London.
- Department of Health (2001a). *Changing the outlook: a strategy for developing and modernising mental health services in prisons*. London: DoH.

- Department of Health (2001b). *Report of the Working Group on Doctors working in prisons: Summary and Key Recommendations*. London: DoH.
- Department of Health (2001c). *The NHS Plan: a plan for investment, a plan for reform*. London.
- Department of Health (2003). *Personality Disorder; no longer a diagnosis of exclusion*. London: DoH.
- Department of Health (2009). *Improving Health, Supporting Justice*. London: DoH.
- Department of Health (2010a). *Equity and Excellence: Liberating the NHS* London: DoH.
- Department of Health. (2010b). *Healthy Lives, Healthy People: Transparency in Outcomes Proposals for a Public Health Outcomes Framework* London: DoH.
- Department of Health (2011). *No health without mental health*. UK: DoH.
- Dixon, W., & Massey, F. (1983). Sensitivity experiments. *Introduction to Statistical Analysis*. 4th ed. Boston: McGraw Hill, 426-441.
- Downey, L., Rosengren, D. B., & Donovan, D. M. (2003). Gender, waitlists, and outcomes for public-sector drug treatment. *J Subst Abuse Treat*, 25(1), 19-28.
- Dreyfuss, R. (1995). Forums of the future: the role of specialized courts in resolving business disputes. *Brooklyn Law Review*, 61(1-44).
- Dunne, F. J., Galatopoulos, C., & Schipperheijn, J. M. (1993). Gender differences in psychiatric morbidity among alcohol misusers. *Comprehensive Psychiatry*, 34(2), 95-101.
- Durcan, G. K., K. (2006). *London's prison mental health services: A review*: Sainsbury Centre for Mental Health.
- Foa, E.B., (1995). *Posttraumatic Stress Diagnostic Scale Manual*. National Computer Systems Inc.
- Fagan, A. A. (2001). The gender cycle of violence: Comparing the effects of child abuse and neglect on criminal offending for males and females. *Violence and Victims*, 16(4), 457-474.
- Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23000 prisoners: a systematic review of 62 surveys. *Lancet*, 359(9306), 545-550. doi: 10.1016/s0140-6736(02)07740-1

- First, M., Gibbon M, Spitzer RL, Williams, JBW, Benjamin LS. (1997). *Structured Clinical Interview for DSM-IV Axis II Personality Disorders, (SCID-II)*. Washington, D.C: American Psychiatric Press, Inc.
- Fisher, H., Morgan, C., Dazzan, P., Craig, T. K., Morgan, K., Hutchinson, G., Fearon, P. (2009). Gender differences in the association between childhood abuse and psychosis. *Br J Psychiatry*, 194(4), 319-325. doi: 10.1192/bjp.bp.107.047985
- Force, S. E. T. (2009). *Short Study on Women Offenders*. London: Ministry of Justice.
- Forrester, A., Exworthy, T., Olumoroti, O., Sessay, M., Parrott, J., Spencer, S. & Whyte, S. (2013). Variations in prison mental health services in England and Wales. *International journal of law and psychiatry*, 36(3), 326-332.
- Galen, L. W., Brower, K. J., Gillespie, B. W., & Zucker, R. A. (2000). Sociopathy, gender, and treatment outcome among outpatient substance abusers. *Drug and Alcohol Dependence*, 61(1), 23-33.
- Gendreau, P., Little, T., & Goggin, C. (1996). A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works. *Criminology*, 34(4), 575-608.
- Goff, A., Rose, E., Rose, S., & Purves, D. (2007). Does PTSD occur in sentenced prison populations? A systematic literature review. *Criminal Behaviour and Mental Health*, 17(3), 152-162.
- Grayling, C. (2012). Speech: Rehabilitation revolution: the next steps Retrieved 25.05/2014, from <https://www.gov.uk/government/speeches/rehabilitation-revolution-the-next-steps>
- Green, B. L., Miranda, J., Daroowalla, A., & Siddique, J. (2005). Trauma exposure, mental health functioning, and program needs of women in jail. *Crime & Delinquency*, 51(1), 133-151.
- Grossman, L. S., Harrow, M., Rosen, C., & Faull, R. (2006). Sex differences in outcome and recovery for schizophrenia and other psychotic and nonpsychotic disorders. *Psychiatr Serv*, 57(6), 844-850.
- Gunderson, J. G., & Siever, L. J. (1985). Relatedness of schizotypal to schizophrenic disorders: editors' introduction. *Schizophr Bull*, 11(4), 532-537.
- Gunn, J., Maden, A., & Swinton, M. (1991). Treatment needs of prisoners with psychiatric disorders. *Bmj*, 303(6798), 338-341.

- Harner, H. M., Budescu, M., Gillihan, S. J., Riley, S., & Foa, E. B. (2013). Posttraumatic Stress Disorder in Incarcerated Women: A Call for Evidence-Based Treatment. *Psychological Trauma: Theory, Research, Practice, and Policy*, No Pagination Specified. doi: 10.1037/a0032508
- Harty, M. A., Jarrett, M., Thornicroft, G., & Shaw, J. (2012). Unmet needs of male prisoners under the care of prison Mental Health Inreach Services. *Journal of Forensic Psychiatry & Psychology*, 23(3), 285-296.
- Harty, M. A., Tighe, J., Leese, M., Parrott, J., & Thornicroft, G. (2003). Inverse care for mentally ill prisoners: unmet needs in forensic mental health services. *The Journal of Forensic Psychiatry*, 14(3), 600-614
- HM Chief Inspector of Prisons. (2007:). *The Mental Health of Prisoners*. London:: HMSO.
- HM Chief Inspector of Prisons. (2004). *The mental health of prisoners - A thematic review of the care and support of prisoners with mental health needs*. London:: The Stationary Office.
- HM Chief Inspector of Prisons. (2010). *Report on a full unannounced inspection of HMP Holloway* London: Her Majesty's Inspectorate of Prisons.
- HM Chief Inspector of Prisons. (2013). *Report on an unannounced inspection of HMP Pentonville*. London: Her Majesty's Inspectorate of Prisons
- HM Chief Inspector of Prisons. (1996). *Patient or prisoner? A new strategy for health care in prisons*. London: Home Office.
- Hodgins, S., & Muller-Isberner, R. (2004). Preventing crime by people with schizophrenic disorders: the role of psychiatric services. *Br J Psychiatry*, 185, 245-250.
- James, D. V. (2006). Court diversion in perspective. *Aust N Z J Psychiatry*, 40(6-7), 529-538.
- Jenkins, R., Lewis, G., Bebbington, P., Brugha, T., Farrell, M., Gill, B., & Meltzer, H. (1997). The National Psychiatric Morbidity surveys of Great Britain--initial findings from the household survey. *Psychol Med*, 27(4), 775-789.
- Jenkins, R., Lewis, G., Bebbington, P., Brugha, T., Farrell, M., Gill, B., & Meltzer, H. (2003). The National Psychiatric Morbidity Surveys of Great Britain-Initial findings from the household survey. *International Review of Psychiatry*, 15(1-2), 29-42.
- Joint Prison Service and National Health Service Executive Working Group (1999). *The future organisation of prison health care*. . London Department of Health.

- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry*, *52*(12), 1048-1060.
- Kety, S. S. (1985). Schizotypal personality disorder: an operational definition of Bleuler's latent schizophrenia? *Schizophr Bull*, *11*(4), 590.
- Kirkbride, J. B., Errazuriz, A., Croudace, T. J., Morgan, C., Jackson, D., Boydell, J., Murray, R.M., Jones, P. B. (2012). Incidence of schizophrenia and other psychoses in England, 1950–2009: a systematic review and meta-analyses. *PloS one*, *7*(3), e31660.
- Langan, N. P., & Pelissier, B. M. (2001). Gender differences among prisoners in drug treatment. *J Subst Abuse*, *13*(3), 291-301.
- Lawton-Smith, S. M. A. A brief history of specialist mental health services. London: Mental Health Foundation.
- Lewis, G., Pelosi, A. J., Araya, R., & Dunn, G. (1992). Measuring psychiatric disorder in the community: a standardized assessment for use by lay interviewers. *Psychol Med*, *22*(2), 465-486.
- Lines, R. (2006). From equivalence of standards to equivalence of objectives: The entitlement of prisoners to health care standards higher than those outside prisons. *International Journal of Prisoner Health*, *2*(4), 269-280.
- Lowenkamp, C. T., Holsinger, A. M., & Latessa, E. J. (2001). Risk/need assessment, offender classification, and the role of childhood abuse. *Criminal Justice and Behavior*, *28*(5), 543-563.
- MacDonald, M. (2013). Women prisoners, mental health, violence and abuse. *International journal of law and psychiatry*, *36*(3), 293-303.
- Macdonald, M. (2013). Women prisoners, mental health, violence and abuse. *Int J Law Psychiatry*, *36*(3-4), 293-303.
- Maden, A., Curle, C., Meux, C., Burrow, S. and Gunn, J. . (1993). The Treatment and Security Needs of Patients in Special Hospitals. *Criminal Behaviour and Mental Health*(3), 290–306.
- Maric, N., Krabbendam, L., Vollebergh, W., de Graaf, R., & van Os, J. (2003). Sex differences in symptoms of psychosis in a non-selected, general population sample. *Schizophr Res*, *63*(1-2), 89-95.



- Marshall, T., Simpson, S., & Stevens, A. (2001). Health care needs assessment in prisons: a toolkit. *Journal of Public Health, 23*(3), 198-204.
- May-Chahal, C., & Cawson, P. (2005). Measuring child maltreatment in the United Kingdom: a study of the prevalence of child abuse and neglect. *Child Abuse Negl, 29*(9), 969-984.
- McConnell, P., Bebbington, P., McClelland, R., Gillespie, K., & Houghton, S. (2002). Prevalence of psychiatric disorder and the need for psychiatric care in Northern Ireland Population study in the District of Derry. *The British Journal of Psychiatry, 181*(3), 214-219.
- McNiel, D. E., & Binder, R. L. (2007). Effectiveness of a mental health court in reducing criminal recidivism and violence. *Am J Psychiatry, 164*(9), 1395-1403.
- Meltzer, H. (1995). *The prevalence of psychiatric morbidity among adults living in private households*: HM Stationery Office.
- Messina, N., Burdon, W., & Prendergast, M. (2006). Prison-based treatment for drug-dependent women offenders: treatment versus no treatment. *J Psychoactive Drugs, Suppl 3*, 333-343.
- Ministry of Justice (2008a). *National Service Framework: Improving Services for Women Offenders*. London: Ministry of Justice.
- Ministry of Justice (2008b). *The Offender Management Guide to Working with Women Offenders* London: Ministry of Justice.
- Ministry of Justice (2009). *Sentencing Statistics: England and Wales 2009 Statistics Bulletin* London: Ministry of Justice.
- Ministry of Justice (2010). *Breaking the Cycle: Effective Punishment, Rehabilitation and Sentencing of Offenders*. London: Ministry of Justice.
- Ministry of Justice (2012). *New criminal offences statistics in England and Wales*. London: Ministry of Justice.
- Ministry of Justice (2013a). *Statistics on Race and the Criminal Justice System 2012*. Ministry of Justice.
- Ministry of Justice (2013b). *Prison Performance Digest 2012-13*. London: Ministry of Justice.
- Ministry of Justice (2014a). *Prison Population Monthly Bulletin* London: Ministry of Justice.
- Ministry of Justice (2014b). *Workforce Information Summary Report: Quarter 3 2013/14*. London: Ministry of Justice.

- Moffitt, T., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and psychopathology*, 13(02), 355-375.
- Moloney, K. P., van den Bergh, B. J., & Moller, L. F. (2009). Women in prison: The central issues of gender characteristics and trauma history. *Public Health*, 123(6), 426-430.
- Monahan, J., Steadman, H. J., Robbins, P. C., Appelbaum, P., Banks, S., Grisso, T., Silver, E. (2005). An actuarial model of violence risk assessment for persons with mental disorders. *Psychiatric services*, 56(7), 810-815.
- Montoya, C. (2008). The European Union, capacity building, and transnational networks: Combating violence against women through the Daphne Program. *International Organization*, 62(02), 359-372.
- Moran, P., Walsh, E., Tyrer, P., Burns, T., Creed, F., & Fahy, T. (2003). Impact of comorbid personality disorder on violence in psychosis Report from the UK700 trial. *The British Journal of Psychiatry*, 182(2), 129-134.
- Morgenstern, J., Langenbucher, J., Labouvie, E., & Miller, K. J. (1997). The comorbidity of alcoholism and personality disorders in a clinical population: Prevalence and relation to alcohol typology variables. *Journal of Abnormal Psychology*, 106(1), 74.
- Morley, S. (2009). *Health Needs Assessment HMP and YOI Norwich* NHS Norfolk.
- NACRO. (2005). *Findings of the 2004 survey of Court Diversion/Criminal Justice Mental Health Liaison Schemes for mentally disordered offenders in England and Wales*. NACRO.
- Nazroo, j. (2001). Exploring Gender Difference in Depression Retrieved 22.06.2011, from <http://www.psychiatrictimes.com/depression/exploring-gender-difference-depression>
- BBC News (2013). Prison cuts may see reoffending rise, say MPs Retrieved 26.05.2014, from <http://www.bbc.co.uk/news/uk-politics-21659738>
- Newton-Howes, G., Tyrer, P., & Johnson, T. (2006). Personality disorder and the outcome of depression: meta-analysis of published studies. *The British Journal of Psychiatry*, 188(1), 13-20.
- Noblet, A. (2008). 'Women In Prison: A Review of the Current Female Prison System: Future Directions and Alternatives'. *Internet Journal of Criminology*, 1-44.
- O'Keefe, K. (2006). The Brooklyn Mental Health Court evaluation: Planning, implementation, courtroom dynamics, and participant outcomes Retrieved 25.05.2014, from <http://www.courtinnovation.org/research/brooklyn-mental-health-court-evaluation-planning-implementation-courtroom-dynamics-and-part>
- Office, H. (1990). *Report of an Efficiency Scrutiny of the Prison Medical Service*. London.
- Office, N. A. (2012). *Comparing International Criminal Justice Systems*. London: National Audit Office.

