# An Investigation into the Prevalence of Mental Health Disorder and Patterns of Health Service Access in a Probation Population (1)

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# Research In Approved Premises

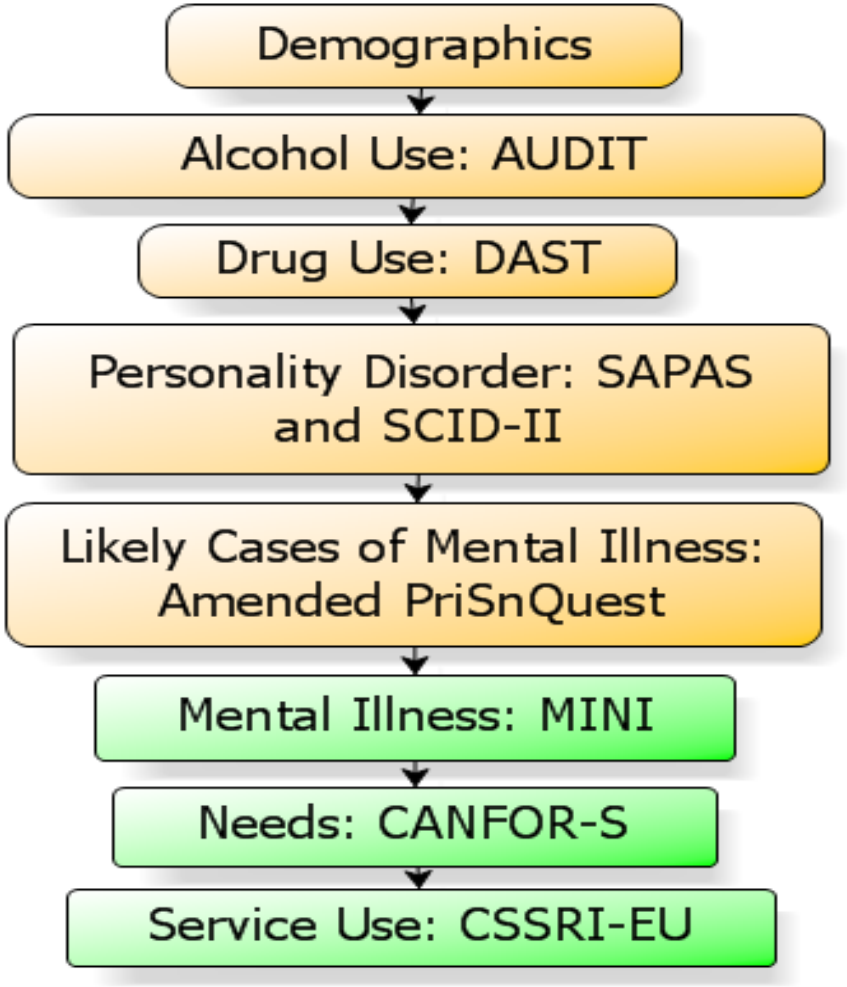
- Several studies have investigated the prevalence of mental illness in probation approved premises:
  - Geelan et al., (1998+2000) – study of an approved premises for mentally ill men using existing records and self-report. Strangely 11% did not have a mental illness. Most common diagnosis was schizophrenia (30%)
  - Nadkarni et al., (2000) – v. small study of a forensic psychiatry service working in an approved premises (n=12), 2 residents experienced a depressive episode and 2 had a PD
  - Hatfield et al., (2004) – staff used the GHQ to look at the MH of residents of approved premises in Greater Manchester. 29.5% were ‘likely to have MH needs’

# Stage One

# Stage 1: Aims

- Stage one investigated:
  - The prevalence of mental health disorder and substance misuse in a probation population
  - Offenders' self-reported needs
  - The extent to which offenders felt that their needs were being met by existing service provision

# Stage 1: Method




All participants interviewed up to the Amended PriSnQuest

Those screening positive on this tool + a sub-sample for a false-negative check complete the remaining tools

# Selection of Tools

- Tools were selected based on the following criteria:
  - Previous use in criminal justice settings
  - Quick to use
  - Suitable for use by 'lay' persons
  - Good rates of sensitivity and specificity

