

subgroup and meta-regression analysis across certain covariates (e.g. sex of prisoner). We hypothesise that contemporary estimates of mental disorders are higher than the general population.

Background. Prevalence of mental health problems among prisoners are considerably higher than the general population; this poses an important public health concern. Individuals who require diversion to appropriate psychiatric services are becoming embroiled in the revolving door of the criminal justice system. However, there are no up-to-date reviews assessing prevalence of mental disorders across the general prison population in the UK. This study aims to address this gap.

Method. We conducted a systematic search of PsycINFO (1923 – October 2019), MEDLINE (1946 – October 2019), EMBASE (1947 – October 2019) and Web of Science (all years) of articles reporting prevalence of mental disorders in UK prison populations (PROSPERO registration number: CRD42019132685). The Joanna Briggs Institute (JBI) Appraisal Checklist for Studies Reporting Prevalence Data assessed study quality and bias. Pooled prevalence of each mental disorder was calculated using Stata statistical software 16.0 via the metaprop command. Forest plots present prevalence estimates with study weights and associated 95% confidence intervals (CI). Overall, 20 studies satisfied inclusion criteria, comprising of 12,335 prisoners across England, Wales and Scotland.

Result. We identified higher rates of neurotic disorders (28.9%, 95% CI 0.71–74.7%), personality disorders (23.5%, 95% CI 13.6–35.2%), alcohol (22.7%, 95% CI 12.2–35.1%) and drug dependence (26.7%, 95% CI 15.0–40.4%). The lowest prevalence rates included schizophrenia (2.42%, 95% CI 0.78–4.84%), panic disorders (3.88%, 95% CI 3.17% – 4.64%), adjustment disorders (3.83%, 95% CI 1.19–7.84%) and intellectual disability (2.90%, 95% CI 0.90–5.80%). Meta-regressions for psychotic disorder and personality disorder revealed no significant differences across study year, sample size and gender.

Conclusion. Our prevalence estimates of mental disorders in prisons are higher than the general English population. However, we should acknowledge the influence of considerable heterogeneity. These findings demonstrate the need to quantify current prevalence of mental disorders amongst prisoners in the UK. We recommend for the government to consider performing an up-to-date census of psychiatric morbidity to facilitate service provision.

A review of serious untoward incidents (SUIs) of patients with personality disorder (PD)

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Aims. The aim of this paper is to describe key findings and recommendations of SUI reports regarding patients with a diagnosis of PD in East London NHS Foundation Trust (ELFT). Patients with a diagnosis of PD are often involved in SUIs with regards to risk to themselves or others. Contributing factors might be the nature of their disorder in terms of mood instability and impulsivity, self-harming or antisocial behaviour, and the difficulties posed to assessing clinicians in predicting risk.

Background. Patients with PD present severe challenges to services. SUI findings thus serve as a lightning rod for issues in their management. With the emergence of NICE guidelines for borderline PD [2009] and antisocial PD [2009] regarding risk assessments, there has been greater optimism for management of PDs.

Method. A case series of 50 SUI reports of patients with a diagnosis of PD were identified from the governance and risk management team of ELFT. Themes were categorized as positive practice, contributory factors, and recommendations. Findings are related to guidelines in NICE and RCPsychiatry. Any patient with a diagnosis of PD (of any sub-type) that was involved in a SUI in ELFT met the inclusion criteria. There were no exclusion criteria.

Result. The most frequent themes in positive practice were 'continuity of care' and 'clinical practice'. The most frequent sub-themes in clinical practice were 'assessments' and 'follow-up'. 'Continuity of care' included examples of collaborative working between various teams, as in joint assessments, good communication, and timely referrals. In contributory factors 'poor documentation' was the most frequent theme. 14 reports found no contributory factors. In recommendations the most frequent theme was the need for development and implementation of PD policies and for improved risk management.

Conclusion. NICE guidelines stress the importance of continuity of care and good clinical care and it is commendable that these were findings in positive practice. The importance of documentation being accurate and timely needs underlining in hard pressed time poor clinicians. Services would do well to review PD policies specifically regarding risk management at a wider Trust and local service level. Our findings point to the ongoing need for workforce development as recommended in the RCPsych position statement on PD published in January 2020.

Obsessive-compulsive disorder: does CBT with exposure and response (ERP) prevention work?

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Aims. Since the 1970s treatment for obsessive Compulsive Disorder (OCD) has consisted of the application of drugs acting on the serotonin system of the brain or psychological treatments using graded exposure. Although there is a large number of studies on psychological treatments, they often are underpowered. Other major methodological issues include ignoring the effects of medication during the trial, using a variety of techniques and using waiting list data as controls.

We decided to systematically review and perform a meta-analysis on randomised controlled trials (RCTs) of CBT with ERP (abbreviated to ERP)1.

Method. The study was preregistered in PROSPERO (CRD42019122311). RCTs incorporating ERP were examined. The primary outcome was the end-of-trial symptoms scores for OCD. In addition, factors which may have influenced the outcome including patient-related factors, type of control intervention, researcher allegiance and other potential forms of bias were examined. The moderating effects of patient-related and study-related factors including type of control intervention and risk of bias were also examined.

