nitive domains, and in psychosocial functioning as assessed by either rating scales (SLOF and PSP) and performance-based measures (UPSA) at the 4-month time-point.
Conclusions CR improved psychosocial functioning in both group of patients, however, they were more pronounced in TRS patients.
Disclosure of interest The authors have not supplied their declaration of competing interest.

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EW0472

Estradiol production suppressed by prolactin in at-risk mental state and first episode psychosis female patients? Preliminary results

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Introduction Clinical, epidemiological and basic research studies have confirmed that estradiol can have protective effects in schizophrenic psychoses. At the same time many patients with schizophrenic psychoses – even antipsychotic naïve at-risk mental state (ARMS) patients show hyperprolactinemia and gonadal dysfunction with estrogen deficiency in women and possibly testosterone deficiency in men.
Aim To investigate the relation between the stress hormone prolactin and the sex hormones estradiol in women and testosterone in men in emerging psychosis.
Methods Forty-seven antipsychotic-naïve ARMS (38 men and 9 women) and 17 antipsychotic-naive first episode psychosis (FEP) (14 men and 3 women) patients were recruited via the Basel Früherkennung von Psychosen (*FePsy*) study. Blood was taken under standardized conditions between 8 and 10 am after an overnight fast and 30 minutes of rest. We performed a linear regression model to evaluate the association between prolactin and sex hormones including age and current antidepressant use as covariates.
Results In women, estradiol was negatively associated with prolactin ($\beta = -1.28$, $P = 0.01$) whereas in men there was a positive association of testosterone with prolactin ($\beta = 0.52$, $P = 0.031$).
Conclusion The often observed estrogen deficiency in women with psychosis could therefore be explained by the stress hormone prolactin suppressing the gonadal axis already in very early untreated stages of the emerging disease.
In ARMS or FEP men prolactin does not seem to influence the gonadal axis in the same way as in women.
Disclosure of interest The authors have not supplied their declaration of competing interest.

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EW0473

Association between prolactin gene polymorphism (–1149 G/T) and hyperprolactinemia in anti-psychotic treated patients with schizophrenia

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Hyperprolactinemia (HPRL) is a classical side effect of antipsychotic drugs. Extrapituitary prolactin (PRL) production is regulated by an alternative promoter, which contains the functional single nucleotide polymorphism – 1149 G/T (rs134,1239) in prolactin gene. We examined whether this polymorphism is associated with hyperprolactinemia in patients with schizophrenia. The experimental group comprised 443 patients with schizophrenia. The control group comprised 126 healthy persons. The PRL concentration was measured in serum using the AccuBind ELISA Microwells kit. The functional polymorphism – 1149 G/T (rs134,1239) of the *PRL* gene was genotyped using the The MassARRAY® system. Genotype and allele frequencies were compared using χ^2 test. A total of 227 patients suffered from HPRL (98 males/129 females) according to the criteria of hyperprolactinemia. The frequency of genotypes and alleles in patients with schizophrenia did not differ from those in control subjects. A comparison between patients with schizophrenia with and without hyperprolactinemia revealed that the frequency of *G* allele in patients with hyperprolactinemia is significantly higher than in patients without hyperprolactinemia ($\chi^2 = 7.25$; $P = 0.007$; OR = 1.44 [1.10–1.89]). Accordingly, the genotype *GG* was found to be more often in patients with hyperprolactinemia than without it ($\chi^2 = 9.49$; $P = 0.009$). A significant association of the polymorphic variant rs134,1239 with the development of hyperprolactinemia in patients with schizophrenia treated with anti-psychotic drugs was revealed. Therefore, the serum concentration of prolactin in antipsychotic treatment patients with schizophrenia may also give an indication of the activity of gene regulating extrapituitary prolactin expression.
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EW0474

Changing the obesogenic environment to improve cardiometabolic health in residential patients with a severe mental Illness: ELIPS, a randomized controlled trial

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Introduction The life expectancy of severe mentally ill (SMI) patients is shortened up to 30 years, due to cardiometabolic diseases, partly caused by unhealthy lifestyles behaviors. In residential facilities, adopting a healthy lifestyle is hampered by the obesogenic environment; an obesity promoting environment.
Objective To determine, the effectiveness of a 12 month lifestyle intervention addressing the obesogenic environment to improve cardiometabolic health of SMI residential patients.
Methods The effectiveness of lifestyle interventions in psychiatry (ELIPS) trial is a multi-site, cluster randomized controlled pragmatic trial. Twenty-nine sheltered and long-term clinical care teams serving SMI patients in the Netherlands were randomized