Method. This retrospective cohort study was carried out at the Phoenix Care Centre Dublin, Ireland. Informed consent was not sought as this was a retrospective chart study involving anonymised clinical data which was collected as part of routine clinical care and no items of information were reported that would enable the identification of any subject. We described primary outcomes using frequencies, percentages, mean and standard deviations, median and interquartile ranges (IQR). Between groups comparisons were made using x2 tests for categorical variables; t-tests, ANOVA tests, or Kruskal-Wallis tests, for continuous variables; All analyses were two-tailed, and a P-value ≤ 0.05 was considered statistically significant

Result. Over the study period from Jan 2014 to Jan 2017 inclusive, there were 96 admission episodes to the PICU. The mean age of admitted cases was 37.1 (SD = 11.3) years (range 18–63 years). The mean length of stay (LOS) was 59.3 (SD = 61.0) days (median 39.5 days). All patients were admitted under the Mental Health Act legislation. We identified assault as the primary risk factor for pre-admission 62% (n = 62) to the PICU. Antipsychotic polypharmacy was used in 61% (n = 55) of the admission. The mean daily antipsychotic dosage was 139.4 % (SD = 65.1) of BNF maximum daily dose. A diagnosis of acute psychotic disorder (B= -1.027, p = 0.003, 95% CI: –1.691 to –0.363) was associated with reduced LOS in PICU. Majority of admissions 43% (n = 39) had a diagnosis of schizophrenia, followed by Bipolar affective disorder BPAD 21% (n = 21), schizoaffective disorder 18% (n = 18), and acute psychotic disorder 9% (n = 9).

Conclusion. Psychiatric Intensive Care Unit is an essential service for the severely ill psychiatric patients and is a progressively developing sub-speciality. An important finding from our study describes the cohort of patients admitted being predominantly male, younger-aged, single, with a diagnosis of schizophrenia, legally detained, and from an Irish background. The primary indication for a referral is the risk of assault, showing the need for the intensive and secure treatment model that a PICU can provide.

Prevalence and correlates of depressive symptoms among professional drivers in Saudi Arabia: a cross-sectional study

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Aims. Due to the nature of their work, professional drivers face a considerable risk of developing depression and other mental illnesses. We sought to assess the prevalence and the factors influencing depressive symptoms among professional drivers in Saudi Arabia.

Method. Using convenience sampling, we have conducted an interviewer-administered survey on 324 professional drivers in Qassim Region in Saudi Arabia using Depression subscale from the Depression, Anxiety and Stress Scale 21 (DASS-21). Participants were interviewed in their native language, and responses were outlined directly into an online form in English. Data were then extracted and analyzed using SPSS software.

Result. Participants' mean age was 38.6 years, and mean driving hours per day were 9.86 hours/day. The mean DASS-21 depression score among the professional drivers was 2.88. Overall, 21.9% of the included drivers had variable degrees of depressive symptoms, with 7.4% suffered from extremely severe symptoms. Depressive symptoms were influenced by the driver's nationality, educational level, vehicle type, driving years, BMI, presence of chronic medical conditions, physical activity, and sexual activity. Moreover, poor sleep quality increased the risk of developing depressive symptoms among the drivers by 31.9 times (OR: 31.9, CI: 9.03–112.63, P < 0.001).

Conclusion. Nearly one-fifth of professional drivers in Saudi Arabia (Qassim region) suffer from depressive symptoms. Unhealthy lifestyle practices (i.e. being obese and physically inactive) have been closely related to depressive symptoms. Education, sexual activity, type of driven vehicle, and the number of chronic conditions were also associated with depressive symptoms. Also, poor and fair sleep quality was strongly associated with the development of depressive symptoms as compared with excellent sleep quality. As drivers are always on the move and hardly reachable, we would propose psychological support and counseling to be administered via telemedicine services. Future research is needed to better comprehend the needs of this vulnerable population.

Can probiotics benefit young people with autism spectrum disorders?

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Aims. The aims are to evaluate the effectiveness of Probiotics on young people with Autism Spectrum Disorder.

We hypothesized that there will be an improvement of the comorbid gastrointestinal symptoms that can accompany Autism Spectrum Disorder.

We believe that the use of probiotics can exert bidirectional effects on the gut-brain axis which may result in improvements in core Autism symptoms.

Method. A literature search was performed in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. We used databases including OVID MEDLINE, Pubmed, EMBASE, AMED and the Cochrane register of controlled trials. Studies using Probiotics as a treatment for children with ASD were identified by key search terms; Child*, young person*, adoles*, teenagers, ASD, Autism Spectrum Disorder, Autism, Pervasive developmental disorder, PDD, Probiotics, Supplements, Lactobacillus, and Bifidobacterium. Inclusion criteria: Children of age range 2-18 with a diagnosis of ASD and having at least one gastrointestinal symptom were included. Exclusion criteria: The following were excluded: studies looking at Autism with interventions aside from Probiotics; studies where Probiotics were tested in conjunction with other interventions; studies where there were additional neurodevelopmental disorders.

Result. Twelve studies identified all utilized probiotics. This included 7 Randomised Control Trials, 2 Open-Label studies, 1 pre and post-intervention design and 1 Case study. All RCTs gave probiotics or placebo to children.

Ten studies showed an improvement in gastrointestinal symptoms. Six studies showed improvements in various behavioral measures. Four studies showed improvements in core autism symptoms. However, the sample sizes in these studies were not large enough to prove statistical significance.

Conclusion. No studies showed an adverse reaction which indicates probiotics can be considered a safe treatment.

The improvements in a variety of parameters imply probiotics a suitable adjunctive intervention that may help improve ASD core symptoms in young people as well as improving physical and behavioural comorbidities which in some cases was noted by parents.

However, due to high dropout rates and generally small sample sizes, larger-scale trials are needed to critically confirm the efficacy of probiotics for children with ASD.