- Oldham, J. M., Skodol, A. E., Kellman, H. D., Hyler, S. E., Doidge, N., Rosnick, L., & Gallaher, P. E. (1995). Comorbidity of axis I and axis II disorders. *American Journal of Psychiatry*, *152*(4), 571-578.
- Oldham, J. M., Skodol, A. E., Kellman, H. D., Hyler, S. E., Rosnick, L., & Davies, M. (1992). Diagnosis of DSM-III-R personality disorders by two structured interviews: patterns of comorbidity. *Am J Psychiatry*, *149*(2), 213-220.
- Pakes, J., Winstone, J, Haskins, Guest, J. (2010). *Mental Health Court pilot: feasibility of an impact evaluation*. London: Ministry of Justice.
- Pelissier, B., & Jones, N. (2005). A review of gender differences among substance abusers. *Crime & Delinquency*, *51*(3), 343-372.
- Pelissier, B., & Jones, N. (2006). Differences in motivation, coping style, and self-efficacy among incarcerated male and female drug users. *J Subst Abuse Treat*, *30*(2), 113-120. doi: 10.1016/j.jsat.2005.10.006
- Pierzchniak, P., Farnham, F., Taranto., Harpett, D. Paul, D., McCallum, A., & Kennedy, H. (1999). Assessing the needs of patients in secure settings: A multi-disciplinary approach. *The Journal of Forensic Psychiatry*, *10*(2), 343-354.
- Pope, H. G., Frankenburg, F. R., Hudson, J. I., Jonas, J. M., & Yurgelun-Todd, D. (1987). Is bulimia associated with borderline personality disorder? A controlled study. *Journal of Clinical Psychiatry*.
- Poythress, N. G., Petrila, J., McGaha, A., & Boothroyd, R. (2002). Perceived coercion and procedural justice in the Broward mental health court. *Int J Law Psychiatry*, *25*(5), 517-533.
- Reed, J. (1992). *Review of health and social services for mentally disordered offenders and others requiring similar services*. London: HMSO.
- Reed, J. L., & Lyne, M. (2000). Inpatient care of mentally ill people in prison: results of a year's programme of semistructured inspections. *Bmj*, *320*(7241), 1031-1034.
- Reed, J. L., M. . (1997). The quality of health care in prison: results of a year's programme of semi-structured inspections. *British Medical Journal*(315), 1420-1424.
- Reform, T. H. L. f. P. (2013). *Second Reading of the Offender Rehabilitation Bill House of Commons November 2013*. London: The Howard League for Penal Reform.
- Saunders, J. B., Aasland, O. G., Babor, T. F., de la Fuente, J. R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption-II. *Addiction*, *88*(6), 791-804.
- Scott, H., Johnson, S., Menezes, P., Thornicroft, G., Marshall, J., Bindman, J., Bebbington, P., Kuipers, E. (1998). Substance misuse and risk of aggression and offending among the severely mentally ill. *The British Journal of Psychiatry*, *172*(4), 345-350. doi: 10.1192/bjp.172.4.345
- Service, H. P. (1998). *Prison Order 3630 Counselling, Assessment, Referral, Advice and Throughcare Services*. HM Prison Service.
- Service, H. P. (2008). *Prison Order 4800 on Women Offenders*. HM Prison Service.

- Service, N. O. M. (2008). *Supporting Women who have Affected by Violence: Guidelines for Staff* NOMS.
- Shea, M. T., Widiger, T. A., & Klein, M. H. (1992). Comorbidity of personality disorders and depression: implications for treatment. *Journal of Consulting and Clinical Psychology*, 60(6), 857.
- Singleton, N., Bumpstead, R., O'Brien, M., Lee, A., & Meltzer, H. . (2001). *Psychiatric morbidity among adults living in private households, 2000*. (0116214805). London (United Kingdom): The Stationery Office.
- Singleton, N., Gatward, R., Meltzer, H., & Britain, G. (1998). *Psychiatric morbidity among prisoners in England and Wales*: Stationery Office London.
- Smith, R. (1999). Prisoners: an end to second class health care?: Eventually the NHS must take over. *BMJ: British Medical Journal*, 318(7189), 954.
- Sorbello, L., Eccleston, L., Ward, T., & Jones, R. (2002). Treatment needs of female offenders: A review. *Australian Psychologist*, 37(3), 198-205.
- Stockwell, T., Murphy, D., & Hodgson, R. (1983). The Severity of Alcohol Dependence Questionnaire: Its Use, Reliability and Validity. *British Journal of Addiction*, 78(2), 145.
- Swinford, S. (2014). £5bn Work Programme 'worse than doing nothing' Retrieved 25.05.14, from <http://www.telegraph.co.uk/news/politics/spending-review/10146659/5bn-Work-Programme-worse-than-doing-nothing.html>
- Taylor, K. N., & Blanchette, K. (2009). The women are not wrong: It is the approach that is debatable\*. *Criminology & Public Policy*, 8(1), 221-229.
- Teplin, L. A., Abram, K. M., & McClelland, G. M. (1996). Prevalence of psychiatric disorders among incarcerated women. I. Pretrial jail detainees. *Arch Gen Psychiatry*, 53(6), 505-512.
- Travis, A. (2013). G4S's £24m offer for overcharging on tagging rejected by MoJ Retrieved 26.05.2014, from <http://www.theguardian.com/business/2013/nov/19/g4s-offer-overcharging-rejected-moj>
- Travis, A. (2014a). Chris Grayling told to delay probation service privatisation or risk deaths Retrieved 26.05.2014, from <http://www.theguardian.com/society/2013/dec/15/probation-reforms-put-public-at-higher-risk>

- Travis, A. (2014b). G4S agrees to repay £109m for overcharging on tagging contracts Retrieved 25.05.2014, from <http://www.theguardian.com/business/2014/mar/12/g4s-repay-overcharging-tagging-contracts>
- Trust, P. R. (2010). Women in prison Retrieved 03.08.2011, from <http://www.prisonreformtrust.org.uk/uploads/documents/Women%20in%20Prison%20August%202010.pdf>
- Trust, P. R. (2014). Figures reveal impact of budget cuts as prison numbers soar by over 700 in just five weeks, from <http://www.prisonreformtrust.org.uk/PressPolicy/News/vw/1/ItemID/217>
- Tyrer, P. (1996). Comorbidity or consanguinity. *The British Journal of Psychiatry*, 168(6), 669-671.
- Unit, S. E. (2002). *Reducing reoffending by ex-prisoners*. London: Social Exclusion Unit.
- Van Voorhis, P., Peiler, J., Presser, L., Spiropoulis, G., & Sutherland, J. (1992). *Classification of women offenders: A national assessment of current practices and the experiences of three states*: Washington, DC: US Department of Justice, National Institute of Corrections. Alexander, J., and J. Austin.
- Walsh, E., Buchanan, A., & Fahy, T. (2002). Violence and schizophrenia: examining the evidence. *Br J Psychiatry*, 180, 490-495.
- Walsh, E., Gilvarry, C., Samele, C., Harvey, K., Manley, C., Tattan, T., Tyrer, P. Creed, F., Murray, R., Fahy, T. (2004). Predicting violence in schizophrenia: a prospective study. *Schizophr Res*, 67(2-3), 247-252.
- Weeks, R., & Widom, C. S. (1998). Self-reports of early childhood victimization among incarcerated adult male felons. *Journal of interpersonal violence*, 13(3), 346-361.
- Weich, S., Sloggett, A., & Lewis, G. (1998). Social roles and gender difference in the prevalence of common mental disorders. *The British Journal of Psychiatry*, 173(6), 489-493.
- Wilson, S. (2004). The principle of equivalence and the future of mental health care in prisons. *The British Journal of Psychiatry*, 184(1), 5-7.

## **APPENDICES**

### ***Appendix I – Permissions***

#### ***Appendix Ia – Ethics Approval***



## Thames Valley Multi-centre Research Ethics Committee

23 September 2005

Professor Paul Bebbington  
Head of Department of Mental Health Sciences  
Royal Free & University College London Medical School  
Bloomsbury Campus Wolfson Building  
48 Riding House Street  
London  
W1W 7EY

Prospect Park Hospital  
Orchid Suite  
Honey End Lane  
Tilehurst  
Reading RG30 4EJ

Tel: 0118 960 5191/5192  
Fax: 0118 960 5368  
www.corec.org.uk

Dear Professor Bebbington

**Full title of study:** Assessing needs for psychiatric treatment in prisoners  
**REC reference number:** 05/MRE12/52

Thank you for your letter of 14 September 2005, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

### Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

### Ethical review of research sites

The Committee has not yet been notified of the outcome of any site-specific assessment (SSA) for the research site(s) taking part in this study. The favourable opinion does not therefore apply to any site at present. I will write to you again as soon as one Local Research Ethics Committee has notified the outcome of a SSA. In the meantime no study procedures should be initiated at sites requiring SSA.

### Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

### Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Application		21 June 2005
Investigator CV		
Protocol	1.0	30 May 2005
Covering Letter		24 June 2005
Participant Information Sheet	2	15 August 2005
Participant Consent Form	1	30 May 2005
Response to Request for Further Information		14 September 2005

S:\SHARED WORK\Letters 05.mre12.xx\05.mre12.52-23sept05ah - Further Information Favourable Opinion.doc

*The Central Office for Research Ethics Committees is responsible for the operational management of Multi-centre Research Ethics Committees*

Email from funder - National R&D Programme on Forensic Mental Health		26 May 2005
Combined Peer Review Form		

### Research governance approval

The study should not commence at any NHS site until the local Principal Investigator has obtained final research governance approval from the R&D Department for the relevant NHS care organisation.

### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

<b>05/MRE12/52</b>	<b>Please quote this number on all correspondence</b>
--------------------	---

With the Committee's best wishes for the success of this project

Yours sincerely



**Mr P Tausig**  
**Chair**

Email: [anna.howitt@berkshire.nhs.uk](mailto:anna.howitt@berkshire.nhs.uk)

*Enclosures:*

*Standard approval conditions*

Copy to: Mr Erville Millar  
Camden & Islington Mental Health and Social Care Trust  
St Pancras Hospital  
4 St Pancras Way  
London  
NW1 0PE



*Appendix Ib – Camden & Islington NHS Foundation Trust R&D approval*



**North Central London  
Research Consortium**

Research Operations Unit  
3<sup>rd</sup> Floor West Wing  
St Pancras Hospital  
4 St Pancras Way  
London NW1 0PE

General Enquiries: 020 7445 8508  
Office Fax: 020 7530 3235

July 7<sup>th</sup> 2006

Professor Paul Babbington  
Head of Department of Mental Health Sciences  
Royal Free & University College London Medical School  
Bloomsbury Campus Wolfson Building  
48 Riding House Street  
London W1W 7EY

Dear Professor Babbington,

**LREC Ref: 05/MRE12/52**

**Title: Assessing needs for psychiatric treatment in prisoners**

I am pleased to confirm that the above study has received conditional R&D approval and you may now start your research in Camden and Islington Mental Health and Social Care Trust. Full Trust approval is contingent on the Research Operations Unit receiving copies of current CRB disclosures and signed researcher honorary contracts for Sharon Jakobowitz and Annette Jones. May I take this opportunity to remind you that during the course of your research you will be expected to ensure the following:

- **Patient contact:** only trained or supervised researchers who hold the appropriate Trust/NHS contract (honorary or full) with each Trust are allowed contact with that Trust's patients. If any researcher on the study does not hold a contract please contact the R&D office as soon as possible.
- **Informed consent:** original signed consent forms must be kept on file. A copy of the consent form must also be placed in the patient's notes. Research projects are subject to random audit by a member of the R&D office who will ask to see all original signed consent forms.
- **Data protection:** measures must be taken to ensure that patient data is kept confidential in accordance with the Data Protection Act 1998.
- **Health & safety:** all local health & safety regulations where the research is being conducted must be adhered to.
- **Adverse events:** adverse events or suspected misconduct should be reported to the R&D office and the Ethics Committee.
- **Project update:** you will be sent a project update form at regular intervals. Please complete the form and return it to the R&D office.
- **Publications:** it is essential that you inform the R&D office about any publications which result from your research.
- **Ethics:** R&D approval is based on the conditions set out in the favourable opinion letter from the Ethics Committee. If during the lifetime of your research project, you wish to make a revision or amendment to your original submission, please contact both the Ethics Committee and R&D Office as soon as possible.