# Stage 1: Findings: Prevalence

| Disorder | % | Weighted Estimate (%) |
|---|---|---|
| Current mood disorder | 15.0 | 17.9 |
| Current anxiety disorder | 21.4 | 27.2 |
| Current psychotic disorder | 8.1 | 11.0 |
| Current eating disorder | 2.3 | 5.2 |
| **Any current disorder** | **27.2** | **38.7** |
| Past/lifetime mood disorder | 38.2 | 43.9 |
| Past/lifetime psychotic disorder | 15.6 | 18.5 |
| **Any past/lifetime disorder** | **39.9** | **48.6** |
| ‘Likely’ case of PD | 47.4 | N/A |

# Substance Misuse

- 55.5% scored 8+ on AUDIT – strong likelihood of hazardous/harmful alcohol consumption
- 40% of the above participants reported accessing a substance misuse service

- 12.1% scored 11+ on DAST – substantial/ severe levels of drug use
- 88% of the above participants reported accessing a substance misuse service

# Comorbidity

- 72.3% of those with a current mental illness also had a substance misuse problem

- 89.4% of those with a current mental illness also had a personality disorder

# Needs

- Those with a current mental illness had a higher mean level of need than those without (mean CANFOR-S scores of 10.53 and 4.59)

- There was a statistically significant difference between these two groups in terms of their ‘met’ and ‘unmet’ needs scores at the p=<0.05 level

# Types of Unmet Needs

- Safety to self
- Physical health
- Daytime activities
- Company
- Money
- Alcohol and drugs
- Agreement with prescribed treatment

# Access to Services

- Overall low levels of service access were reported
- No mental health service access was reported by:
  - 60% of current mood disorder cases
  - 59% of current anxiety disorder cases
  - 50% of current psychotic disorder cases
  - 75% of current eating disorder cases
  - 55% of 'likely' cases of PD

# Stage Two

# Stage 2: Aim

- Compare findings from stage one interviews to information in probation case files to determine:
  - the extent to which probation staff were aware of and recording offenders' mental health and substance misuse problems
  - What is recorded about offenders' access to health services in probation files

# Stage 2: Method

- Files for all PriSnQuest positive cases with a current mental health disorder were examined
- Quantitative data were collected from every file and analysed in SPSS
- Qualitative data were collected from every fifth file and manually coded into themes using the constant comparative method

# Stage 2: Findings: Recording of Disorders/Substance Misuse

- Findings for 'complete' files suggest that the following proportions of cases identified in stage 1 interviews were also recorded in probation files:
  - Any current mood disorder: 73%
  - Any current anxiety disorder: 47%
  - Any current psychotic disorder: 33%
  - Any current eating disorder: 0%
  - Any likely PD: 21% (may have improved with the new pathway – discussed later)
  - 11+ on DAST: 83%
  - 8+ on AUDIT: 79%

# Access to Services

- In a third of cases participants told a researcher that they were accessing a mental health service but this was not recorded in their file

- Qualitative data highlighted the following barriers to service access:
  - Motivation
  - Dual diagnosis
  - Services' referral criteria

# Stage Three

# Stage 3: Aims

- To investigate:
  - what works well in linking offenders with mental health and substance misuse services,
  - what acts as a barrier to access, and
  - where improvements could be made

# Stage 3: Method

- 20 semi-structured interviews with a purposive sample of probation staff (n=11) and offenders on probation (n=9)
- Interviews were conducted by research staff and service user representatives
- Transcribed verbatim and analysed in NVivo using the constant comparative method

# Stage 3: Findings

- Enablers:
  - Joint meetings with probation, offender and health service staff
  - Services guaranteeing confidentiality
  - Co-location of services
  - Clear communication within and between agencies
  - A good relationship between an offender and probation staff
  - Probation and health staff knowing each other
  - Probation staff having sufficient mental health awareness training

- Barriers:
  - Referral systems
  - Lack of flexibility in provision
  - Poor/one-way communication between services
  - Silo working
  - Stigma
  - Travel distances
  - A lack of resources for the treatment of some problems
  - Reluctance to treat complex cases or accept mental health treatment requirements
  - Probation staff lacking mental health awareness training
  - Offenders' inability to engage with services
  - Poor relationship between offenders and probation staff

- Positive Experiences:
  - Services with straightforward referral procedures
  - Services which are able to work flexibly
  - Services which are quick and easy to access
  - Services with the time to listen to complex needs
  - Services which explain health problems rather than simply giving a diagnosis