Result. Overall, 36 studies were included in the analyses, involving 537 children/adolescents and 1483 adults (total 2020 subjects). A total of 1005 received ERP and the remainder a variety of control treatments. Initial results showed that ERP had a large effect size compared with placebo treatments. This was more marked in younger than older persons. However, whereas ERP was markedly more effective than waiting list or psychological control, this positive effect size disappeared when it was compared with other psychological treatments.

When ERP was compared against psychopharmacological treatment it initially appeared significantly superior but this reduced to marginal benefit when compared with adequate doses of appropriate medication.

The majority of studies were performed where there may be expected to be researcher allegiance to ERP and in these studies the effect size was large. In contrast, in the 8 studies considered to have low risk of researcher bias, ERP was found to be ineffective.

Conclusion. Although on initial sight CBT incorporating ERP seems to be highly efficacious in the treatment of OCD, further analysis revealed that this varied depending on the choice of comparator control. In addition there are considerable concerns about methodological rigour and reporting of studies using CBT with ERP. Further studies examining the role of researcher bias and allegiance are needed.

Ref: 1 Jemma E Reid, Keith R Laws, Lynne Drummond, Matteo Vismara, Benedetta Grancini, Davis Mpavaenda, Naomi A Fineberg (2021) Cognitive Behavioural Therapy with Exposure and Response Prevention in the treatment of Obsessive-Compulsive Disorder: A systematic review and meta-analysis of randomised controlled trials. *Comprehensive Psychiatry*, in press.

A clinical significance analysis of manualised psychological interventions for obsessive-compulsive disorder

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Aims. To conduct an individual patient data meta-analysis of randomised controlled trials (RCTs) of manualised psychological treatments for obsessive-compulsive disorder (OCD), and examine the differential efficacy of psychological treatments by treatment type and format.

Background. Previous meta-analyses conclude that efficacious psychological treatments for OCD exist. However, determining the efficacy of psychological treatments requires multiple forms of assessment across a range of indexes, yet most previous meta-analyses in OCD are based solely on effect sizes.

Method. We evaluated treatment efficacy across 24 RCTs ($n = 1,667$) by conducting clinical significance analyses (using standardised Jacobson methodology) and standardised mean difference within-group effect-size analyses. Outcomes were Yale-Brown Obsessive Compulsive Scale (Y-BOCS) scores, evaluated at post-treatment and follow-up (3-6 months post-treatment).

Result. Post-treatment, there was a large significant within-group effect size for treated patients ($g = 1.28$) and a small significant effect size for controls ($g = 0.30$). At follow-up, large within-group effect sizes were found for both treated patients ($g = 1.45$) and controls ($g = 0.90$). Clinical significance analyses indicated that treated patients were significantly more likely than controls to recover following an intervention, but recovery rates were low;

post-intervention, only 32% of treated patients and 3% of controls recovered; rising to 38% and 21% respectively at follow-up. Regardless of allocation, only approximately 20% of patients were asymptomatic at follow-up. Across the different analysis methods, individual cognitive therapy (CT) was the most effective intervention, followed by group CT plus exposure and response prevention. Self-help interventions were generally less effective.

Conclusion. Reliance on aggregated within-group effect sizes may lead to overestimation of the efficacy of psychological treatments for OCD. More research is needed to determine the most effective treatment type and format for patients with OCD.

The neurobiology of attachment and the influence of psychotherapy: a literature review

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Aims. To review the existing scientific literature on the neurobiology of caregiver-infant attachment and the effects of psychotherapy on neurobiological structures. We hypothesised that the therapeutic relationship is a new attachment relationship that can model and re-map neural networks involved in emotional self-regulation.

Understanding attachment is relevant to working with women and families in the perinatal period and has an impact on treatment outcomes. Evolutionary perspectives show that the infant's attachment to the caregiver is important for survival, development of self and relational patterns. Mother's attachment predicts the infant caregiving behaviour in perinatal period and psychotherapeutic interventions at this time have a role in modifying the risk of intergenerational transmission of trauma and further pathological attachment styles.

Method. We performed a MEDLINE search focussing on the past 10 years. Keywords used were attachment, neurobiology and psychotherapy. We included original studies and existing reviews looking at all types of formal psychotherapy used and focussing on human research. Exclusion criteria were non psychotherapeutic interventions and attachment based on couples only.

Result. There has been an increasing focus in the literature on studying the neurobiology of attachment in caregivers and infants both in healthy cases and in psychopathology over the past decade. Existing studies concentrate on care givers, there is growing evidence on the effects of attachment styles on the infant's brain, mostly from animal studies. Some authors looked at the effects of parental childhood trauma on later parenting styles and intergenerational transmission of trauma. A few studies highlighted neurobiological changes as a result of psychotherapeutic interventions in various psychiatric disorders.

Conclusion. There is growing evidence on the neurobiology of attachment focussing on specific neurotransmitters and brain pathways. The modulating effect of psychotherapy has also been studied, albeit with more focus on recovery from psychiatric illness. The literature on neurobiological changes with psychotherapy remains scarce and heterogeneous and further research may be needed in the neurobiology of therapeutic relationship itself as there is increasing recognition that this may be the agent of change, with evidence in the role of linking cortical structures to subcortical limbic systems.