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 proteinuria, 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

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

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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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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.

Abstract G491 Table 1 Proportions of children with comparable health outcomes in the British Cohort Study (1980/81) and the Millennium Cohort Study (2010–11)

	BCS – 1980			MCS - 2011		
	proportion	95% C.I	n	proportion	95% C.I	n
Bed wetting	0.10	[0.10;0.11]	13504	0.05	[0.05;0.06]	13472
Limiting longstanding illness or disability	0.08	[0.07;0.08]	13554	0.08	[0.07;0.08]	13467
Has child ever been admitted to hospital	0.23	[0.23;0.24]	13494	0.14	[0.13;0.15]	13497
More than 2 accidents requiring medical attention	0.13	[0.12;0.13]	13245	0.11	[0.11;0.12]	13462
Have you ever tried a cigarette	0.14	[0.14;0.15]	12615	0.02	[0.02;0.03]	13384
Do any of your friends smoke	0.16	[0.16;0.17]	12568	0.05	[0.04;0.05]	12240
Child Overweight or Obese	0.08	[0.08;0.09]	12160	0.26	[0.25;0.27]	13433
Child Underweight	0.02	[0.02;0.02]	12160	0.01	[0.01;0.01]	13434
Weight for age Z score (mean)	-0.16	[-0.17;-0.15]	12254	0.52	[0.50;0.54]	13434
Height for age Z score (mean)	-0.18	[-0.19;-0.17]	12531	0.29	[0.26;0.31]	13662
Does child wear glasses	0.11	[0.10;0.11]	13453	0.19	[0.18;0.20]	13497
Ever had hearing problems	0.13	[0.12;0.13]	13678	0.09	[0.08;0.09]	13497
Ever had hay fever	0.10	[0.10;0.11]	13251	0.25	[0.24;0.26]	13461
Ever had Asthma	0.05	[0.05;0.05]	12833	0.17	[0.17;0.18]	13465
Ever had Eczema	0.13	[0.12;0.13]	13227	0.32	[0.31;0.33]	13466
Does child have a stammer or stutter	0.02	[0.02;0.02]	13001	0.01	[0.01;0.01]	13472
Ever had measles	0.50	[0.49;0.51]	12894	0.04	[0.04;0.05]	13096
Ever had chicken pox	0.63	[0.62;0.63]	13218	0.90	[0.90;0.91]	11232
Ever had whooping cough	0.08	[0.08;0.09]	12916	0.02	[0.01;0.02]	13332
Any evidence of puberty	0.15	[0.15;0.16]	12981	0.56	[0.55;0.57]	13497
Visited the dentist in the last 12 months	0.90	[0.90;0.90]	13447	0.93	[0.92;0.93]	13472
Mother Overweight	0.25	[0.24;0.25]	13256	0.47	[0.45;0.49]	10262
Mother Obese	0.06	[0.06;0.06]	13256	0.18	[0.17;0.19]	10262
Does mother currently smoke	0.41	[0.41;0.42]	13421	0.22	[0.21;0.23]	13774
No. of cigarettes mother smokes daily (mean)	16.37	[16.18;16.57]	5313	11.81	[11.49;12.13]	2968
Does Father currently smoke	0.56	[0.55;0.56]	12771	0.20	[0.19;0.21]	9502
No. of cigarettes father smokes daily (mean)	20.11	[19.86;20.35]	5428	13.30	[12.80;13.80]	1815

Abstract G491 Table 2 Odds ratios for the health outcomes comparing the lowest income group to the highest income groups

	BCS - 1980			MCS - 2011		
	OR	95% C.I	n	OR	95% C.I	n
Bed wetting	1.59***	(1.37 - 1.84)	12,313	1.22	(0.95 - 1.55)	11,854
Limiting longstanding illness/disability	1.30***	(1.10 - 1.53)	12,406	2.01***	(1.62 - 2.50)	11,875
Has child ever been admitted to hospital	1.11**	(1.00 - 1.24)	12,351	1.22***	(1.06 - 1.42)	11,875
More than 2 accidents requiring medical attention	1.09	(0.95 - 1.25)	12,122	1.23**	(1.02 - 1.47)	11,847
Have You Ever Tried a Cigarette	1.01	(0.88 - 1.16)	10,594	3.30***	(2.23 - 4.87)	11,656
Do any of your friends smoke	1.43***	(1.25 - 1.63)	10,557	3.36***	(2.49 - 4.54)	10,628
Child Overweight	1.06	(0.89 - 1.25)	11,103	1.94***	(1.69 - 2.24)	11,754
Child Underweight	1.77***	(1.23 - 2.54)	11,103	0.95	(0.57 - 1.58)	11,754
Does child wear glasses	1.05	(0.92 - 1.21)	12,305	1.50***	(1.29 - 1.74)	11,875
Ever had hearing problems	1.03	(0.90 - 1.17)	12,512	1.04	(0.86 - 1.27)	11,875
Ever had hay fever	0.55***	(0.47 - 0.63)	12,024	1.03	(0.90 - 1.18)	11,847
Ever had Asthma	0.78**	(0.63 - 0.96)	11,731	1.48***	(1.28 - 1.71)	11,849
Ever had Eczema	0.71***	(0.63 - 0.81)	12,115	0.98	(0.87 - 1.12)	11,851
Does child have a stammer or stutter	1.33	(0.94 - 1.88)	11,871	1.47*	(0.94 - 2.30)	11,855
Ever had measles	1.56***	(1.42 - 1.70)	11,826	1.87***	(1.45 - 2.42)	11,491
Ever had chicken pox	0.56***	(0.51 - 0.61)	12,117	0.48***	(0.39 - 0.60)	9,728
Ever had whooping cough	1.14	(0.97 - 1.34)	11,863	1.66**	(1.07 - 2.59)	11,723
Any evidence of puberty	0.97	(0.85 - 1.10)	11,851	1.38***	(1.23 - 1.55)	11,875
Visited the dentist in the last 12 months	0.42***	(0.36 - 0.49)	12,311	0.38***	(0.29 - 0.49)	11,854
Mother Overweight	2.18***	(1.95 - 2.42)	12,186	1.62***	(1.41 - 1.86)	8,918
Mother Obese	3.09***	(2.50 - 3.82)	12,186	2.22***	(1.89 - 2.59)	8,918
Does mother currently smoke?	1.87***	(1.70 - 2.04)	12,299	4.87***	(4.10 - 5.78)	12,070
Does Father currently smoke?	1.78***	(1.62 - 1.95)	11,682	3.99***	(3.39 - 4.71)	8,051

*** p<0.01, ** p<0.05, * p<0.10