- Negative Experiences:
  - Inadequate provision of alcohol services
  - Frequency of appointments/continuity of care
  - 'Fobbing off' with medication
  - Services being unwilling to accept people with chaotic lifestyles

- Improvements:
  - Co-working cases to improve communication between agencies
  - Providing specialist workers with mental health expertise to probation
  - Expanding provision in some areas e.g. alcohol
  - Reducing waiting lists
  - Increasing flexibility in provision

# Additional Papers (2,3)

- A paper showing that SAPAS the brief measure of personality disorder (just 8 items) we used in our study was as valid in detecting cases as SCID-II from DSM IV (2014)

- Paper on suicide /self harm showing that 25-40% of prisoners have a life-time history of self harm and at high risk of suicide (2014)

# Recent Studies on Suicide (4,5)

- Important paper by Philips et al (2018) and I will present data from this study next. Data is descriptive but most useful. NB All probation suicides in England and Wales are detailed in monthly reports to the MofJ

- Systematic review (Sirdifield et al, 2020) soon to be published in the Journal of Mind and Law which concludes that new models of mental health care were required in probation including a need to look at ‘specialty caseloads and staff’

- There are no reported studies world-wide on interventions to reduce suicide rates in probation services

# Comparison of Suicide Rates: general population, probation and prison (4)

**Table 2** Suicide rate and rate ratio of people dying by suicide under supervision, in prison and in the general population

| Total number of suicides of offenders under supervision (2010/11–2015/16) | Annual suicide rate (offenders in community) / 100,000 | | Annual suicide rate (prisoners) / 100,000 (Fazel et al. 2017) | | Annual suicide rate (general population) / 100,000 aged 30–49 (ONS) |
|---|---|---|---|---|---|
| | Rate | 95% CI | Rate | 95% CI | |
| 1619 | 118 | 99–137 | 83 | 66–100 | 13.6 |

# Suicide rates comparing probationers and the general population by gender

**Table 3** Suicide rate of people under probation supervision compared with suicide rate of people in prison and in general population (2010/11–2015/16)

| Gender | Suicide rate per 100,000 offenders under supervision (2015–16) | | Annual suicide rate Gen pop suicide rate/100,000 aged 30–49 | Rate ratios | |
|---|---|---|---|---|---|
| | Rate | 95% CI | | Supervision/general population rate ratio | Prison/general population rate ratio (Fazel et al. 2017) |
| Men | 105 | 95.2–115 | 18.8 | 5.6 | 3.9 |
| Women | 146 | 115–175 | 5 | 29.2 | 8.9 |