Please ensure that all members of the research team are aware of their responsibilities as researchers. For more details on these responsibilities, please check the R&D handbook on the NoCLoR website.  
<http://www.noclор.nhs.uk>

We would like to wish you every success with your project

Yours sincerely,

Angela Williams  
Research Governance Manager

020 7445 8508 / 020 7530 3235

---

## Appendix II – Instruments

**NEUROSIS SECTION – CIS-R**

**Appetite and Weight**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**WtIntro**

I would now like to ask you a few questions about your weight.  
PRESS <ENTER> TO CONTINUE  
STRING[1]

**Q18**

[\*] Have you noticed a marked loss in your appetite in the past month?

- (1) Yes Yes
- (2) No No

**Q19**

Have you lost any weight in the past month?

- (1) Yes Yes
- (2) NoDntK No/Don't Know

*ASK IF: LOST WEIGHT IN PAST MONTH*

**Q19a**

Were you trying to lose weight or on a diet?

- (1) Yes Yes
- (2) No No

*ASK IF: LOST WEIGHT IN PAST MONTH  
AND: NOT DIETING*

**Q19b**

Did you lose half a stone or more, or did you lose less than this?  
Half a stone  
or 7 lbs  
or 3 1/4 Kg

- (1) GEHlfStn lost half a stone or more
- (2) LTHlfStn lost less than half a stone

*ASK IF: DIDN'T LOSE WEIGHT IN PAST MONTH*

**Q21**

[\*] Have you noticed a marked increase in your appetite in the past month?

- (1) Yes Yes
- (2) No No

*ASK IF: DIDN'T LOSE WEIGHT IN PAST MONTH*

**Q22**

Have you gained weight in the past month?  
Do not include weight gain due to pregnancy

- (1) Yes Yes  
(2) No No/Don't Know

**Section A – Somatic Symptoms**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**CISRIIntr**

The next group of questions is about any physical discomfort you may have suffered recently. I will then go on and ask about how you have been feeling lately, whether you have been depressed or worried or anxious or have any obsessive thoughts or suffer from phobias. Each is a different type of feeling and is asked about separately and each section follows a similar pattern.

PRESS <ENTER> TO CONTINUE.

**A1**

[\*] Have you had any sort of ache or pain in the past month?

- (1) Yes Yes  
(2) No No

*ASK IF: NO ACHES/PAINS IN PAST MONTH*

**A2**

[\*] During the past month have you been troubled by any sort of discomfort, for example, headache or indigestion?

- (1) Yes Yes  
(2) No No

*ASK IF: ACHES/PAINS OR DISCOMFORT IN PAST MONTH*

**A3**

[\*] Was this ache or pain/discomfort brought on or made worse because you were feeling low, anxious or stressed?  
IF INFORMANT HAS MORE THAN ONE PAIN/  
DISCOMFORT, REFER TO ANY OF THEM

- (1) Yes Yes  
(2) No No

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS*

**A4**

[\*] In the past seven days, including last (DAY), on how many days have you noticed the ache or pain/discomfort?

- (1) GE4Days 4 days or more  
(2) LT4Days 1 to 3 days  
(3) None None

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A5**

[\*] In total, did the ache or pain/discomfort last for more than 3 hours on any day in the past week/on that day?

- (1) Yes Yes
- (2) No No

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A6**

[\*] In the past week, has the ache or pain/discomfort been...  
RUNNING PROMPT

- (1) VeryUnpl ...very unpleasant
- (2) LitlUnpl ...a little unpleasant
- (3) NotUnpl ...or not unpleasant?

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A7**

[\*] Has the ache or pain/discomfort bothered you when you were doing something interesting in the past week?

- (1) Yes Yes
- (2) No No/has not done anything interesting

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A8**

[\*] How long have you been feeling this ache or pain/discomfort as you have just described?  
SHOW CARD 10

- (1) Percod1 less than 2 weeks
- (2) Percod2 2 weeks but less than 6 months
- (3) Percod3 6 months but less than 1 year
- (4) Percod4 1 year but less than 2 years
- (5) Percod5 2 years or more

**DVA9**

Computed variable  
Sum codes from A4, A5, A6 and A7.  
0..4

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A5**

[\*] In total, did the ache or pain/discomfort last for more than 3 hours on any day in the past week/on that day?

- (1) Yes Yes  
(2) No No

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A6**

[\*] In the past week, has the ache or pain/discomfort been...  
RUNNING PROMPT

- (1) VeryUnpl ...very unpleasant  
(2) LitUnpl ...a little unpleasant  
(3) NotUnpl ...or not unpleasant?

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A7**

[\*] Has the ache or pain/discomfort bothered you when you were doing something interesting in the past week?

- (1) Yes Yes  
(2) No No/has not done anything interesting

*ASK IF: ACHES/DISCOMFORT MADE WORSE BECAUSE OF STRESS  
AND: AT LEAST ONE DAY OF PAIN/DISCOMFORT IN PAST WEEK*

**A8**

[\*] How long have you been feeling this ache or pain/discomfort as you have just described?

SHOW CARD 10

- (1) Percod1 less than 2 weeks  
(2) Percod2 2 weeks but less than 6 months  
(3) Percod3 6 months but less than 1 year  
(4) Percod4 1 year but less than 2 years  
(5) Percod5 2 years or more

**DVA9**

Computed variable

Sum codes from A4, A5, A6 and A7.

0..4

**Section B – Fatigue***ASK IF: SUBJECT INTERVIEW (NOT PROXY)***B1**

[\*] Have you noticed that you've been getting tired in the past month?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: NO TIREDNESS IN PAST MONTH***B2**

[\*] During the past month, have you felt you've been lacking in energy?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH***B3**

[\*] Do you know why you have been feeling tired/lacking in energy?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH**AND: KNOWS WHY TIRED***B3a**[\*] What is the main reason? Can you choose from this card?  
SHOW CARD 11

- |     |          |   |
|-----|----------|---|
| (1) | Sleep    | Problems with sleep                         |
| (2) | Medic    | Medication                                  |
| (3) | Illness  | Physical illness                            |
| (4) | Work     | Working too hard                            |
| (5) | Stress   | Stress, worry or other psychological reason |
| (6) | Exercise | Physical exercise                           |
| (7) | Other    | Other                                       |

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH**AND: TIREDNESS NOT DUE TO EXERCISE***B4**

[\*] In the past seven days, including last (DAY) on how many days have you felt tired/lacking in energy?

- |     |         |                |
|-----|---------|----------------|
| (1) | GE4Days | 4 days or more |
| (2) | LT4Days | 1 to 3 days    |
| (3) | None    | None           |

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH  
AND: TIREDNESS NOT DUE TO EXERCISE  
AND: AT LEAST ONE DAY OF TIREDNESS IN PAST WEEK*

**B5**

[\*] Have you felt tired/lacking in energy for more than 3 hours in total on any day in the past week?  
EXCLUDE TIME SPENT SLEEPING

- (1) Yes Yes  
(2) No No

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH  
AND: TIREDNESS NOT DUE TO EXERCISE  
AND: AT LEAST ONE DAY OF TIREDNESS IN PAST WEEK*

**B6**

[\*] Have you felt so tired/lacking in energy that you've had to push yourself to get things done during the past week?

- (1) Yes Yes, on at least one occasion  
(2) No No

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH  
AND: TIREDNESS NOT DUE TO EXERCISE  
AND: AT LEAST ONE DAY OF TIREDNESS IN PAST WEEK*

**B7**

[\*] Have you felt tired/lacking in energy when doing things that you enjoy during the past week?

- (1) Yes Yes, at least once  
(2) No No  
(3) NoEnjoy Spontaneous: Does not enjoy anything

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH  
AND: TIREDNESS NOT DUE TO EXERCISE  
AND: AT LEAST ONE DAY OF TIREDNESS IN PAST WEEK  
AND: NOT TIRED DOING ENJOYABLE THINGS*

**B8**

[\*] Have you in the past week felt tired/lacking in energy when doing things that you used to enjoy?

- (1) Yes Yes  
(2) No No

*ASK IF: TIRED OR LACKING ENERGY IN PAST MONTH  
AND: TIREDNESS NOT DUE TO EXERCISE  
AND: AT LEAST ONE DAY OF TIREDNESS IN PAST WEEK*

**B9**

[\*] How long have you been feeling tired/lacking in energy in the way you have just described?  
SHOW CARD 10

- (1) Percod1 less than 2 weeks



- |     |         |                                |
|-----|---------|--------------------------------|
| (2) | Percod2 | 2 weeks but less than 6 months |
| (3) | Percod3 | 6 months but less than 1 year  |
| (4) | Percod4 | 1 year but less than 2 years   |
| (5) | Percod5 | 2 years or more                |

**DVB10**

Computed variable:

Sum codes from B4, B5, B6, B7 and B8.

0..4

**Section C – Concentration and Forgetfulness***ASK IF: SUBJECT INTERVIEW (NOT PROXY)***C1**

[\*] In the past month, have you had any problems in concentrating on what you are doing?

- |     |     |                             |
|-----|-----|-----------------------------|
| (1) | Yes | Yes, problems concentrating |
| (2) | No  | No                          |

**C2**

[\*] Have you noticed any problems with forgetting things in the past month?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: PROBLEMS CONCENTRATING OR FORGETS THINGS IN PAST MONTH***C4**

[\*] Since last (DAY), on how many days have you noticed problems with your concentration/memory?

- |     |         |                |
|-----|---------|----------------|
| (1) | GE4Days | 4 days or more |
| (2) | LT4Days | 1 to 3 days    |
| (3) | None    | None           |

*ASK IF PROBLEMS CONCENTRATING OR FORGETS THINGS IN PAST MONTH**AND: AT LEAST ONE DAY OF MEMORY/CONCENTRATION PROBLEMS IN PAST WEEK**AND: PROBLEMS CONCENTRATING***C5**

[\*] In the past week could you concentrate on a TV programme, read a newspaper article or talk to someone without your mind wandering?

- |     |     |               |
|-----|-----|---------------|
| (1) | Yes | Yes           |
| (2) | No  | No/not always |

*ASK IF: PROBLEMS CONCENTRATING OR FORGETS THINGS IN PAST MONTH**AND: AT LEAST ONE DAY OF MEMORY/CONCENTRATION PROBLEMS IN PAST WEEK**AND: PROBLEMS CONCENTRATING***C6**

[\*] In the past week, have these problems with your

concentration actually stopped you from getting on with things you used to do or would like to do?

- (1) Yes Yes  
 (2) No No

*ASK IF: PROBLEMS CONCENTRATING OR FORGETS THINGS IN PAST MONTH  
 AND: AT LEAST ONE DAY OF MEMORY/CONCENTRATION PROBLEMS IN PAST WEEK  
 AND: FORGETS THINGS*

#### C7

(Earlier you said you have been forgetting things.)

[\*] Have you forgotten anything important in the past seven days?

- (1) Yes Yes  
 (2) No No

*ASK IF: PROBLEMS CONCENTRATING OR FORGETS THINGS IN PAST MONTH  
 AND: AT LEAST ONE DAY OF MEMORY/CONCENTRATION PROBLEMS IN PAST WEEK*

#### C8

[\*] How long have you been having the problems with your concentration /memory as you have described?

SHOW CARD 10

- |     |         |                                |
|-----|---------|--------------------------------|
| (1) | ercod1  | less than 2 weeks              |
| (2) | Percod2 | 2 weeks but less than 6 months |
| (3) | Percod3 | 6 months but less than 1 year  |
| (4) | Percod4 | 1 year but less than 2 years   |
| (5) | Percod5 | 2 years or more                |

#### DVC9

Computed variable:  
 Sum codes from C4, C5, C6 and C7.

0..4

### Section D – Sleep Problems

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

#### D1

CISR - Sleep

[\*] In the past month, have you been having problems with trying to get to sleep or with getting back to sleep if you woke up or were woken up?

- (1) Yes Yes  
 (2) No No

*ASK IF: NO PROBLEMS GETTING (BACK) TO SLEEP IN PAST MONTH*

#### D2

[\*] Has sleeping more than you usually do been a problem for you in the past month?

- (1) Yes Yes  
 (2) No No

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH*

**D3**

[\*] On how many of the past seven nights did you have problems with your sleep?

- (1) GE4Night 4 nights or more  
 (2) LT4Night 1 to 3 nights  
 (3) None None

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK*

**D4**

[\*] Do you know why you are having problems with your sleep?

- (1) Yes Yes  
 (2) No No

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK  
 AND: KNOWS WHY HAVING SLEEP PROBLEMS*

**D4a**

[\*] Can you look at this card and tell me the main reason for these problems?  
 SHOW CARD 12

- (1) Noise Noise  
 (2) Work Shift work/too busy to sleep  
 (3) Illness Illness/discomfort  
 (4) Worry Worry/thinking  
 (5) Toilet Needing to go to the toilet  
 (6) Distract Having to do something (eg look after baby)  
 (7) Tired Tired  
 (8) Medic Medication  
 (9) Other Other

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK  
 AND: HAD PROBLEMS GETTING (BACK) TO SLEEP*

**D5**

[\*] Thinking about the night you had the least sleep in the past week, how long did you spend trying to get to sleep?  
 (If you woke up or were woken up I want you to allow a quarter of an hour to get back to sleep).  
 Only include time spent trying to get to sleep.

