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Aims. The prevalence of emotional problems, such as depressive and anxiety disorders, increases sharply during adolescence. There is evidence for familial clustering of mental health problems during early childhood and adulthood, however no studies have investigated whether adolescent mental health problems cluster within families. This study tests the hypotheses that i) emotional problems during adolescence cluster within families, and that ii) conduct, peer and hyperactivity problems, prosocial behaviour and overall emotional and behavioural difficulties during adolescence also cluster within families.

Methods. We used cross-sectional data from a nationally representative survey of UK households, collected between 2019 and 2021, with 4,088 participants aged 10–16 years. Analyses included 1,241 participants who had complete outcome data and complete data on all covariates of interest. The Strengths and Difficulties Questionnaire (SDQ) was used to examine emotional problems, as well as conduct, peer and hyperactivity problems, prosocial behaviour and total difficulties. Multilevel modelling was used to: estimate clustering of i) emotional problems and ii) conduct, peer and hyperactivity problems, prosocial behaviour and total difficulties, within families, after adjusting for several individual- and family-level covariates associated with adolescent mental health problems (including individual and family demographics, school and sibling bullying, quality of parent-child relationship, parent mental health and parent romantic relationship satisfaction).

Results. After adjusting for known covariates of adolescent mental health problems, there was substantial clustering of adolescent emotional problems (ICC: 0.439; CI^{95%}: 0.36–0.52; SE: 0.042) and overall adolescent emotional and behavioural difficulties (ICC: 0.417; CI^{95%}: 0.34–0.50; SE: 0.043) within families. There was also evidence of clustering of adolescent peer problems (ICC: 0.374; CI^{95%}: 0.28–0.48; SE: 0.051), hyperactivity (ICC: 0.332; CI^{95%}: 0.25–0.42; SE: 0.044), prosocial behaviour (ICC: 0.263; CI^{95%}: 0.18–0.37; SE: 0.048) and conduct problems (ICC: 0.232; CI^{95%}: 0.14–0.35; SE: 0.053) within families after adjustment.

Conclusion. We found strong evidence that adolescent emotional problems cluster within families even after accounting for individual- and family-level covariates which are associated with adolescent mental health problems. Over 40% of the variation was accounted for at the family level. This indicates how the contextual characteristics of the family environment may influence the mental health of young people. As such, social policy aiming to prevent or improve the mental health of young people should focus on family context.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Role of Parental Supervision on Digital Screen Use and Its Effects on Children's Mental Health and Wellbeing in Bangladesh: A Cross Sectional Study

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Aims. The younger generation of today is highly dependent on digital technologies worldwide. Studies on young children's cognitive and socio-emotional development have shown that there can be conflicting effects from using screen-based media or from exposing them to it. The study explored the relation between unsupervised use of digital screen time with student mental health and behavioral problems.

Methods. It was a cross sectional descriptive study approached primary and secondary school going children from grades 2–8 (age 6 to 14 years), purposively selected six schools consist of three English and Bangla medium schools from Dhaka city. A total of 420 students along with their parents were enrolled by clustered random sampling. Study explored the effect of the unsupervised screen time on student mental health and social wellbeing through semi structured questionnaires, Strength and Difficulties Questionnaire (SDQ), Pittsburgh Quality of Sleep Scale (PSQI), Spencer Children Anxiety Scale (SCAS) and Development and Wellbeing Assessment Scale (DAWBA).

Results. Students used various forms of digital screens for 4.6 hours every day, and 56% of them used these devices without parental supervision or monitoring. English Medium students spend significantly more time on screens on a daily average (5.5 hours) compared with students at Bangla Medium schools (3.7 hours). 21.2% students had mental health concern, this percentage was higher in the unsupervised group (56.2%) than in the supervised group (43.8%). In the unsupervised group, students experienced higher levels of emotional difficulties (15.7%), behavioral difficulties (28.3%), hyperactivity behavior difficulties (17.4%), peer relations difficulties (28.8%), and pro-social behavior difficulties (6.7%) compared with supervised group. 83.3% of students in the supervised group found higher levels of anxiety compared with the unsupervised group (16.7). In the unsupervised group, 15.4% of the students had experienced sleeping problems, compared with 14% in the supervised group.

Conclusion. These results suggest an impact of unsupervised screen time on the prevalence of mental health problems among students. Appropriate screen usage may be a major intervention target to improve children's mental health and wellbeing.

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A Systematic Review of Estrogen Modulators as Augmentation to Antipsychotics for the Treatment of Post- and Perimenopausal Psychosis

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Aims. To investigate if estrogen agents as an adjunct to anti-psychotic medication are effective at treating psychosis in post- and perimenopausal females.

Methods. A digital search focusing on controlled clinical trials was conducted. Studies were assessed for quality using the Cochrane Risk of Bias tool and GRADE system. The Joanna

Briggs Institute (JBI) tools were used to critically appraise articles. The total Positive and Negative Symptom Scale (PANSS) scores were synthesised using a meta-analysis.