# Suicide in Probation through time

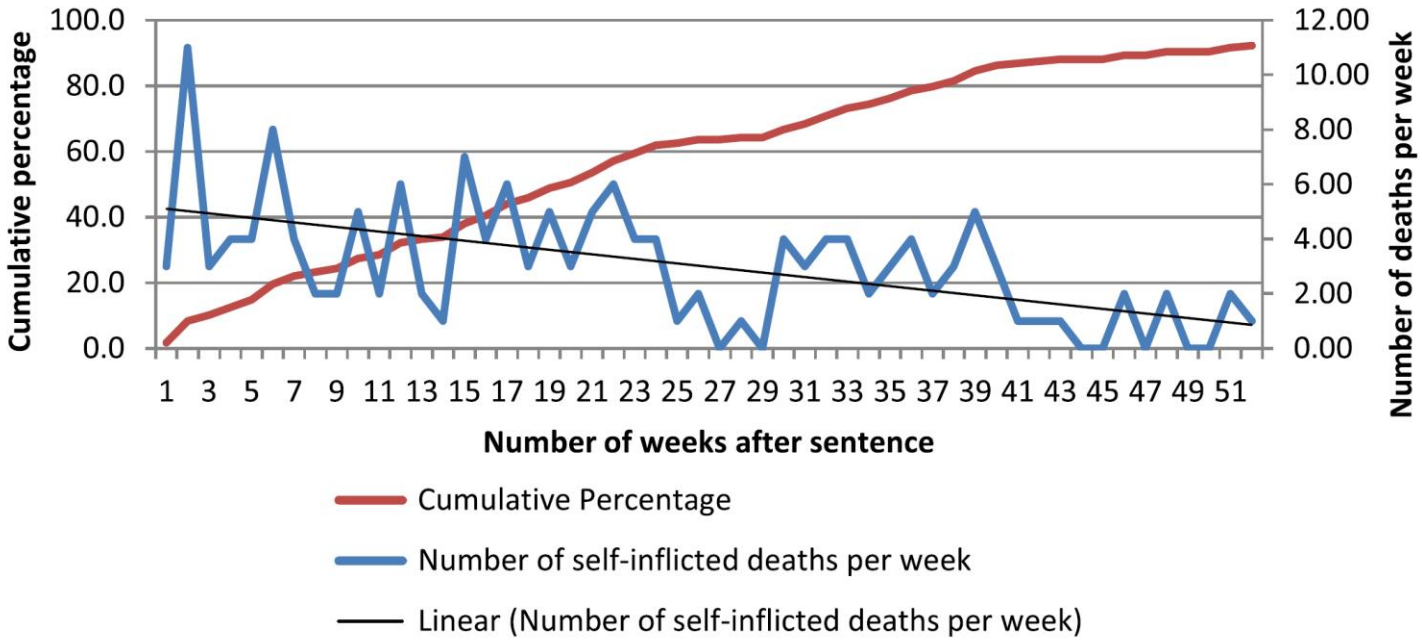



**Fig. 1** Number of deaths per week after sentence and cumulative percentage of self-inflicted deaths, 2015–16

# Other systematic reviews (6,7)

- Mental health (Brooker et al, 2019) only four intervention studies world wide and they were of questionable quality

- Substance Misuse (Sirdifield et al, 2020)

# Systematic review: Substance misuse

- Estimates of the prevalence and complexity of substance misuse in probation populations
- Studies of the effectiveness of approaches to treating substance misuse and engaging and retaining probation populations in treatment.
- A total of 5125 papers were identified in the initial electronic searches, and after careful double-blind review only 31 papers related to this topic met our criteria.
- In addition, a further 15 background papers were identified which are reported.
- We conclude that internationally there is a high prevalence and complexity of substance misuse amongst people on probation.
- Despite clear benefits to individuals and the wider society through improved health, and reduced re-offending; it is still difficult to identify the most effective ways of improving health outcomes for this group

# Probation and healthcare funding (8,9)

- Two studies in England looking healthcare spend on probation.
- Offender health budgets are split in England &Wales (NHS England pays for prison healthcare and Clinical Commissioning Groups pay for probation)
- This leaves obvious difficulties when people are released from prison ‘through the gate’
- However CCGS do not fund much healthcare for probation (see overleaf)

# CCGs and Healthcare Spend

- Despite often having complex health needs, including a higher prevalence of mental health problems, substance misuse problems and physical health problems than the general population, this socially excluded group of people often do not access healthcare until crisis point.
- This is partly due to service-level barriers such as a lack of appropriate and accessible healthcare provision.
- We conducted a national survey of all Clinical Commissioning Groups (CCGs, n = 210) and Mental Health Trusts (MHTs, n = 56) in England to systematically map healthcare provision for this group.
- We compared findings with similar surveys conducted in 2013 and 2014.
- We found that just 4.5% (n = 7) of CCG responses described commissioning a service specifically for probation service clients, and 7.6% (n = 12) described probation-specific elements within their mainstream service provision. Responses from
- 19.7% of CCGs providing data (n = 31) incorrectly suggested that NHS England are responsible for commissioning healthcare for probation clients rather than CCGs.

# Toolkit for Commissioning Healthcare for Probationers

- Our last study, funded by the NIHR, undertook the systematic reviews already referenced in your packs and presented here

- We also surveyed Public Health Depts; Mental Health Services; CCGs, Approved Premises and Probation. This established *inter alia* current healthcare spend

- A commissioning toolkit was also produced in an effort to improve the low level of funding by CCGs see below

- https://probhct.blogs.lincoln.ac.uk/

# New Healthcare Strategy for Probation

- During the course of the latest research that we conducted a new national healthcare strategy was published for probation

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831817/MOJ3131_210658_NPS-Health-and-Social-Care-Stategy-2019-Brochure-v5.pdf

- It's written in terms of the following sub-headings: mental health and well-being; substance misuse; suicide reduction; social care; physical health; learning disabilities and finally the offender personality disorder pathway

- This includes a section on the Offender Personality Disorder Pathway that has been developed since we conducted our prevalence study, and is summarised in an infographic in our Toolkit here: https://cpb-eu-w2.wpmucdn.com/blogs.lincoln.ac.uk/dist/9/8124/files/2019/07/OPD-Pathway.pdf