- (1) LT15M Less than 1/4 hr  
 (2) GE15M At least 1/4 hr but less than 1 hr  
 (3) GE1H At least 1 hr but less than 3 hrs  
 (4) GE3H 3 hrs or more

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK  
 AND: HAD PROBLEMS GETTING (BACK) TO SLEEP  
 AND: SPENT 3 HOURS OR MORE TRYING*

**D6**

[\*] In the past week, on how many nights did you spend 3 or more hours trying to get to sleep?

- |     |          |                  |
|-----|----------|------------------|
| (1) | GE4Night | 4 nights or more |
| (2) | LT4Night | 1 to 3 nights    |
| (3) | None     | None             |

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK  
 AND: HAD PROBLEMS GETTING (BACK) TO SLEEP  
 AND: SPENT 15 MINS OR MORE TRYING*

**D7**

[\*] Do you wake more than two hours earlier than you need to and then find you can't get back to sleep?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK  
 AND: HAD PROBLEMS GETTING (BACK) TO SLEEP  
 AND: SPENT 15 MINS OR MORE TRYING*

**D10**

[\*] How long have you had these problems with your sleep as you have described?  
 SHOW CARD 10

- |     |         |                                |
|-----|---------|--------------------------------|
| (1) | Percod1 | less than 2 weeks              |
| (2) | Percod2 | 2 weeks but less than 6 months |
| (3) | Percod3 | 6 months but less than 1 year  |
| (4) | Percod4 | 1 year but less than 2 years   |
| (5) | Percod5 | 2 years or more                |

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK  
 AND: SLEPT MORE THAN USUAL*

**D8**

[\*] Thinking about the night you slept the longest in the past week, how much longer did you sleep compared with how long you normally sleep for?

- |     |       |                                    |
|-----|-------|------------------------------------|
| (1) | LT15M | Less than 1/4 hr                   |
| (2) | GE15M | At least 1/4 hr but less than 1 hr |
| (3) | GE1H  | At least 1 hr but less than 3 hrs  |
| (4) | GE3H  | 3 hrs or more                      |

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH  
 AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK*

*AND: SLEPT MORE THAN USUAL*  
*AND: SLEPT 3 HOURS (OR MORE) LONGER THAN USUAL*

**D9**

[\*] In the past week, on how many nights did you sleep for more than 3 hours longer than you usually do?

- |     |          |                  |
|-----|----------|------------------|
| (1) | GE4Night | 4 nights or more |
| (2) | LT4Night | 1 to 3 nights    |
| (3) | None     | None             |

*ASK IF: HAD PROBLEMS WITH SLEEPING IN PAST MONTH*  
*AND: AT LEAST ONE NIGHT OF SLEEP PROBLEMS IN PAST WEEK*  
*AND: SLEPT MORE THAN USUAL*  
*AND: SLEPT 15 MINS (OR MORE) LONGER THAN USUAL*

**D10**

[\*] How long have you had these problems with your sleep as you have described?

SHOW CARD 10

- |     |         |                                |
|-----|---------|--------------------------------|
| (1) | Percod1 | less than 2 weeks              |
| (2) | Percod2 | 2 weeks but less than 6 months |
| (3) | Percod3 | 6 months but less than 1 year  |
| (4) | Percod4 | 1 year but less than 2 years   |
| (5) | Percod5 | 2 years or more                |

**DVD11**

Computed variable:  
 Sum codes from D3, D5, D6, D8 and D9.

0..4

**Section E – Irritability**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**E1**

[\*] Many people become irritable or short tempered at times, though they may not show it.  
 Have you felt irritable or short tempered with those around you in the past month?

- |     |     |                        |
|-----|-----|------------------------|
| (1) | Yes | Yes/no more than usual |
| (2) | No  | No                     |

*ASK IF: FELT IRRITABLE IN PAST MONTH*

**E2**

[\*] During the past month did you get short tempered or angry over things which now seem trivial when you look back on them?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH*

**E3**

## CISR - Irritability

[\*] Since last (DAY), on how many days have you felt irritable or short tempered/angry?

- |     |         |                |
|-----|---------|----------------|
| (1) | GE4Days | 4 days or more |
| (2) | LT4Days | 1 to 3 days    |
| (3) | None    | None           |

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK*

## E4

[\*] What sort of things made you irritable or short tempered/angry in the past week?  
CODE VERBATIM  
STRING[100]

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK*

## E5

[\*] In total, have you felt irritable or short tempered/angry for more than one hour (on any day in the past week)?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK*

## E6

[\*] During the past week, have you felt so irritable or short tempered/angry that you have wanted to shout at someone, even if you haven't actually shouted?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK*

## E7

[\*] In the past seven days, have you had arguments, rows or quarrels or lost your temper with anyone?

- |     |     |     |
|-----|-----|-----|
| (1) | Yes | Yes |
| (2) | No  | No  |

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK*

*AND: HAD QUARREL/LOST TEMPER IN PAST WEEK*

## E7a

[\*] Did this happen once or more than once (in the past week)?

- (1) Once Once  
 (2) More More than once

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
 AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK  
 AND: HAD QUARREL/LOST TEMPER IN PAST WEEK  
 AND: HAD QUARREL/LOST TEMPER ONCE*

**E8**

[\*] Do you think this was justified?

- (1) Yes Yes, justified  
 (2) No No, not justified

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
 AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK  
 AND: HAD QUARREL/LOST TEMPER IN PAST WEEK  
 AND: HAD QUARREL/LOST TEMPER MORE THAN ONCE*

**E9**

[\*] Do you think this was justified on every occasion?

- (1) Yes Yes  
 (2) No No, at least one was unjustified

*ASK IF: FELT IRRITABLE OR SHORT TEMPERED IN PAST MONTH  
 AND: AT LEAST ONE DAY OF IRRITABILITY IN PAST WEEK*

**E10**

[\*] How long have you been feeling irritable or short  
 tempered/angry as you have described?  
 SHOW CARD 10

- (1) Percod1 less than 2 weeks  
 (2) Percod2 2 weeks but less than 6 months  
 (3) Percod3 6 months but less than 1 year  
 (4) Percod4 1 year but less than 2 years  
 (5) Percod5 2 years or more

**DVE11**

Computed variable:  
 Sum codes from E3, E5, E6, E8 and E9.

0..4

**Section F – Worry about Physical Health**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**F1**

[\*] Many people get concerned about their physical health. In  
 the past month, have you been at all worried about your  
 physical health?  
 INCLUDE WOMEN WHO ARE WORRIED ABOUT THEIR  
 PREGNANCY

- (1) Yes Yes, worried  
 (2) No No/concerned

*ASK IF: NOT WORRIED ABOUT PHYSICAL HEALTH IN PAST MONTH  
AND: MENTIONED A LONGTERM ILLNESS*

**F2Route**

INTERVIEWER: HAS INFORMANT MENTIONED A  
PHYSICAL HEALTH PROBLEM AT LMAT?  
YOU ENTERED THE FOLLOWING ILLNESS/ES:  
(NAMES OF ILLNESSES MENTIONED)

- (1) YesProb Yes, has mentioned a physical health problem  
(2) NoProb No physical health problem

*ASK IF: NOT WORRIED ABOUT PHYSICAL HEALTH IN PAST MONTH  
AND: (QGENHLTH.ILLNESS = No) OR (F2ROUTE = NoPROB)*

**F2**

[\*] During the past month, did you find yourself worrying that  
you might have a serious physical illness?

- (1) Yes Yes  
(2) No No

*ASK IF: WORRIED ABOUT PHYSICAL HEALTH OR SERIOUS PHYSICAL  
ILLNESS IN PAST MONTH*

**F3**

[\*] Thinking about the past seven days, including last (DAY),  
on how many days have you found yourself worrying/feeling  
concerend about your physical health?

- (1) GE4Days 4 days or more  
(2) LT4Days 1 to 3 days  
(3) None None

*ASK IF: WORRIED ABOUT PHYSICAL HEALTH OR SERIOUS PHYSICAL  
ILLNESS IN PAST MONTH  
AND: AT LEAST ONE DAY OF WORRY IN PAST WEEK*

**F4**

[\*] In your opinion, have you been worrying too much in view  
of your actual health?

- (1) Yes Yes  
(2) No No

*ASK IF: WORRIED ABOUT PHYSICAL HEALTH OR SERIOUS PHYSICAL  
ILLNESS IN PAST MONTH  
AND: AT LEAST ONE DAY OF WORRY IN PAST WEEK*

**F5**

[\*] In the past week, has this worrying been...  
RUNNING PROMPT...

- (1) VeryUnpl ...very unpleasant  
(2) LitlUnpl ...a little unpleasant  
(3) NotUnpl ...or not unpleasant?



*ASK IF: WORRIED ABOUT PHYSICAL HEALTH OR SERIOUS PHYSICAL ILLNESS IN PAST MONTH*  
*AND: AT LEAST ONE DAY OF WORRY IN PAST WEEK*

**F6**

[\*] In the past week, have you been able to take your mind off your health worries at least once, by doing something else?

- (1) Yes Yes  
 (2) No No, could not be distracted once

*ASK IF: WORRIED ABOUT PHYSICAL HEALTH OR SERIOUS PHYSICAL ILLNESS IN PAST MONTH*  
*AND: AT LEAST ONE DAY OF WORRY IN PAST WEEK*

**F7**

[\*] How long have you been worrying about your physical health in the way you described?  
 SHOW CARD 10

- (1) Percod1 less than 2 weeks  
 (2) Percod2 2 weeks but less than 6 months  
 (3) Percod3 6 months but less than 1 year  
 (4) Percod4 1 year but less than 2 years  
 (5) Percod5 2 years or more

**DVF8**

Computed variable:  
 Sum codes from F3, F4, F5 and F6.  
 0..4

**Section G – Depression**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**G1**

[\*] Almost everyone becomes sad, miserable or depressed at times.

Have you had a spell of feeling sad, miserable or depressed in the past month?

- (1) Yes Yes  
 (2) No No

**G2**

[\*] During the past month, have you been able to enjoy or take an interest in things as much as you usually do?

- (1) Yes Yes  
 (2) No No/no enjoyment or interest

*ASK IF: SAD/DEPRESSED IN PAST MONTH*

**G4**

USE INFORMANT'S OWN WORDS IF POSSIBLE

[\*] In the past week have you had a spell of feeling sad, miserable or depressed?

- (1) Yes Yes

(2) No No

*ASK IF: UNABLE TO ENJOY THINGS IN PAST MONTH*

**G5**

USE INFORMANT'S OWN WORDS IF POSSIBLE

[\*] In the past week have you been able to enjoy or take an interest in things as much as usual?

(1) Yes Yes

(2) No No/no enjoyment or interest

*ASK IF: SAD/DEPRESSED OR UNABLE TO ENJOY THINGS, IN PAST WEEK*

**G6**

[\*] Since last (DAY) on how many days have you felt sad miserable or depressed / unable to enjoy or take an interest in things?

(1) GE4Days 4 days or more

(2) LT4Days 1 to 3 days

(3) None None

*ASK IF: SAD/DEPRESSED OR UNABLE TO ENJOY THINGS, IN PAST WEEK*

**G7**

[\*] Have you felt sad miserable or depressed / unable to enjoy or take an interest in things for more than 3 hours in total (on any day in the past week)?

(1) Yes Yes

(2) No No

*ASK IF: SAD/DEPRESSED OR UNABLE TO ENJOY THINGS, IN PAST WEEK*

**G9**

[\*] In the past week when you felt sad, miserable or depressed/ unable to enjoy or take an interest in things, did you ever become happier when something nice happened, or when you were in company?

(1) Yes Yes, at least once

(2) No No

*ASK IF: SAD/DEPRESSED OR UNABLE TO ENJOY THINGS, IN PAST WEEK*

**G10**

[\*] How long have you been feeling sad, miserable or depressed/unable to enjoy or take an interest in things as you have described?

SHOW CARD 10

(1) Percod1 less than 2 weeks

(2) Percod2 2 weeks but less than 6 months

(3) Percod3 6 months but less than 1 year

(4) Percod4 1 year but less than 2 years

(5) Percod5 2 years or more

**DVG11**

Computed variable:

Sum codes from G5, G6, G7 and G9.

0..4

## Section H – Depressive Ideas

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

*AND: QGDEPRN.DVG11 > 0*

**H1**

[\*] I would now like to ask you about when you have been feeling miserable, depressed or unable to take an interest in things.

In the past week, was this worse in the morning or in the evening, or did this make no difference?

PROMPT AS NECESSARY

(1) Mornng in the morning

(2) Eveng in the evening

(3) NoDiff no difference/other

**H2**

## ASK OR USE SHOWCARD 13

[\*] Many people find that feeling miserable, depressed or unable to take an interest can affect their interest in sex.

Over the past month, do you think your interest in sex has

RUNNING PROMPT

- (1) More increased
- (2) Less decreased
- (3) Same has it stayed the same?
- (4) NA Spontaneous - Not applicable

**H3a**

[\*] When you have felt miserable, depressed or unable to take an interest in things in the past seven days

... have you been so restless that you couldn't sit still?

