

Comparison of hospitalizations in patients on first generation versus second generation long acting injectable (LAI) antipsychotics

Seemab Rasool* and Paster Venan

Essex Partnership University NHS Foundation Trust

*Corresponding author.

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Aims. There is limited data on the comparison of efficacy between first and second antipsychotic LAIs. One good indicator of efficacy is the rates of hospitalization. Some studies have shown that second generation depot antipsychotics, significantly reduce hospitalizations as compared to conventional depots.

Our aim was to compare hospitalizations in patients on first and second generation LAI antipsychotics.

Method. A retrospective observational study was done by reviewing the records of all the depot clinics in South Essex, United Kingdom. A list of patients enrolled and receiving LAI antipsychotics was obtained from the 6 depot clinics. Data were collected by going through the electronic records of the patients on the depot clinic lists and taking down the demographics, diagnosis and the hospital admissions. Other variables like comorbid drug abuse were also recorded.

Result. Amongst a total of 346 patients 223 (64 %) were males and 123 (36%) were females. Average age was 50.3 (range 21 to 88 years) and 290 (83%) patients were single. An overwhelming majority of patients 299 (87 %) were not in employment. Regarding the diagnosis, the majority, 237 patients were diagnosed with Paranoid Schizophrenia, 49 patients were diagnosed with Schizoaffective disorder, 38 patients were diagnosed with Bipolar affective disorder, 20 patients had a diagnosis of Delusional disorder and only 2 patients had a primary diagnosis of Mental and Behavioral disorders due to substance abuse. Of the total 346 only 17 patients were on a Community treatment Order.

Risperidone was the most commonly used second generation LAI at 26%, Aripiprazole in 10% and Paliperidone was used in 5% patients. Olanzapine LAI was only used in 2 patients. Amongst first generation LAIs Zuclopenthixol, Fluclopenthixol were both used in 24%, and Haloperidol in 10% patients. 21 % of patients were reported to be actively abusing drugs.

65 (32.6%) of the total 200 patients on 1st Generation LAIs had hospital admissions

55 (39.8%) of the total 138 patients on 2nd Generation LAIs had hospital admissions

This difference was not statistically significant (Z test)- P value of 0.082427

Conclusion. The results in our observational study are equivocal, both LAIs providing equitable decrease in the hospital admissions albeit with a slightly favourable outcome (not statistically significant though) attributable to the first generation LAIs. There was a high incidence of unemployment and drug abuse in our cohort of patients, thus targeted interventions can be established in rehabilitation of such individuals.

Quantifying the disorganization and the core deficit in classical schizophrenia

Mohan Rathnaiah¹*, Elizabeth B Liddle², Lauren Gascoyne², Jyothika Kumar², Mohammad Zia Ul-Haq Katshu², Catherine Faruqui³, Christina Kelly³, Malkeet Gill³, Sian Robson², Peter Morris², Mathew Brookes² and Peter Liddle²

¹Institute of Mental Health, University of Nottingham; ²University of Nottingham and ³Nottinghamshire Healthcare NHS Foundation Trust

*Corresponding author.

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Aims. To derive scores for mental disorganization and impoverishment from commonly used rating scales, and test the hypothesis that disorganization and impoverishment, along with impaired cognition and role-function reflect a latent variable that is a plausible candidate for the putative core deficit.

Background. For more than 100 years, disorganization and impoverishment of mental activity have been recognised as fundamental symptoms of schizophrenia. These symptoms may reflect a core brain process underlying persisting disability. Delusions and hallucinations have been regarded as accessory features. The psychopathological processes predisposing to persisting disability in schizophrenia are poorly understood. The delineation of a core deficit underlying persisting disability would be potentially of great value in predicting outcome and developing improved treatment.

Method. Patients aged 18–55 years were included if: they satisfied DSM IV criteria for schizophrenia or schizoaffective disorder. Healthy controls were recruited by public advertisement and selected to match the patient group in age and sex. Study sample included 39 participants with schizophrenia, 1 with schizoaffective disorder and 44 matched healthy controls. We derived disorganization and impoverishment scores from three symptom scales: PANSS, SSPI and CASH. We computed composite scores for disorganization and for impoverishment and employed Confirmatory Factor Analysis to test the hypothesis that a single factor accounts for the relationships between disorganization, impoverishment, cognitive impairment and impaired role function. We assessed the relationship between this latent “core deficit” and diminished Post Movement Beta Rebound (PMBR), an electrophysiological measure from Magnetoencephalography (MEG), associated with persisting brain disorders.

Result. Fit indices for the single factor model from CFA indicated a good fit: $\chi^2(2) = 1.817$, $p = .403$; RMSEA $< .001$ GFI = .979. PMBR was significantly reduced in the schizophrenia group compared to healthy controls, $t(68) = 3.55$, $p < .001$. Within the patient group, PMBR was significantly and negatively correlated with the CFA factor scores representing the Core Deficit score, $r = -.543$, $p < .01$, indicating that high core deficit scores were associated with reduced PMBR. PMBR was significantly correlated with the composite Disorganization score, $r = -.521$, $p < .001$.

Conclusion. Our findings demonstrate that the shared variance between impoverishment (psychomotor poverty); disorganization; cognitive impairment; and impaired role function can be accounted for by a latent variable that can reasonably be described as the core deficit of classical schizophrenia. The demonstration that the severity of the putative core deficit is correlated with the reduction in PMBR provides evidence that the core deficit is associated with an identifiable abnormality of brain dysfunction.

Prevalence of mental disorders in prisons in the UK: a systematic review and meta-analysis

Nivedita Rebbapragada*, Vivek Furtado and George William Hawker-Bond

Warwick Medical School

*Corresponding author.

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Aims. To report pooled prevalence of all mental disorders among the general prison population in the United Kingdom (UK). This includes individuals in Young Offender Institutions (YOI), youth custody and adult prisons across all categories. A secondary aim explores possible sources of heterogeneity by performing

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)

Harry Reid^{1*}, Tennyson Lee², Charlotte James³, William Hancox⁴ and Stefanos Stoikos⁵

¹East London NHS Foundation Trust; ²Centre for Understanding Personality Disorder (CUSP), Deancross Personality Disorder Service, ELFT NHS Foundation Trust; ³East London NHS Trust; ⁴North East London Foundation Trust and ⁵North Kensington and Chelsea CMHT, Central and North West London NHS Foundation Trust, and Centre for Understanding Personality Disorder (CUSP), Deancross Personality Disorder Service, ELFT NHS Foundation Trust
*Corresponding author.

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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?

Jemma Reid^{1*}, Naomi A Fineberg¹, Lynne Drummond², Keith Laws³, Matteo Vismara⁴, Benedetta Grancini⁴ and Davis Mpavaenda¹

¹Hertfordshire Partnership University NHS Foundation Trust; ²South West London and St George's Mental Health NHS Trust; ³University of Hertfordshire and ⁴University of Milan

*Corresponding author.

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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.