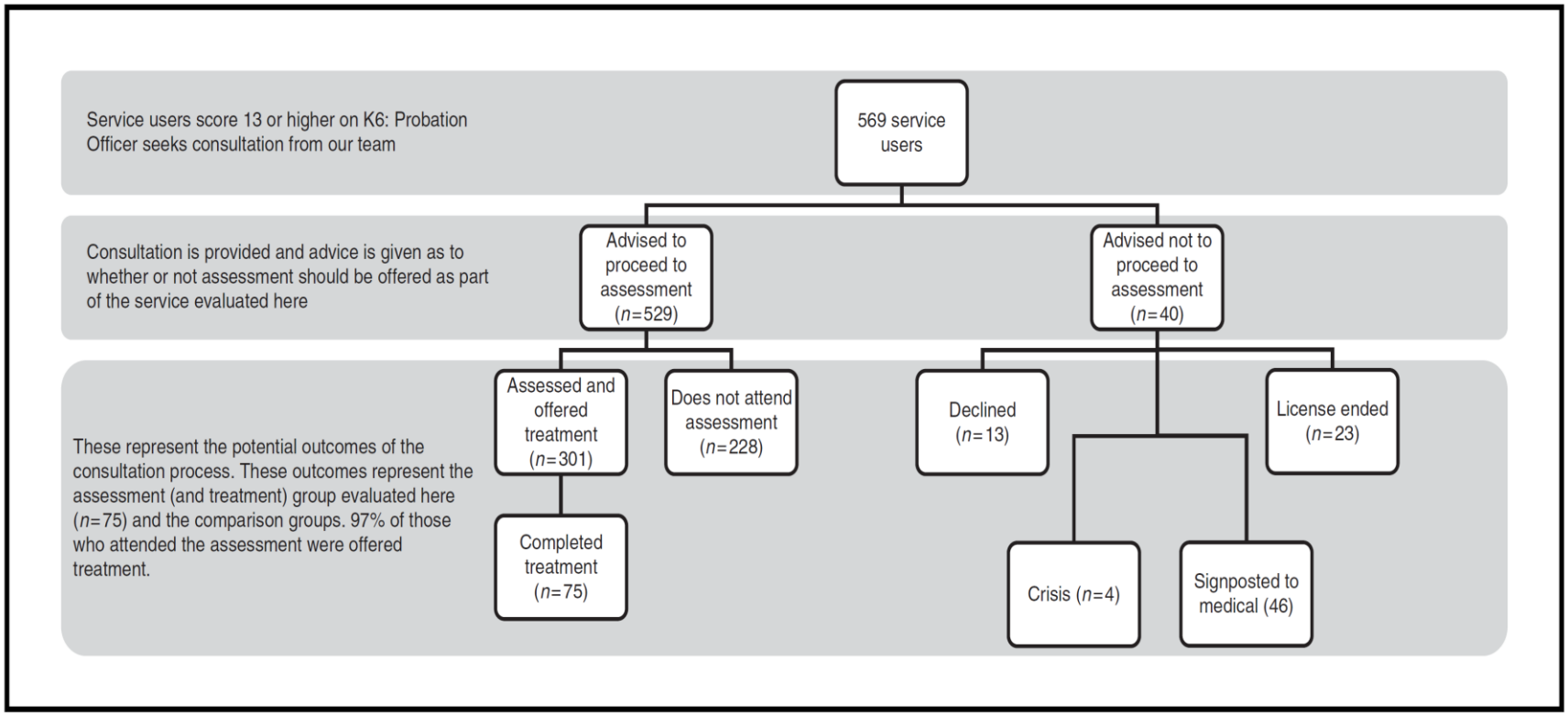
- We have collaborated with this group to put in another bid to develop healthcare indicators for probation

# Recent Study on CBT for Probationers in London with a mental health problem (10)

- Only published in December 2019 by Fowler,J et al (2019)
- Every person in the London Probation service was screened with Kessler-6 (K-6), six items all scored 1-5, if you scored 13 or over offered intervention. The K-6 is a general measure of mental health status.
- The intervention consisted of a ‘manualised’ CBT-type intervention with aimed for emotional regulation (copy right St Andrews)
- The intervention was not offered as part of a Mental Health Treatment Requirement (MHTR)