- (1) Yes Yes
- (2) No No

**H3b**

[\*] ..... have you been doing things more slowly, for example, walking more slowly?

- (1) Yes Yes
- (2) No No

**H3c**

[\*] ...have you been less talkative than normal?

- (1) Yes Yes
- (2) No No

**H4**

[\*] Now, thinking about the past seven days have you on at least one occasion felt guilty or blamed yourself when things went wrong when it hasn't been your fault?

- (1) Yes Yes, at least once
- (2) No No

**H5**

[\*] During the past week, have you been feeling you are not as good as other people?

- (1) Yes Yes
- (2) No No

**H6**

[\*] Have you felt hopeless at all during the past seven days, for instance about your future?

- (1) Yes Yes
- (2) No No

**H10**

Thank you for answering those questions on how you have been feeling. INTERVIEWER – ADAPT AS APPROPRIATE  
PRESS ENTER TO CONTINUE

STRING[1]

**Section I – Worry**

ASK IF: SUBJECT INTERVIEW (NOT PROXY)

**II**

[\*] (The next few questions are about worrying.) In the past month, did you find yourself worrying more than you needed to about things?

- (1) Yes Yes, worrying
- (2) No No/concerned

ASK IF: II = No

**I2**

[\*] Have you had any worries at all in the past month?

- (1) Yes Yes
- (2) No No

ASK IF: (II = Yes) OR (I2 = Yes)

**I6Intro**

For the next few questions, I want you to think about worries you have had other than those about your physical health.

PRESS ENTER TO CONTINUE

ASK IF: (I1 = YES) OR (I2 = YES)

**I6**

[\*] On how many of the past seven days have you been worrying about things (other than your physical health)?

- (1) GE4Days 4 days or more
- (2) LT4Days 1 to 3 days
- (3) None None

ASK IF: (I1 = YES) OR (I2 = YES)

AND: I6 IN [GE4DAYS, LT4DAYS]

**I7**

[\*] In your opinion, have you been worrying too much in view of your circumstances?

REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

- (1) Yes Yes
- (2) No No

ASK IF: (I1 = YES) OR (I2 = YES)

AND: I6 IN [GE4DAYS, LT4DAYS]

**I8**

[\*] In the past week, has this worrying been:

REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

RUNNING PROMPT

- (1) VeryUnpl ...very unpleasant
- (2) LitlUnpl ...a little unpleasant
- (3) NotUnpl ...or not unpleasant?

ASK IF: (I1 = YES) OR (I2 = YES)

AND: I6 IN [GE4DAYS, LT4DAYS]

**I9**

[\*] Have you worried for more than 3 hours in total on any one of the past seven days?

REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

- (1) Yes Yes
- (2) No No

ASK IF: (I1 = YES) OR (I2 = YES)

AND: I6 IN [GE4DAYS, LT4DAYS]

**I10**

[\*] How long have you been worrying about things in the way you have described?

SHOW CARD 10

- (1) Percod1 less than 2 weeks
- (2) Percod2 2 weeks but less than 6 months
- (3) Percod3 6 months but less than 1 year
- (4) Percod4 1 year but less than 2 years
- (5) Percod5 2 years or more

**DVII1**

COMPUTED VARIABLE

: Sum of codes 1 at I6, I7, I8 and I9.

0..4

ASK IF: (((QGDDEPRN.G4 = YES) OR (QGDDEPRN.G5 = NO)) OR (I1 = YES)) OR (I2 = YES)

**Reason**

[\*] Can you look at this card and tell me what sorts of things have been making you worried/depressed/worried and depressed?

SHOW CARD 14

CODE ALL THAT APPLY - DON'T KNOW=99

SET [11] OF

- (1) Family Members of the family
- (2) Spouse Relationship with spouse/partner
- (3) Friend Relationships with friends
- (4) Housing Housing
- (5) Money Money/bills
- (6) PHealth Own physical health (inc. pregnancy)
- (7) MHealth Own mental health
- (8) Work Work or lack of work
- (9) LegDiff Legal difficulties
- (10) News Political issues/the news
- (11) Other Other
- (99) DntKnw Don't know/no main thing

*ASK IF: (((QGDEPRN.G4 = Yes) OR (QGDEPRN.G5 = No)) OR (I1 = Yes)) OR (I2 = Yes)*

*AND: REASON[2] NOT EMPTY*

**MnReason**

[\*] What was the main thing you have been worried/depressed/worried and depressed about?

CARD 14

DON'T KNOW/NO MAIN THING=99

- (1) Family Members of the family
- (2) Spouse Relationship with spouse/partner
- (3) Friend Relationships with friends
- (4) Housing Housing
- (5) Money Money/bills
- (6) PHealth Own physical health (inc. pregnancy)
- (7) MHealth Own mental health
- (8) Work Work or lack of work
- (9) LegDiff Legal difficulties
- (10) News Political issues/the news
- (11) Other Other
- (99) DntKnw Don't know/no main thing

**Section J – Anxiety**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**J1**

[\*] Have you been feeling anxious or nervous in the past month?

- (1) Yes Yes, anxious or nervous
- (2) No No

*ASK IF: J1 = No*

**J2**

[\*] In the past month, did you ever find your muscles felt tense or that you couldn't relax?

- (1) Yes Yes
- (2) No No

**J3**

[\*] Some people have phobias; they get nervous or uncomfortable about specific things or situations when there is no real danger. For instance they may get extremely anxious when in confined spaces, or they may have a fear of heights. Others become nervous at the sight of things like blood or spiders.

In the past month have you felt anxious, nervous or tense about any specific things when there was no real danger?

- (1) Yes Yes
- (2) No No

*ASK IF: DVJ4 = PHOBPLUS*

**J5**

[\*] In the past month, when you felt anxious/nervous/tense, was this always brought on by the phobia about some specific situation or thing or did you sometimes feel generally anxious/nervous/tense?

- (1) AllPhob Always brought on by phobia
- (2) SomeAnx Sometimes generally anxious

ASK IF: *DVJ4 = PHOBPLUS*

AND: *J5 = SOMEANX*

**J6**

[\*] The next questions are concerned with general anxiety/nervousness/tension only.

I will ask you about the anxiety which is brought on by the phobia about specific things or situations later.

On how many of the past seven days have you felt generally anxious/nervous/tense?

- (1) GE4Days 4 days or more
- (2) LT4Days 1 to 3 days
- (3) None None

ASK IF: *DVJ4 = ONLYANX*

**J7**

[\*] On how many of the past seven days have you felt generally anxious/nervous/tense?

- (1) GE4Days 4 days or more
- (2) LT4Days 1 to 3 days
- (3) None None

ASK IF: *(J6 IN [GE4DAYS, LT4DAYS]) OR (J7 IN [GE4DAYS, LT4DAYS])*

**J8**

[\*] In the past week, has your anxiety/nervousness/tension been:

RUNNING PROMPT

- (1) VeryUnpl ...very unpleasant
- (2) LitlUnpl ...a little unpleasant
- (3) NotUnpl ...or not unpleasant?

ASK IF: *(J6 IN [GE4DAYS, LT4DAYS]) OR (J7 IN [GE4DAYS, LT4DAYS])*

**J9**

SHOW CARD 15

[\*] In the past week, when you've been anxious/nervous/tense, have you had any of the symptoms shown on this card?

- (1) Yes Yes
- (2) No No

ASK IF: *(J6 IN [GE4DAYS, LT4DAYS]) OR (J7 IN [GE4DAYS, LT4DAYS])*

AND: *J9 = YES*

**J9A**

SHOW CARD 15

[\*] Which of these symptoms did you have when you felt anxious/nervous/tense?

CODE ALL THAT APPLY

SET [7] OF

- (1) Heart Heart racing or pounding
- (2) Sweat Hands sweating or shaking
- (3) Dizzy Feeling dizzy
- (4) Breath Difficulty getting your breath
- (5) Butterf Butterflies in stomach
- (6) Drymth Dry mouth
- (7) Nausea Nausea or feeling as though you wanted to vomit

ASK IF: *(J6 IN [GE4DAYS, LT4DAYS]) OR (J7 IN [GE4DAYS, LT4DAYS])*

**J10**

[\*] Have you felt anxious/nervous/tense for more than 3 hours in total on any one of the past seven days?

- (1) Yes Yes
- (2) No No

*ASK IF: (J6 IN [GE4DAYS, LT4DAYS]) OR (J7 IN [GE4DAYS, LT4DAYS])*

**J11**

[\*] How long have you had these feelings of general anxiety/nervousness/tension as you described?

SHOW CARD 10

- (1) Percod1 less than 2 weeks
- (2) Percod2 2 weeks but less than 6 months
- (3) Percod3 6 months but less than 1 year
- (4) Percod4 1 year but less than 2 years
- (5) Percod5 2 years or more

**DVJ12**

COMPUTED VARIABLE:

Sum of codes 1 at J6, J7, J8, J9 and J10.

0..4

**Section K – Phobias**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

**DVK1**

COMPUTED VARIABLE

- (1) Phobic phobic anxiety in past month (1 at J3)
- (2) Others

*ASK IF: DVK1 = OTHERS*

**K2**

[\*] Sometimes people avoid a specific situation or thing because they have a phobia about it.

In the past month, have you avoided any situation or thing because it would have made you feel nervous or anxious, even though there was no real danger?

- (1) Yes Yes
- (2) No No

*ASK IF: DVK1 = PHOBIC*

**K3**

[\*] Can you look at this card and tell me which of the situations or things listed made you the most anxious/nervous/tense in the past month?

SHOW CARD 16

CODE ALL THAT APPLY

SET [6] OF

- (1) Crowds Crowds or public places
- (2) Spaces Enclosed spaces
- (3) SocSits Social situations
- (4) Blood Sight of blood or injury
- (5) Single Specific single cause
- (6) Other Other (SPECIFY)

*ASK IF: K2 = Yes*

**K3**

[\*] Can you look at this card and tell me which of the situations or things listed did you avoid the most in the past month?

SHOW CARD 16

CODE ALL THAT APPLY

SET [6] OF

- (1) Crowds Crowds or public places
- (2) Spaces Enclosed spaces
- (3) SocSits Social situations
- (4) Blood Sight of blood or injury
- (5) Single Specific single cause

(6) Other Other (SPECIFY)

ASK IF: OTHER IN K3

XK3

SPECIFY OTHER PHOBIA

STRING[40]

ASK IF: DVK1 = PHOBIC

K4

[\*] In the past seven days, how many times have you felt nervous or anxious about (SITUATION(S)/THING(S))?

(1) More4 4 times or more

(2) One2Thr 1 to 3 times

(3) None None

ASK IF: DVK1 = PHOBIC

AND: K4 IN [MORE4, ONE2THR]

K5

CISR - Phobias

[\*] In the past week, on those occasions when you felt anxious/nervous/tense did you have any of the symptoms on this card?

SHOW CARD 15

(1) Yes Yes

(2) No No

ASK IF: DVK1 = PHOBIC

AND: K4 IN [MORE4, ONE2THR]

AND: K5 = YES

K5A

[\*] Which of these symptoms did you have when you felt anxious/nervous/tense?

SHOW CARD 15

SET [7] OF

(1) Heart Heart racing or pounding

(2) Sweat Hands sweating or shaking

(3) Dizzy Feeling dizzy

(4) Breath Difficulty getting your breath

(5) Butterf Butterflies in stomach

(6) Drymth Dry mouth

(7) Nausea Nausea or feeling as though you wanted to vomit

ASK IF: DVK1 = PHOBIC

K6

[\*] In the past week, have you avoided any situation or thing because it would have made you feel anxious/nervous/tense even though there was no real danger?

(1) Yes Yes

(2) No No

ASK IF: (K6 = YES) OR (K2 = YES)

K7

[\*] How many times have you avoided such situations or things in the past seven days?

(1) GE4Days 4 days or more

(2) LT4Days 1 to 3 days

(3) None None

ASK IF: (K4 IN [MORE4, ONE2THR]) OR (K7 IN [GE4DAYS, LT4DAYS])

K8

[\*] How long have you been having these feelings about these situations/things as you have just described?

SHOW CARD 10

(1) Percod1 less than 2 weeks

(2) Percod2 2 weeks but less than 6 months

(3) Percod3 6 months but less than 1 year



(4) Percod4 1 year but less than 2 years

(5) Percod5 2 years or more

**DVK9**

COMPUTED VARIABLE = SCORE FOR SECTION K

0.4

**Section L – Panic**

*ASK IF: SUBJECT INTERVIEW (NOT PROXY)*

*AND: QJANXTY.DVJ4 NOT OTHERS*

**L1**

[\*] Thinking about the past month, did your anxiety or tension ever get so bad that you got in a panic, for instance make you feel that you might collapse or lose control unless you did something about it?

(1) Yes Yes

(2) No No

*ASK IF: QJANXTY.DVJ4 NOT OTHERS*

*AND: L1 = YES*

**L2**

[\*] How often has this happened in the past week?

(1) Once Once

(2) GTonce More than once

(3) Notatall Not at all

*ASK IF: L1 = YES*

*AND: L2 IN [ONCE, GTONCE]*

**L3**

[\*] In the past week, have these feelings of panic been:

RUNNING PROMPT

(1) LitlUnPl a little uncomfortable or unpleasant

(2) VeryUnPl or have they been very unpleasant or unbearable?