Results. Of the studies obtained ($n = 11$), two used estrogen HT as an augmentation agent, and nine used the SERM Raloxifene. Quality review and critical appraisal found inconsistencies in data and publication bias favouring trials that include Raloxifene. Meta-analysis results indicate Raloxifene plus antipsychotic did perform better than placebo [Std diff in means total = 0.340 (95% CI) $p = 0.001$] with a small effect size ($g = 0.3392$).

Conclusion. Though research appears promising, recommendations for the use of estrogen agent augmentation cannot be made at this time as more clinical trials that include a diverse range of treatments are needed.

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The Impact of Rare Copy Number Variants on Real-World Functional Outcomes in Individuals With Psychosis

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Aims. Individuals with psychosis experience impairments in real-world functional outcomes such as employment and health. Rare copy number variants (CNVs) are established risk factors for psychosis, neurodevelopmental disorders and cognitive impairment. However, little is known about their effect on real-world functional outcomes in individuals with psychosis.

I aimed to establish the effect of rare neurodevelopmental CNVs on real-world functioning in individuals with psychosis.

Methods. I identified 1,932 individuals with psychotic disorders (ICD-10 F20–F29) in the UK Biobank using first-occurrence data (from primary care, hospital inpatient and death register records and self-reported conditions). I mapped UK Biobank data to two domains of real-world functional outcomes – health deficits and vocational outcomes. We previously called CNVs using PennCNV, annotating them with 53 CNVs associated with autism spectrum disorder and developmental delay. I conducted regression analyses with neurodevelopmental CNVs as the predictor, real-world functioning as outcomes and with relevant covariates (e.g. age and sex).

Results. Out of 1,932 individuals with psychotic disorders, 2.5% ($n = 49$) carried a neurodevelopmental CNV.

Health Deficits

I used first-occurrence diagnosis data to establish comorbid psychiatric diagnoses. I summed these diagnoses and dichotomised them into one or more comorbid diagnoses versus no comorbid psychiatric diagnoses. I conducted a logistic regression analysis – neurodevelopmental CNV carrier status was associated with having at least one psychiatric diagnosis in addition to a psychosis diagnosis (OR 2.1, 95% CI 1.1 - 4.1, $p = 0.034$). Post-hoc analyses revealed an increased rate of dissociative and conversion disorders in CNV carriers (OR 4.5, 95% CI 1.26 - 15.99, $p = 0.021$).

I used first-occurrence physical health diagnosis data to establish the burden of the 20 most prevalent chronic non-cancer

illnesses. Neurodevelopmental CNV carrier status was associated with chronic physical health multimorbidity in individuals with psychosis (59.2% vs 43.5%, OR 2.30, 95% CI 1.27–4.17, $p = 0.006$), defined as the presence of two or more chronic physical health conditions.

Vocational Outcomes

I conducted an ordinal regression analysis, establishing that among individuals with psychosis, CNV carriers had a lower likelihood of achieving a higher qualification (OR 0.45, 95% CI 0.27–0.77, $p = 0.003$).

Conclusion. Neurodevelopmental CNVs are associated with important real-world functional outcomes in individuals with psychosis. This work provides information that can guide the assessment and management of individuals with both psychosis and neurodevelopmental CNVs.

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Phenomenology of Mood Disorders in Children and Adolescents

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Aims. Psychiatrists frequently diagnose mood disorders in children. However, there is a limited understanding of clinical history and phenomenology of mood disorders in these phases of lifespan, and phenomenological variations in those with and without neurodevelopmental disorders (NDD). The primary objective of the study was to study, comparatively, the phenomenology in children clinically diagnosed with mania, depression and mixed affective disorder. The second objective was to study the phenomenological differences in diagnosed cases of mood disorder children with and without neurodevelopmental disorders.

Methods. We conducted a semi-qualitative study of the clinical history and phenomenology in 120 children recruited from a tertiary care child and adolescent psychiatry service. Children with current diagnosis of depression, mania or mixed affective state, age less than 18 years, and appropriate consent/assent were included. Children with comorbid neurological disorders, any underlying organicity, or those currently in remission from their mood episode were excluded. Descriptive summaries were calculated for socio-demographic, clinical and phenomenological data. Chi Square test was used to examine statistical differences in prevalence of various phenomena across the clinical diagnostic groups.

Results. The most common clinical diagnosis was depression (58.3%) followed by mania (25.8%) and mixed affective state (15%). Irritable mood and emotional dysregulation were equally distributed among the three diagnostic groups. With a high prevalence of comorbid NDDs in the sample, we compared phenomena between groups with and without NDDs. In cases of depression, suicidal ideas and guilt feelings were expressed in 61% and 80% of these participants without comorbid NDD ($n = 45$) respectively, which was significantly high as compared with those with NDD ($n = 67$). The symptoms of disinhibition (78.9%), impulsivity