# Results from the Fowler Study – sample attrition

**Figure 1** Referral throughput numbers



# Pre- and post-intervention results

**Table I** Psychometric results

| *Assessment* | *Pre-mean (SD)* | *Post-mean (SD)* | *Statistical value (pre-post comparison)* |
|---|---|---|---|
| Kessler Psychological Distress Scale (K6) | 22 (3.5) clinically significant $n = 75$ | 14.6 (4.9) clinically significant $n = 41$ | $t = 18.1$ (df1) $p < 0.001$ Cohen's $d = 1.3$ |
| Patient Health Questionnaire-9 (PHQ-9) | 17 (5.8) clinically significant $n = 65$ | 9.2 (6.2) clinically significant $n = 29$ | $t = 11.8$ (df1) $p < 0.001$ Cohen's $d = 1.1$ |
| Generalised Anxiety Disorder 7 (GAD-7) | 14.7 (5.2) clinically significant $n = 65$ | 8.4 (5.2) clinically significant $n = 39$ | $t = 10.5$ (df1) $p < 0.001$ Cohen's $d = 1$ |
| Work and Social Adjustability Scale (WSAS) | 18.2 (10.3) clinically significant $n = 61$ | 11.8 (10.1) clinically significant $n = 37$ | $t = 6.8$ (df1) $p < 0.001$ Cohen's $d = 0.7$ |

# Pre- and post-intervention results (cont)

**Table II** Treatment condition offending rates

| | *12 months pre-treatment mean (SD)* | *12 months post-treatment mean (SD)* | *Statistical value (pre–post comparison)* | *Reliable change index* |
|---|---|---|---|---|
| Treatment condition ($n = 61$) | 1.64 (1.13) | 0.43 (0.9) | $t = 9.3$ (df1) $p < 0.001$ Cohen's $d = 1.02$ | 1.43 |

# Pre- and post-intervention results (cont)

**Table III** Offending rates per condition against treatment

| | *Control condition mean (SD)* | *Statistical value (compared to treatment condition)* | *Reliable change index* |
|---|---|---|---|
| Signposted ($n = 46$) | 0.93 (1.22) | $t = 3.6$ (df1) $p < 0.05$ $d = 0.47$ | 1.55 |
| Declined ($n = 13$) | 0.92 (1.38) | $t = 3.11$ (df1) $p = 0.11$ $d = 0.49$ | 1.35 |
| License ended ($n = 23$) | 0.7 (0.91) | $t = 2.58$ (df1) $p = 0.23$ $d = 0.3$ | 1.33 |
| Crisis ($n = 4$) | 1 (1) | $t = 4.97$ (df1) $p = 0.23$ $d = 0.63$ | 1.22 |
| Advice ($n = 114$) | 0.97 (1.2) | $t = 3.97$ (df1) $p < 0.001$ $d = 0.48$ | 1.22 |

# 2012 EU Survey of Policy for probationers with a mental health problem (11)

- Assisted by CEP Brooker attempted to survey all EU member countries on their policy concerning the mental health of probationers

- There was a poor response with only 8/36 countries replying including: Slovakia, NI, Ireland, Denmark, the Netherlands, Austria, Rumania, and Malta

- Questions were asked about: the overall policy framework, training in MH, prevalence on caseloads, processes for identification and onward referral and the role of probation in providing mental healthcare to probationers.

- The low response rate was disappointing and led to little formal write up of the findings which must be now out of date.This survey should be attempted again

# The Issues Worth Considering

- Recognition and assessment of of mental health problems and suicidality by probation staff
- Healthcare funding for probation where needs are highly complex (dual diagnosis and personality disorder)
- The lack of rigorous research on effective mental health interventions for probationers
- If mental health problems were detectable, but they are complex, how do you develop pathways between probation and mental health services?
- High levels of suicide a significant issue in their own right

# Conclusions

- The evidence base has been systematically reviewed in three main areas: mental health, suicide and substance misuse. We know there is little information, world-wide, on effective mental health/substance misuse interventions

- We have useful descriptive data on the epidemiology of mental health disorders and suicide data from England and Ireland (although, as yet, the data from Ireland is unpublished)

- We also know that healthcare/substance misuse services in probation in England are under-funded and indeed, almost unrecognised by CCGs in England as a ‘need’

- There has been one recent study of a CBT type intervention in London where of 569 people that met screening criteria only 75 completed treatment.