

from the clinical care than participating TP group (48 % vs 30 %,  $p=0.01$ ). NTP group had also higher rate of dropping out of clinical treatment mainly because of patient non-adherence (33 % vs 16 %,  $p=0.03$ ).

**Discussion:** Nearly half (47 %) of the intent-to-study FEP patients were not reached or declined to participate in our study. Non-participating patients had a slightly more severe illness and poorer treatment adherence during one-year follow-up. The clinical differences were not as marked as we expected. E.g. involuntary care, inpatient care and more coercion during the follow-up were not significantly different between NTP and TP groups. Nevertheless, the data suggest considerable differences between participating and non-participating patients with first-episode psychosis which should be taken in to account when evaluating the generalizability of the results for an unselected group of psychotic patients in 'real-life' clinical care.

### S133. DIAGNOSED SPEECH, SCHOLASTIC AND MOTOR DISORDERS AS PREDICTORS FOR NON-AFFECTIVE PSYCHOSES

David Gyllenberg<sup>\*1</sup>, Bianca Arrhenius<sup>1</sup>, Auli Suominen<sup>1</sup>, Andre Sourander<sup>1</sup>

<sup>1</sup>University of Turku

**Background:** Premorbid cognitive impairments are associated with schizophrenia, but little is known about the risk of developing psychoses among children with diagnosed speech, scholastic and motor disorders. Our aim was to study if children diagnosed with these are at increased risk of non-affective psychoses in adolescence and early adulthood.

**Methods:** We identified all children born 1996–2001 that were diagnosed with a speech disorder (ICD-10 code F80), scholastic disorder (F81), motor disorder (F82) or mixed developmental disorder (F83) before age 15 in outpatient and inpatient specialized services in Finland by using nationwide registers ( $n=17,038$ ). A control cohort of children without these disorders was identified ( $n=63,745$ ). The outcome was non-affective psychoses (F20-F29) diagnosed between age 15 years and the end of year 2017 (maximum age at end of follow-up: 16.0–21.9 years). We used Cox regression to study the association between speech, scholastic and motor disorders and psychoses and adjusted for sex, urbanicity and comorbid depression and conduct disorders.

**Results:** A total of 216 and 251 subjects were diagnosed with non-affective psychoses during follow-up in the cohort of speech, scholastic and motor disorders and the control-cohort, respectively. The cumulative incidence of psychoses from age 15.0 to 21.9 years was 2.4 % (95% confidence interval [CI] 2.0 - 2.8 %) in the cohort of speech, scholastic and motor disorders compared to 0.8 % (95% CI 0.7 % - 1.0 %) in the control-cohort (adjusted hazard ratio [aHR] 2.6, 95% CI 2.2 - 3.2). When stratified by a pure or a combination of at least two speech, scholastic and motor disorders, all categories were significantly associated with psychoses with the highest HR for motor disorders (aHR 3.6, 95% CI 2.0 - 6.4), followed by the combination of different speech, scholastic and motor disorders (3.3, 2.4 - 4.4), pure scholastic disorders (2.4, 1.5 - 3.7) and pure speech disorders (1.7, 1.2 - 2.6).

**Discussion:** Non-affective psychoses in late adolescence and early adulthood are associated with speech, scholastic and motor disorders diagnosed in childhood, in particular motor development disorders.

### S134. INCIDENCE, IMPACT AND TRAJECTORIES OF PSYCHOTIC EXPERIENCES FROM CHILDHOOD TO ADULTHOOD, AND PREDICTION OF PSYCHOTIC DISORDER

Stanley Zammit<sup>\*1</sup>, Jon Heron<sup>2</sup>, Alexandros Rammos<sup>1</sup>, Hannah Jones<sup>2</sup>, Daphne Kounali<sup>2</sup>, Sarah Sullivan<sup>2</sup>, Jazz Croft<sup>2</sup>, Mary Cannon<sup>3</sup>, Anthony David<sup>4</sup>, Paul Fletcher<sup>5</sup>, Peter Holmans<sup>1</sup>, Peter Jones<sup>5</sup>, David Linden<sup>1</sup>, Glyn Lewis<sup>6</sup>, Michael Owen<sup>1</sup>, Michael O'Donovan<sup>1</sup>, Andrew Thompson<sup>7</sup>, Dieter Wolke<sup>7</sup>