*ASK IF: L1 = YES*

*AND: L2 IN [ONCE, GTONCE]*

**L4**

[\*] Did this panic/the worst of these panics last for longer than 10 minutes?

(1) Yes Yes

(2) No No

*ASK IF: L1 = YES*

*AND: L2 IN [ONCE, GTONCE]*

**L5**

[\*] Are you relatively free of anxiety between these panics?

(1) Yes Yes

(2) No No

*ASK IF: L1 = YES*

*AND: L2 IN [ONCE, GTONCE]*

*AND: (QKPHOBS.DVK1 NOT OTHERS) AND (((QKPHOBS.K2 NOT NO) OR (QKPHOBS.K2 NOT DONTKNOW)) OR (QKPHOBS.K2 NOT REFUSAL))*

**L6**

[\*] Is this panic always brought on by (LIST OF PHOBIAS MENTIONED)?

(1) Yes Yes

(2) No No

*ASK IF: L1 = YES*

*AND: L2 IN [ONCE, GTONCE]*

**L7**

[\*] How long have you been having these feelings of panic as you have described?

SHOW CARD 10

(1) Percod1 less than 2 weeks

(2) Percod2 2 weeks but less than 6 months

(3) Percod3 6 months but less than 1 year

(4) Period 1 year but less than 2 years

(5) Period 2 years or more

DVL8

COMPUTED SCORE:

0..4

Section M – Compulsions

ASK IF: SUBJECT INTERVIEW (NOT PROXY)

M1

In the past month, did you find that you kept on doing things over and over again when you knew you had already done them. For example, making your bed or washing your hands over and over again?

(1) Yes Yes

(2) No No

ASK IF: M1 = YES

M2

On how many days in the past week did you find yourself doing things over again that you had already done?

(1) GE4Days 4 days or more

(2) LT4Days 1 to 3 days

(3) None None

ASK IF: M1 = YES

AND: M2 IN [GE4DAYS, LT4DAYS]

M3

Since last (DAY) what sorts of things have you done over and over again?

STRING[200]

ASK IF: M1 = YES

AND: M2 IN [GE4DAYS, LT4DAYS]

M4

During the past week, have you tried to stop yourself repeating (BEHAVIOUR)/doing any of these things over again?

(1) Yes Yes

(2) No No

ASK IF: M1 = YES

AND: M2 IN [GE4DAYS, LT4DAYS]

M5

Has repeating (BEHAVIOUR)/doing any of these things over again made you upset or annoyed with yourself in the past week?

(NOTE: Compulsion(s) mentioned at M3: LIST OF COMPULSIONS)

(1) Yes Yes, upset or annoyed

(2) No No, not at all

ASK IF: M1 = YES

AND: M2 IN [GE4DAYS, LT4DAYS]

M6

INTERVIEWER: IS MORE THAN ONE THING REPEATED AT M3

(1) Yes Yes

(2) No No

ASK IF: M1 = YES

AND: M2 IN [GE4DAYS, LT4DAYS]

AND: M6 = YES

M6A

Thinking about the past week, which of the things you mentioned did you repeat the most times?

STRING[25]

ASK IF: M1 = YES

AND: M2 IN [GE4DAYS, LT4DAYS]

M7

Since last (DAY), how many times did you repeat

(DESCRIPTION OF MAIN COMPULSION) when you had already done it?

- (1) GE3Times 3 or more repeats
- (2) Twice 2 repeats
- (3) Once 1 repeat

*ASK IF: M1 = YES*

*AND: M2 IN [GE4DAYS, LT4DAYS]*

**M8**

How long have you been repeating (BEHAVIOUR)/any of the things you mentioned in the way which you have described?

SHOW CARD 10

- (1) Percod1 less than 2 weeks
- (2) Percod2 2 weeks but less than 6 months
- (3) Percod3 6 months but less than 1 year
- (4) Percod4 1 year but less than 2 years
- (5) Percod5 2 years or more

**DVM9**

COMPUTED SCORE:

0..4

### Section N – Obsessions

*ASK SECTION IF: SUBJECT INTERVIEW (NOT PROXY)*

**N1**

[\*] In the past month did you have any thoughts or ideas over and over again that you found unpleasant and would prefer not to think about, that still kept on coming into your mind?

For example, constantly thinking about death

- (1) Yes Yes
- (2) No No

*ASK IF: N1 = YES*

**N2**

[\*] Can I check, is this the same thought or idea over and over again or are you worrying about a problem or something in general?

- (1) Same Same thought
- (2) General Worrying in general

*ASK IF: N1 = YES*

*AND: N2 = SAME*

**N3**

[\*] What are these unpleasant thoughts or ideas that keep coming into your mind?

RECORD VERBATIM

DO NOT PROBE

DO NOT PRESS FOR AN ANSWER

STRING[200]

*ASK IF: N1 = YES*

*AND: N2 = SAME*

**N4**

[\*] Since last (DAY), on how many days have you had these unpleasant thoughts?

- (1) GE4Days 4 days or more
- (2) LT4Days 1 to 3 days
- (3) None None

*ASK IF: N1 = YES*

*AND: N2 = SAME*

*AND: N4 IN [GE4DAYS, LT4DAYS]*

**N5**

[\*] During the past week, have you tried to stop yourself thinking any of these thoughts?

- (1) Yes Yes
- (2) No No

ASK IF: N1 = YES

AND: N2 = SAME

AND: N4 IN [GE4DAYS, LT4DAYS]

N6

[\*] Have you become upset or annoyed with yourself when you have had these thoughts in the past week?

(1) Yes Yes, upset or annoyed

(2) No Not at all

ASK IF: N1 = YES

AND: N2 = SAME

AND: N4 IN [GE4DAYS, LT4DAYS]

N7

[\*] In the past week, was the longest episode of having such thoughts...

RUNNING PROMPT

(1) GE15min a quarter of an hour or longer

(2) LT15min or was it less than this?

ASK IF: N1 = YES

AND: N2 = SAME

AND: N4 IN [GE4DAYS, LT4DAYS]

N8

How long have you been having these thoughts in the way which you have just described?

SHOW CARD 10

(1) Percod1 less than 2 weeks

(2) Percod2 2 weeks but less than 6 months

(3) Percod3 6 months but less than 1 year

(4) Percod4 1 year but less than 2 years

(5) Percod5 2 years or more

DVN9

COMPUTED SCORE:

0..4

### Section O – Overall Effects

ASK SECTION IF: SUBJECT INTERVIEW (NOT PROXY)

AND: ((((((((((QASMTG.DVA9 > 1) OR (QBFTGUE.DVB10 > 1))

OR (QCCNCTN.DVC9 > 1)) OR (QDSLEEP.DVD11 > 1)) OR

(QEIRRIT.DVE11 > 1)) OR (QFWORPH.DVF8 > 1)) OR

(QGDEPRN.DVG11 > 1)) OR (QDEPSCRE.DVH11 > 1)) OR

(QIWORRY.DVI11 > 1)) OR (QJANXTY.DVJ12 > 1)) OR

(QKPHOBS.DVK9 > 1)) OR (QLPANIC.DVL8 > 1)) OR

(QMCOMPL.DVM9 > 1)) OR (QNOBSNS.DVN9 > 1)

O1

[\*] Now I would like to ask you how all of these things that you have told me about have affected you overall.

In the past week, has the way you have been feeling ever actually stopped you from getting on with things you used to do or would like to do?

(1) Yes Yes

(2) No No

ASK IF: O1 = YES

O1A

[\*] In the past week, has the way you have been feeling stopped you doing things once or more than once?

(1) Once Once

(2) GTOnce More than once

ASK IF: NOT (O1 = YES)

O1B

[\*] Has the way you have been feeling made things more difficult even though you have got everything done?

(1) Yes Yes

(2) No No

**Deliberate Self-Harm**

*ASK SECTION IF: SUBJECT INTERVIEW (NOT PROXY)*

**DSHIntro**

There may be times in everyone's life when they become very miserable and depressed and may feel like taking drastic action because of these feelings.

PRESS <ENTER> TO CONTINUE

**DSH1**

[\*] Have you ever felt that life was not worth living?

(1) Yes Yes

(2) No No

*ASK IF: DSH1 = YES*

**DSH1a**

Was this....

CODE FIRST THAT APPLIES

(1) lastwk In the last week?

(2) Lastyr In the last year?

(3) other or at some other time?

**DSH2**

[\*] Have you ever wished that you were dead?

(1) Yes Yes

(2) No No

*ASK IF: DSH2 = YES*

**DSH2a**

Was this..

CODE FIRST THAT APPLIES

(1) lastwk In the last week?

(2) Lastyr In the last year?

(3) other or at some other time?

**DSH3**

[\*] Have you ever thought of taking your life, even if you would not really do it?

(1) Yes Yes

(2) No No

*ASK IF: DSH3 = YES*

**DSH3a**

Was this..

CODE FIRST THAT APPLIES

(1) lastwk In the last week?

(2) Lastyr In the last year?

(3) other or at some other time?

*ASK IF: DSH3 = YES*

**DSH4**

[\*] Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way ?

(1) Yes Yes

(2) No No

*ASK IF: DSH3 = YES*

*AND: DSH4 = YES*

**DSH4a**

Was this..

CODE FIRST THAT APPLIES

(1) lastwk In the last week?

(2) Lastyr In the last year?

(3) other or at some other time?

*ASK IF: DSH3 = YES*

*AND: DSH4 = YES*

**DSH4b**

[\*] Did you try to get help from anyone following this attempt?

(1) Yes Yes

(2) No No

*ASK IF: DSH3 = YES*

*AND: DSH4B = YES*

**DSH4c**

Who did you try to get help from?

You may give more than one response.

CODE ALL THAT APPLY

SET [5] OF

(1) friend a friend

(2) family A member of your family

(3) GP your GP/family doctor

(4) Hosp the local hospital

(5) other Someone else - specify

*ASK IF: DSH3 = YES*

*AND: OTHER IN DSH4C*

**DSH4d**

Who was the other person you asked for help?

STRING[50]

**DSH5**

[\*] Have you deliberately harmed yourself in any way but not with the intention of killing yourself?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH6**

Did you ...

CODE ALL THAT APPLY

SET [4] OF

(1) Cut cut yourself

(2) Burn or burn yourself

(3) Swallow or swallow any objects

(4) Other or harm yourself some other way?

*ASK IF: DSH5 = YES*

**DSH7**

[\*] Did you do any of these things to draw attention to your situation or to change your situation?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH8**

[\*] Did you do any of these things because it relieved unpleasant feelings of anger, tension, anxiety or depression?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH9**

Have you received medical attention for deliberately harming yourself in any of these ways?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH10**

Have you seen a psychiatrist, psychologist or counsellor because you had harmed yourself?

(1) Yes Yes

(2) No No

*ASK IF: (((DSH4A = LASTWK) OR (DSH4A = LASTYR)) OR ((DSH1A = LASTWK) OR (DSH4A = LASTYR))) OR ((DSH2A = LASTWK) OR (DSH4A = LASTYR))) OR ((DSH3A = LASTWK) OR (DSH4A = LASTYR))*

**DSHExit**

The sorts of thoughts and feelings we have talked about here are very serious and it is important that you talk to someone,

*ASK IF: DSH3 = YES*

*AND: DSH4B = YES*

**DSH4c**

Who did you try to get help from?

You may give more than one response.

CODE ALL THAT APPLY

SET [5] OF

(1) friend a friend

(2) family A member of your family

(3) GP your GP/family doctor

(4) Hosp the local hospital

(5) other Someone else - specify

*ASK IF: DSH3 = YES*

*AND: OTHER IN DSH4C*

**DSH4d**

Who was the other person you asked for help?

STRING[50]

**DSH5**

[\*] Have you deliberately harmed yourself in any way but not with the intention of killing yourself?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH6**

Did you ...

CODE ALL THAT APPLY

SET [4] OF

(1) Cut cut yourself

(2) Burn or burn yourself

(3) Swallow or swallow any objects

(4) Other or harm yourself some other way?

*ASK IF: DSH5 = YES*

**DSH7**

[\*] Did you do any of these things to draw attention to your situation or to change your situation?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH8**

[\*] Did you do any of these things because it relieved unpleasant feelings of anger, tension, anxiety or depression?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH9**

Have you received medical attention for deliberately harming yourself in any of these ways?

(1) Yes Yes

(2) No No

*ASK IF: DSH5 = YES*

**DSH10**

Have you seen a psychiatrist, psychologist or counsellor because you had harmed yourself?

(1) Yes Yes

(2) No No

*ASK IF: (((DSH4A = LASTWK) OR (DSH4A = LASTYR)) OR ((DSH1A = LASTWK) OR (DSH4A = LASTYR))) OR ((DSH2A = LASTWK) OR (DSH4A = LASTYR))) OR ((DSH3A = LASTWK) OR (DSH4A = LASTYR))*

**DSHExit**

The sorts of thoughts and feelings we have talked about here are very serious and it is important that you talk to someone,

Appendix IIb – AUDIT, SAD-Q and Drug use questionnaire



**DrinkNow**

I'm now going to ask you a few questions about what you drink - that is if you do drink.  
Do you ever drink alcohol nowadays, including drinks you brew or make at home?

