Abstracts

unclear. In England and Wales, 7.6% infants are born before 37 weeks gestation; this is higher (16.2%) among those of South Asian ethnicity. We examined PCHI risk by age 11 years in a prospective UK-wide cohort of children born before UNHS. We tested the hypothesis that lower gestational length is associated with higher PCHI risk after adjusting for NICU/SCBU admission and ethnicity.

Methods PCHI risk (cumulative incidence) was based on parental report of hearing impairment and associated treatment at ages nine months, three, five, seven and 11 years for 19,518 children participating in the Millennium Cohort Study. The association of PCHI (defined by provision of hearing aids/cochlear implants, persisting hearing impairment at final report, and absence of glue ear) with gestational length was investigated using multivariable discrete-time survival analysis, adjusting for NICU/SCBU admission, ethnicity and other confounding factors, and weighting for survey design (Stata: Release 14; StataCorp LP).

Results Parents reported no health problems in the first week after birth in 10,247 (52.4%), children, neonatal illness without NICU/SCBU admission in 6781 (38.0%), and NICU/SCBU admission in 1785 (9.6%). PCHI was ascertained in 44 children by age 11 years. PCHI risk was 1.0 per 1000 children (95% CI: 0.6–1.6) by age 9 months, rising by age five to 1.5 (1.0–2.2) and by age 11 to 2.1 (1.5–3.0). PCHI risk by age 11 was not associated with gestational length (hazard ratio (HR): 1.00, 95% CI: 0.98–1.03), but was associated with parental report of neonatal illness with or without NICU/SCBU admission (HR: 6.33; 2.27–17.63 and 2.62; 1.15–5.97, respectively) and Bangladeshi or Pakistani ethnicity (HR: 2.78; 1.06–7.31).

Conclusion In this cohort, born before UNHS, PCHI risk was highest in infancy. Neonatal illness, irrespective of NICU/SCBU admission, and not gestational length, increased PCHI risk by age 11 years. Further research should explore the observed increased PCHI risk in children of Bangladeshi or Pakistani ethnicity, and the relevance for UNHS of PCHI with onset or diagnosis after infancy.

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P20 CUMULATIVE EFFECT OF ADVERSE CHILDHOOD EXPERIENCES ON AFFECTIVE SYMPTOM TRAJECTORIES IN ADULTHOOD: EVIDENCE FROM A BRITISH BIRTH COHORT

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Background Previous studies have shown that specific types of adverse childhood events (ACEs), such as parental divorce and parental psychopathology, pose a risk for the development of affective symptoms in adulthood (AS). However, a majority of this evidence is based on single types of retrospectively reported ACEs. This is problematic as ACEs tend to be interrelated and often co-occur.

Methods We used the data from the MRC National Survey of Health and Development (NSHD). This is an ongoing longitudinal study of 5362 women and men who were born in Britain in 1946. Later life AS were measured using the General Health Questionnaire (GHQ) at ages 53 y, 60–64 y and 69.

Multiple imputation was implemented on each ACE predictor and a cumulative risk index was derived though summing the number of adversities experienced by each participant (0, 1, 2, 3…20) before age 16 y. The effect of cumulative ACEs on AS at each time point (53, 60–64 and 69) was examined using linear regression.

Results Preliminary analyses revealed a significant association was found between cumulative ACEs and AS at ages 60–64, β(1, 2183)=0.07, p=0.002, and 69, β(1, 2110)=0.07, p=0.003, but not age 53 β(1, 2900)=0.04, p=0.058. Further to this growth mixture modelling will be used to model latent trajectories of AS between age 53 and 69 years and the effect of cumulative ACEs will be examined.

Discussion These findings will be presented in light of the growing evidence for the negative effects of ACEs on health and wellbeing in later life. Furthermore, we will discuss how