SIRS 2020 Abstracts

<sup>1</sup>Cardiff University; <sup>2</sup>University of Bristol; <sup>3</sup>Royal College of Surgeons in Ireland; <sup>4</sup>UCL Institute of Mental Health; <sup>5</sup>University of Cambridge; <sup>6</sup>University College London; <sup>7</sup>University of Warwick

**Background:** Given the global burden of disease of psychotic disorders and the promise of benefit from early intervention, there is an imperative to understand the developmental trajectories from onset of psychotic experiences to clinical disorder and to improve identification of individuals at greatest risk.

The aims of this study therefore were: 1) to describe, for the first time, the change in incidence of psychotic experiences in the general population from childhood through early adulthood; 2) to describe the prevalence and burden of unmet clinical need of at-risk mental states and psychotic disorder among young adults in the general population; 3) to examine the predictive ability of both self-reported and interviewer-rated measures of psychotic experiences during childhood and adolescence in identifying psychotic disorder by early adulthood; and 4) to describe longitudinal profiles of psychotic experiences from childhood through early adulthood and investigate a comprehensive range of childhood determinants of symptom persistence.

**Methods:** We used data from the ALSPAC birth cohort study. Psychotic experiences and disorder were assessed using semi-structured interviews at ages 12, 18, and 24 ( $N=7,900$  with any data). Incidence rates were estimated using flexible parametric modeling, and positive predictive values (PPVs), sensitivity, specificity, and area under the curve were estimated for prediction. Longitudinal profiles were constructed based on interviewer ratings and frequency of experiences, with profiles describing no experiences (62.5%), episodic experiences (26.5%), persistent/recurrent low frequency (9.1%), and persistent/recurrent high frequency (1.9%) groups. Multinomial regression was used to examine risk factors for persistence, covering socio-demographic, genetic, behavioural, cognitive, and psychological characteristics during childhood.

**Results:** The incidence rate of psychotic experiences increased between ages 12 and 24, peaking during late adolescence. A total of 109 individuals (2.8%) met criteria for a psychotic disorder up to age 24, of whom 70% had sought professional help. Prediction of current psychotic disorder at age 24 ( $N=47$ , 1.2%), by both self-report and interviewer-rated measures of psychotic experiences at age 18 (PPVs, 2.9% and 10.0%, respectively), was improved by incorporating information on frequency and distress (PPVs, 13.3% and 20.0%, respectively), although sensitivities were low. The PPV of an at-risk mental state at age 18 predicting incident disorder at ages 18–24 was 21.1% (95%CI 6.1, 45.6), and the sensitivity was 14.3% (95%CI 4.0, 32.7).

Longitudinal profile analysis showed that persistence was highest in those with higher levels of emotional instability and borderline personality traits in childhood, whilst persistence was strongly related to concurrent and increasing levels of social isolation, anxiety, self-harm, and substance use over time.

**Discussion:** Our study results show a peak in incidence of psychotic experience during late adolescence just prior to the peak incidence rate for schizophrenia, and an unmet need for care in young people with psychotic disorders. Although we show the potential efficiency of self-report measures for prediction, because of the low sensitivity, targeting individuals in non-help-seeking samples based only on more severe symptom cutoff thresholds will likely have little impact on population levels of first-episode psychosis. The primary characteristics indexing whether psychotic experiences are likely to persist over time is the presence of emotion regulation difficulties in childhood, providing evidence of a potentially modifiable target for prevention.

### S135. EXPOSURE TO COMMON INFECTIONS AND RISK OF SUICIDE AND SELF-HARM – A LONGITUDINAL GENERAL POPULATION STUDY

Maija Lindgren<sup>\*1</sup>, Minna Holm<sup>1</sup>, Niina Markkula<sup>2</sup>, Tommi Härkänen<sup>1</sup>, Faith Dickerson<sup>3</sup>, Robert H. Yolken<sup>4</sup>, Jaana Suvisaari<sup>1</sup>