- (1) Yes Yes
- (2) No No

**ASK IF: DRINKNOW = NO**

**DrinkAny**

Could I just check, does that mean you never have an alcoholic drink nowadays, or do you have an alcoholic drink very occasionally, perhaps for medicinal purposes or on special occasions like Christmas or New Year?

- (1) Occasion Very occasionally
- (2) Never Never

**ASK IF: DRINKNOW = NO**

**AND: DRINKANY = NEVER**

**TeeTotal**

Have you always been a non-drinker, or did you stop drinking for some reason?

- (1) Always Always a non-drinker
- (2) Stopped Used to drink but stopped

**ASK IF: DRINKNOW = NO**

**AND: DRINKANY = NEVER**

**AND: TEETOTAL = ALWAYS**

**NonDrink**

[\*] What would you say is the MAIN reason you have always been a non-drinker?

- (1) Relig Religious reasons
- (2) Dontlike Don't like it
- (3) Advice Parent's advice/influence
- (4) Health Health reasons
- (5) Cost Can't afford it
- (6) Other Other

**ASK IF: DRINKNOW = NO**

**AND: DRINKANY = NEVER**

**AND: TEETOTAL = STOPPED**

**StopDrink**

[\*] What would you say was the MAIN reason you stopped drinking?

- (1) Relig Religious reasons
- (2) Dontlike Don't like it
- (3) Advice Parent's advice/influence
- (4) Health Health reasons
- (5) Cost Can't afford it
- (6) Other Other

**ASK IF: SUBJECT INTERVIEW (NOT PROXY)**

**AND: (QDRINK.DRINKNOW = YES) OR (QDRINK.DRINKANY = OCCASION)**

**DrkOft**

In the last 12 months, how often have you had a drink containing alcohol?

- (1) never never
- (2) monthly monthly
- (3) mn2t4 two to four times a month
- (4) wk2t3 two to three times a week
- (5) wk4 four or more times a week

**ASK IF:** ((*DRKOFT* = *MONTHLY*) OR (*DRKOFT* = *MN2T4*)) OR (*DRKOFT* = *WK2T3*) OR (*DRKOFT* = *WK4*)

**DrAmt**

How many standard drinks containing alcohol do you have on a typical day when you are drinking?

A standard drink is half a pint of beer, a single measure of spirits or a glass of wine.

- (1) d1or2 one or two
- (2) d3or4 three or four
- (3) d5or6 five or six
- (4) d789 seven, eight, or nine
- (5) d10 ten or more

**ASK IF:** ((*DRKOFT* = *MONTHLY*) OR (*DRKOFT* = *MN2T4*)) OR (*DRKOFT* = *WK2T3*) OR (*DRKOFT* = *WK4*)

**LotOften**

How often do you have 6 or more drinks on one occasion?

- (1) never never
- (2) lmonthly less than monthly,
- (3) month2t4 monthly,
- (4) weekly weekly
- (5) daily daily or almost daily

**ASK IF:** ((*DRKOFT* = *MN2T4*) OR (*DRKOFT* = *WK2T3*)) OR (*DRKOFT* = *WK4*)

**NotStop**

How often during the last year have you found that you were not able to stop drinking once you had started?

- (1) never never
- (2) lmonthly less than monthly,
- (3) month2t4 monthly,
- (4) weekly weekly
- (5) daily daily or almost daily

**ASK IF:** ((*DRKOFT* = *MN2T4*) OR (*DRKOFT* = *WK2T3*)) OR (*DRKOFT* = *WK4*)

**FailDrk**

How often during the last year have you failed to do what was normally expected from you because of drinking?

- (1) never never
- (2) lmonthly less than monthly,
- (3) month2t4 monthly,
- (4) weekly weekly
- (5) daily daily or almost daily

**ASK IF: ((DRKOFT = MN2T4) OR (DRKOFT = WK2T3)) OR (DRKOFT = WK4)**

**MornDrk**

How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

- (1) never never
- (2) lmonthly less than monthly,
- (3) month2t4 monthly,
- (4) weekly weekly
- (5) daily daily or almost daily

**ASK IF: ((DRKOFT = MN2T4) OR (DRKOFT = WK2T3)) OR (DRKOFT = WK4)**

**Guilty**

How often during the last year have you had a feeling of guilt or remorse after drinking?

- (1) never never
- (2) lmonthly less than monthly,
- (3) month2t4 monthly,
- (4) weekly weekly
- (5) daily daily or almost daily

**ASK IF: ((DRKOFT = MN2T4) OR (DRKOFT = WK2T3)) OR (DRKOFT = WK4)**

**NoMem**

How often during the last year have you been unable to remember what happened the night before because you had been drinking?

- (1) never never
- (2) lmonthly less than monthly,
- (3) month2t4 monthly,
- (4) weekly weekly
- (5) daily daily or almost daily

**ASK IF: (((DRKOFT = MONTHLY) OR (DRKOFT = MN2T4)) OR (DRKOFT = WK2T3)) OR (DRKOFT = WK4)**

**Injured**

Have you or someone else been injured as a result of your drinking?

- (1) YnotYr Yes, but not in the last year
- (2) YYr Yes, during the last year
- (3) No No

**ASK IF: (((DRKOFT = MONTHLY) OR (DRKOFT = MN2T4)) OR (DRKOFT = WK2T3)) OR (DRKOFT = WK4)**

**Advised**

Has a relative, a friend, or a doctor or other health worker been concerned about your drinking or suggested you cut down?

- (1) YnotYr Yes, but not in the last year
- (2) YYr Yes, during the last year
- (3) No No

**DVAudit**

COMPUTED VARIABLE

AUDIT SCORE (computed from DrkOfit to Advised)

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**intro**

Please recall a typical period of heavy drinking in the last 6 MONTHS.

(Or an occasion when you have drunk a lot.)

Which month was this?

- (1) January January
- (2) February February
- (3) March March
- (4) April April
- (5) May May
- (6) June June
- (7) July July
- (8) August August
- (9) September September
- (10) October October
- (11) November November
- (12) December December

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**woke**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I woke up feeling sweaty

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**shook**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

My hands shook first thing in the morning

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**violent**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

My whole body shook violently first thing in the morning if I didn't have a drink

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**drench**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I woke up absolutely drenched in sweat

- (1) never Never, or almost never,
- (2) sometime sometimes,

- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**dread**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...  
I dreaded waking up in the morning

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**fright**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...  
I was frightened of meeting people first thing in the morning

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**despair**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...  
I felt at the edge of despair when I awoke

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**awoke**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...  
I felt very frightened when I awoke

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**morn**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...  
I liked to have a morning drink

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**quick**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I always gulped my first few drinks down as quickly as possible

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**shakes**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I drank in the morning to get rid of the shakes

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**crave**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I had a very strong craving for drink when I awoke

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**quarter**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I drank more than 1/4 bottle spirits a day (or 4 pints of beer/2 cans strong lager/1 bottle table wine)

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**AND: NOT (QUARTER = NEVER)**

**half**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I drank more than 1/2 bottle spirits a day (or 8 pints of beer/4 cans strong lager/2 bottles table wine)

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**quick**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I always gulped my first few drinks down as quickly as possible

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**shakes**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I drank in the morning to get rid of the shakes

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**crave**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I had a very strong craving for drink when I awoke

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**quarter**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I drank more than 1/4 bottle spirits a day (or 4 pints of beer/2 cans strong lager/1 bottle table wine)

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**AND: NOT (QUARTER = NEVER)**

**half**

During that period of heavy drinking in (NAME OF MONTH), how did you feel? Would you say that...

I drank more than 1/2 bottle spirits a day (or 8 pints of beer/4 cans strong lager/2 bottles table wine)

- (1) never Never, or almost never,
- (2) sometime sometimes,
- (3) often often,
- (4) allways or always, or nearly always?

- (1) notat Not at all,
- (2) slight slightly,
- (3) moderate moderately,
- (4) qalot or, quite a lot?

**ASK IF: QDAUDIT.DVAUDIT >= 10**

**craved**

How would you feel the morning after those two days of heavy drinking? Would you say that...

I would be craving for a drink

- (1) notat Not at all,
- (2) slight slightly,
- (3) moderate moderately,
- (4) qalot or, quite a lot?

**DRUG USE**

**DrgIntro**

This section is about drug use. By drugs we mean things like cannabis, speed and heroin.

We do not mean drugs that you have taken or are taking on a doctor's prescription.

**ADrug**

Have you EVER taken any of the drugs listed below even if it was a long time ago?

Please type the numbers of ALL those drugs you have used

If you have used NONE of them, type '8'

SET [8] OF

- (1) Cann cannabis (marijuana, grass, hash, ganja, blow, draw, skunk, weed, spliff)
- (2) Amph amphetamines (speed, whizz, uppers, billy)
- (3) Coca cocaine or coke
- (4) Crac crack (rock, stones)
- (5) Ecst ecstasy (E)
- (6) Hero heroin (smack, skag, H, brown)
- (7) Acid acid or LSD
- (8) None none of these

**ADrug2**

And, have you EVER taken any of the drugs listed below (not prescribed by a doctor) even if it was a long time ago?

Please type the numbers of ALL those drugs you have used

If you have used NONE of them, type '8'

SET [8] OF

- (1) Magi magic mushrooms
- (2) Meth methadone or physeptone
- (3) Semo semeron
- (4) Tran tranquilisers (temazepam, valium)
- (5) Amyl amyl nitrate (poppers)
- (6) Anab anabolic steroids (steroids)
- (7) Glue glues, solvents, gas or aerosols (to sniff)
- (8) None none of these

**ASK IF: NOT (NONE IN ADRUG)**

**YDrug**

In the LAST 12 MONTHS have you taken any of these drugs?

Please type the numbers of ALL those drugs you have used in



the LAST 12 MONTHS

If you have used NONE of them, type '8'  
SET [8] OF

- (1) Cann cannabis (marijuana, grass, hash, ganja, blow, draw, skunk, weed, spliff)
- (2) Amph amphetamines (speed, whizz, uppers, billy)
- (3) Coca cocaine or coke
- (4) Crac crack (rock, stones)
- (5) Ecst ecstasy (E)
- (6) Hero heroin (smack, skag, H, brown)
- (7) Acid acid or LSD
- (8) None none of these

**ASK IF: NOT (NONE IN ADRUG2)**

**YDrug2**

And, in the LAST 12 MONTHS have you taken any of these drugs?

Please type the numbers of ALL those drugs you have used in the LAST 12 MONTHS

If you have used NONE of them, type '8'  
SET [8] OF

- (1) Magi magic mushrooms
- (2) Meth methadone or physeptone
- (3) Semo semeron
- (4) Tran tranquilisers (temazepam, valium)
- (5) Amyl amyl nitrate (poppers)
- (6) Anab anabolic steroids (steroids)
- (7) Glue glues, solvents, gas or aerosols (to sniff)
- (8) None none of these

**For each drug taken in the last 12 months**

**ASK IF: DRUG TAKEN IN LAST 12 MONTHS (NOT MAGI, SEMO, AMYL, ANAB, ACID)**

**AgeStrt**

How old were you when you first used (NAME OF DRUG)?  
0..97

**NumUse**

How many times have you ever used (NAME OF DRUG)?

- (1) lftTen less than 10 times
- (2) ge10toC 10 to 100 times
- (3) over100 more than 100 times?

**More2wk**

During the past 12 months, have you used (NAME OF DRUG) every day for two weeks or more?

- (1) Yes Yes
- (2) No No

**Needed**

In the past 12 months have you used (NAME OF DRUG) to the extent that you felt like you needed it or were dependent on it?

- (1) Yes Yes  
(2) No No

**CutDrg**

In the past 12 months have you tried to cut down on (NAME OF DRUG) but found you could not do it?

- (1) Yes Yes  
(2) No No

**IncDrg**

In the past 12 months did you find that you needed larger amounts of (NAME OF DRUG) to get an effect, or that you could no longer get high on the amount you used to use?

- (1) Yes Yes  
(2) No No

**Withdr**

In the past 12 months have you had withdrawal symptoms such as feeling sick because you stopped or cut down on (NAME OF DRUG) ?

- (1) Yes Yes  
(2) No No

**UseMB4**

Now thinking about the past month, have you used (NAME OF DRUG) in the past month?

- (1) Yes Yes  
(2) No No

**ASK IF: USEMB4 = YES**

**OftenB4**

About how often were you using (NAME OF DRUG) in the past month?

- (1) Daily about daily  
(2) TwoTo3WK 2 to 3 times per week  
(3) OnceWk about once a week  
(4) LtWkly less than once a week  
End of section for each drug used.

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**ODEver**

Have you ever experienced a drugs overdose where you accidentally took too much or the drug was stronger than you were used to?

- (1) Yes Yes  
(2) No No

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**AND: ODEVER = YES**

**OdTimes**

How many times in your life?

- (1) Once Once
- (2) TwoTo3 2 or 3 times
- (3) FourTo5 4 or 5 times
- (4) SixTo9 6 - 9 times
- (5) More10 10 or more times

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**  
**AND: (((((AMPH IN ADRUG) OR (COCA IN ADRUG)) OR (CRAC**  
**IN ADRUG)) OR (ECST IN ADRUG)) OR (HERO IN ADRUG)) OR**  
**(METH IN ADRUG2)) OR (TRAN IN ADRUG2)**

**InjIntr**

The next questions are about your own experience of drug injecting.

