Her renal biopsy showed a crescentic glomerulonephritis with the characteristic features of acute phase, PSGN along with acute tubular injury. She had an increased ASO titre and antiDNAase level. Her initial C3 was low, with normal C4 confirming PSGN. Her renal function improved on dialysis.

Though the acute kidney injury has improved, she continues to have proteniuria, and is on antihypertensive medication. However, her haemolytic anaemia has resolved completely.

Discussion The combination of AIHA and PSGN is very rare, to our knowledge this might be the first reported case in UK A cross reaction between antibodies induced by streptococcal infection against the red blood cells has been described as a possible mechanism. Both streptolysin O antigen and NAD–glycohydrolase (NADase) may play a role in causing haemolysis.

Intravascular haemolysis resulting in haemoglobinuria could aggravate the acute kidney injury, hence the importance of recognising this association.

Our patient's haemolytic anaemia improved along with her renal recovery.

Conclusion In children presenting with severe anaemia in the context of PSGN, the possibility of AIHA must be considered.

## Paediatric Mental Health Association and British Association for Child and Adolescent Public Health and Ethics and Law Forum

G491

TRENDS IN HEALTH AT THE BEGINNING OF ADOLESCENCE IN THE UK: EVIDENCE FROM TWO BIRTH COHORTS 30 YEARS APART

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10.1136/archdischild-2015-308599.444

Aims To compare the health of contemporary young adolescents with their historical peers. We sought to understand changes in patterns of injuries, non-communicable conditions, infectious diseases and health service use; and to examine the effects of increasing income disparities in Britain over the past 30 years on changes in the social patterning of health between the two cohorts.

Methods Secondary analysis of the 10–11 year surveys of the British Cohort Study (in 1980–81) and the Millennium Cohort Study (in 2012). The prevalence of, and socioeconomic gradients in, the following were compared; general health problems, body mass index, height and weight z scores, allergic conditions, infectious diseases, health service use, smoking and parental smoking behaviour, and maternal adiposity.

Results As shown in Table 1, there were decreases in hospital admissions, smoking, parental smoking, infectious diseases, hearing problems and bed wetting. There were no changes in limiting long standing illness, or the proportion of children having 2 or more accidents requiring medical attention. There were increases in overweight and obesity, height for age, weight for age, chicken pox, allergic conditions and wearing glasses.

There were notable socioeconomic gradients in many health outcomes in the BCS cohort (1980) and the MCS cohort (2012), as shown in Table 2. There was a stronger socioeconomic gradient for most health outcomes in 2012 compared to 1980, with significant increases in social gradients observed for many outcomes.

Conclusions There have been reductions in infectious diseases and tobacco exposure amongst British children at the cusp of adolescence, but overweight and atopic conditions have risen dramatically. Social gradients in health increased across most conditions. Children from deprived families have benefitted least from improvements in health status, and have experienced the largest increases in health risks.

G492

HEALTH IN ADOLESCENCE INFLUENCES EDUCATIONAL ATTAINMENTS AND LIFE CHANCES: LONGITUDINAL ASSOCIATIONS IN THE LONGITUDINAL STUDY OF YOUNG PEOPLE IN ENGLAND (LSYPE)

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10.1136/archdischild-2015-308599.445

Aims Education is recognised as a social determinant of health with poor academic attainment linked to poorer health. Reverse causal pathways have been largely overlooked. Likewise, exploration of risk factors for youth unemployment have rarely examined the impact of poor adolescent health. This study longitudinally examines causal pathways from poor adolescent health to low academic attainment and unemployment in young adulthood.

Methods We used nationally-representative data from the Longitudinal Study of Young People in England (LSYPE; Wave 1, age 13 N=15,770). Having a chronic condition, poor mental health and poor self-reported general health were assessed between ages 13 and 15. Outcome variables included poor academic performance (non-attainment of expected academic proficiency based on mandated school examinations) at age 16 and NEET status (not in education, employment or training) at age 19. We examined associations between health and subsequent outcomes, and conducted mediator analyses to assess the proportion of the association attributable to hypothesised mediators including school absences, classroom behaviour, truancy, social exclusion, health behaviours and psychological distress.

Results Poor mental and general health and long-term conditions predicted low educational attainment at age 16. Poor mental health and poor general health (but not long-term conditions) predicted unemployment. Social exclusion was a consistent mediating variable. Long-term absences mediated associations between general health and mental health and later outcomes whereas school behaviour, truancy and substance use were significant mediators for general health and mental health.

Conclusion Poor adolescent health disrupts educational and employment pathways. Due to the economic and social costs of educational underachievement and unemployment, policy interventions should focus on improving outcomes for unhealthy adolescents.