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**

**InjEver**

Have you ever injected drugs?

Do not include drugs that you were prescribed by a doctor

- (1) Yes Yes
- (2) No No

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjAge**

About how old were you when you first injected?

5..97

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjReg**

Have you ever injected regularly?

- (1) Yes Yes
- (2) No No

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjOften**

About how many times have you EVER injected?

- (1) ltTen less than 10 times
- (2) ge10toC 10 to 100 times
- (3) over100 more than 100 times?

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjMB4**

Did you inject in the last month?

- (1) Yes Yes
- (2) No No

- (1) Once Once
- (2) TwoTo3 2 or 3 times
- (3) FourTo5 4 or 5 times
- (4) SixTo9 6 - 9 times
- (5) More10 10 or more times

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**  
**AND: (((((AMPH IN ADRUG) OR (COCA IN ADRUG)) OR (CRAC**  
**IN ADRUG)) OR (ECST IN ADRUG)) OR (HERO IN ADRUG)) OR**  
**(METH IN ADRUG2)) OR (TRAN IN ADRUG2)**

**InjIntr**

The next questions are about your own experience of drug injecting.

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**

**InjEver**

Have you ever injected drugs?

Do not include drugs that you were prescribed by a doctor

- (1) Yes Yes
- (2) No No

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjAge**

About how old were you when you first injected?

5..97

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjReg**

Have you ever injected regularly?

- (1) Yes Yes
- (2) No No

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjOften**

About how many times have you EVER injected?

- (1) ltTen less than 10 times
- (2) ge10toC 10 to 100 times
- (3) over100 more than 100 times?

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,**  
**ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**  
**AND: INJEVER = YES**

**InjMB4**

Did you inject in the last month?

- (1) Yes Yes
- (2) No No

**ASK IF: EVER USED AMPHETAMINES, COCAINE, CRACK,  
ECSTASY, HEROIN, METHADONE OR TRANQUILLISERS**

**AND: INJEVER = YES**

**AND: INJMB4 = YES**

**InjOfB4**

About how often did you inject in the last month?

- (1) Daily about daily
- (2) TwoTo3WK 2 to 3 times per week
- (3) OnceWk about once a week
- (4) LtWkly less than once a week

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**TreatInt**

We would now like to ask you about any treatment, help or advice that you may have had in relation to drug use.

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**TreatOut**

Have you EVER received any treatment, help or advice because you were using drugs?

- (1) Yes Yes
- (2) No No

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**AND: TREATOUT = YES**

**TreatB4**

Thinking about the past 12 months, did you receive any treatment, help or advice because you were using drugs?

- (1) Yes Yes
- (2) No No

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**AND: TREATOUT = YES**

**AND: TREATB4 = YES**

**TreatFrm**

Who was that from?

Please type the numbers of ALL those you received treatment from

SET [5] OF

- (1) GP GP or family doctor or other practice staff
- (2) CDT Community Drug Team, (CDT)
- (3) Hosp Hospital (outpatient and/or inpatient)
- (4) Resid Residential rehab unit
- (5) Other Other (specify)

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)**

**AND: TREATOUT = YES**

**AND: TREATB4 = YES**

**AND: OTHER IN TREATFRM**

**XTreatFr**

Please specify the other source of treatment/advice

Please type your answer

STRING[80]

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)  
AND: (HERO IN ADRUG) OR (METH IN ADRUG2)**

**PresMeth**

Have you ever been prescribed Methadone?

- (1) Yes Yes
- (2) No No

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)  
AND: PRES METH = YES**

**Meth12mo**

Have you been prescribed methadone in the past 12 months?

- (1) Yes Yes
- (2) No No

**ASK IF: NOT (NONE IN ADRUG) OR NOT (NONE IN ADRUG2)  
AND: PRES METH = YES  
AND: METH12MO = YES**

**Meth1mo**

Have you been prescribed Methadone in the past month?

- (1) Yes Yes
- (2) No No

Appendix IIc – Traumatic Events Inventory

**Traumatic events inventory**

ID:

Date:

**Have any of the following things ever happened to you?**

	In childhood (<18 years)	In adulthood before last 6 mths	In the last 6 mths
Bullying at school?	<input type="checkbox"/> BSC	<input type="checkbox"/> BSA	<input type="checkbox"/> BSR
Bullying at work?	<input type="checkbox"/> BWC	<input type="checkbox"/> BWA	<input type="checkbox"/> BWR
Bullying in any other place?	<input type="checkbox"/> BOC	<input type="checkbox"/> BOA	<input type="checkbox"/> BOR
When was that?			
Did it happen more than once? <b>1 = Yes, 2 = No</b>			
Violence in the home?	<input type="checkbox"/> VHC	<input type="checkbox"/> VHA	<input type="checkbox"/> VHR
Violence at work?	<input type="checkbox"/> VWC	<input type="checkbox"/> VWA	<input type="checkbox"/> VWR
Violence elsewhere?	<input type="checkbox"/> VOC	<input type="checkbox"/> VOA	<input type="checkbox"/> VOR
When was that?			
Did it happen more than once? <b>1 = Yes, 2 = No (rate all that apply)</b>			
Sexual abuse including intercourse? *	<input type="checkbox"/> SAFC	<input type="checkbox"/> SAFA	<input type="checkbox"/> SAFR
Sexual abuse not including intercourse?	<input type="checkbox"/> SAPC	<input type="checkbox"/> SAPA	<input type="checkbox"/> SAPR
When was that?			
Did it happen more than once? <b>1 = Yes, 2 = No</b>			
Did you ever experience anything else really traumatic?	<input type="checkbox"/> OTC	<input type="checkbox"/> OTA	<input type="checkbox"/> OTR
Did you every witness something really traumatic?	<input type="checkbox"/> WTC	<input type="checkbox"/> WTA	<input type="checkbox"/> WTR
When was that?			
Did it happen more than once? <b>1 = Yes, 2 = No</b>			
Rate persistent sexual abuse (more than 10 times)			<input type="checkbox"/> PSA
Rate persistent physical abuse (marked abuse more than 10 times)			<input type="checkbox"/> PPR

**1 = Yes, 2 = No**

\*vaginal or anal

Appendix IId – PDS





# PDS

## Part 1

Many People have lived through or witnessed a very stressful and traumatic event at some point in their lives. Below is a list of traumatic events. Put a checkmark in the box next to ALL of the events that have happened to you or that you have witnessed.

- (1) Serious accident, fire, or explosion (for example, an industrial, farm, car, plane, or boating accident)
- (2) Natural disaster (for example, tornado, hurricane, flood, or major earthquake)
- (3) Non-sexual assault by a family member or someone you know (for example, being mugged, physically attacked, shot, stabbed, or held at gunpoint)
- (4) Non-sexual assault by a stranger (for example, being mugged, physically attacked, shot, stabbed, or held at gunpoint)
- (5) Sexual assault by a family member or someone you know (for example, rape or attempted rape)
- (6) Sexual assault by a stranger (for example, rape or attempted rape)
- (7) Military combat or war zone
- (8) Sexual contact when you were younger than 18 with someone who was 5 or more years older than you (for example, contact with genitals, breasts)
- (9) Imprisonment (for example, prison inmate, prisoner of war, hostage)
- (10) Torture
- (11) Life-threatening illness
- (12) Other traumatic event
- (13) If you marked item 12, specify the traumatic event below.

IF YOU MARKED ANY OF THE ITEMS ABOVE, CONTINUE. IF NOT, STOP HERE.

## Part 2

(14) If you marked more than one traumatic event in Part 1, put a checkmark in the box below next to the event that bothers you the most. If you marked only one traumatic event in Part 1, mark the same one below.

- Accident
- Disaster
- Non-sexual assault by family or someone you know
- Non-sexual assault by a stranger
- Sexual assault by family or someone you know
- Sexual assault by a stranger
- Combat
- Sexual contact under 18 with someone 5 or more years older
- Imprisonment
- Torture
- Life-threatening illness
- Other

In the lines below, briefly describe the traumatic event you marked above.

---



---



---

Below are several questions about the traumatic event you just described above.

(15) How long ago did the traumatic event happen? (circle ONE)

- 1 Less than 1 month
- 2 1 to 3 months
- 3 3 to 6 months
- 4 6 months to 3 years
- 5 3 to 5 years
- 6 More than 5 years

For the following questions, circle Y for Yes or N for No.

During this traumatic event:

- (16) Y N Were you physically injured?
- (17) Y N Was someone else physically injured?
- (18) Y N Did you think that your life was in danger?
- (19) Y N Did you think that someone else's life was in danger?
- (20) Y N Did you feel helpless?
- (21) Y N Did you feel terrified?

**Part 3**

Below is a list of problems that people sometimes have after experiencing a traumatic event. Read each one carefully and circle the number (0-3) that best describes how often that problem has bothered you IN THE PAST MONTH. Rate each problem with respect to the traumatic event you described in Item 14.

- |  |   |   |   |   |                                      |
|--|---|---|---|---|--------------------------------------|
|  | 0 | 1 | 2 | 3 |                                      |
|  | 1 |   |   |   | Not at all or only one time          |
|  | 2 |   |   |   | Once a week or less/once in a while  |
|  | 3 |   |   |   | 2 to 4 times a week/half the time    |
|  |   |   |   |   | 5 or more times a week/almost always |
- (22) 0 1 2 3 Having upsetting thoughts or images about the traumatic event that came into your head when you didn't want them to
- (23) 0 1 2 3 Having bad dreams or nightmares about the traumatic event
- (24) 0 1 2 3 Reliving the traumatic event, acting or feeling as if it was happening again
- (25) 0 1 2 3 Feeling emotionally upset when you were reminded of the traumatic event (for example, feeling scared, angry, sad, guilty, etc.)
- (26) 0 1 2 3 Experiencing physical reactions when you were reminded of the traumatic event (for example, breaking out in a sweat, heart beating fast)
- 
- (27) 0 1 2 3 Trying not to think about, talk about, or have feelings about the traumatic event
- (28) 0 1 2 3 Trying to avoid activities, people, or places that remind you of the traumatic event
- (29) 0 1 2 3 Not being able to remember an important part of the traumatic event
- (30) 0 1 2 3 Having much less interest or participating much less often in important activities
- (31) 0 1 2 3 Feeling distant or cut off from people around you
- (32) 0 1 2 3 Feeling emotionally numb (for example, being unable to cry or unable to have loving feelings)
- (33) 0 1 2 3 Feeling as if your future plans or hopes will not come true (for example, you will not have a career, marriage, children, or a long life)
- (34) 0 1 2 3 Having trouble falling or staying asleep
- (35) 0 1 2 3 Feeling irritable or having fits of anger
- (36) 0 1 2 3 Having trouble concentrating (for example, drifting in and out of conversation, losing track of a story on television, forgetting what you read)
- (37) 0 1 2 3 Being overly alert (for example, checking to see who is around you, being uncomfortable with your back to a door, etc.)
- (38) 0 1 2 3 Being jumpy or easily startled (for example, when someone walks up behind you)
- 
- (39) How long have you been experiencing the problems that you reported above? (circle ONE)
- 1 Less than 1 month
- 2 1 to 3 months
- 3 More than 3 months
- (40) How long after the traumatic event did these problems begin? (circle ONE)
- 1 Less than 6 months
- 2 6 or more months

Part 4

Indicate below if the problems you rate in Part 3 have interfered with any of the following areas of your life DURING THE PAST MONTH. Circle Y for Yes and N for No.

- (41) Y N Work
- (42) Y N Household chores and duties
- (43) Y N Relationships with friends
- (44) Y N Fun and leisure activities
- (45) Y N Schoolwork
- (46) Y N Relationships with your family
- (47) Y N Sex life
- (48) Y N General satisfaction with life
- (49) Y N Overall level of functioning in all areas of your life

### ***Appendix III – Vignette***

Participant 471 – 38 year old, white British Female, in Holloway for 20 months, sentenced for manslaughter, single, one child, A-levels, in employment prior to imprisonment.

History of trauma: was molested by brother-in-law when under 18, found out was adopted, negative relationship with mother.

Diagnosed with depression in 2000, was on anti-depressants for 15 months, has been prescribed anti-depressants in Holloway for the last 14 months, receives counselling 1x week, targeted at depression

Audit score 0, no drug abuse

CIS-R score 17, (concentration = 4, fatigue = 2, sleep = 2, depression = 3, depressive ideas = 3, worry = 3)

Avoidant/obsessive-compulsive PD

### **Appendix IV – Glossary**

CAN – Camberwell Assessment of Needs

CANFOR – Camberwell Assessment of Needs, Forensic version

CARAT – Counselling, Assessment, Referral, Advice and Throughcare

CMHT – Community Mental Health Team

CPA – Care Plan Approach

DoH – Department of Health

MHIRT – Mental Health In-Reach Team

NIMHE – National Institute for Mental Health England

NLFS – North London Forensic Service

NSF – The National Service Framework for Mental Health

NPSPM – National Prison Survey of Psychiatric Morbidity

MoJ – Ministry of Justice

ONS – The Office of National Statistics

PMHI – Prisoner’s Mental Health Inventory

PCT – Primary Care Trust

PTSD – Post Traumatic Stress Disorder

WTE – Whole Time Equivalent

