Background The National Institute for Health and Clinical Excellence recognises that times of transition, including adolescence, offer opportunities for intervention in health-related behaviour. Adolescence is characterised by the building of identity, independence and relationships, while navigating complex emotional and physical change. According to Public Health England, half of the most common health problems in adults arise from behaviours that are established during adolescence (Rise Above Programme, 2017). Smoking is a key example, with 40% of adult smokers in the UK starting smoking before the age of 16 years.

Aim To design an objective structure clinical examination (OSCE) station to assess the medical students' communication skills to challenge unhealthy behaviours in which adolescent smokers play a central role from inception to final assessment.

Methods We initially developed a workshop with medical educators and adolescent smokers to identify which behaviours and attributes of doctors would facilitate their engagement with smoking cessation services. Together, we co-created the consultation narrative for a smoking cessation OSCE that assesses the ability of medical students to practice motivational interviewing, a behavioural change technique included and taught in their curriculum. This OSCE station was included in the summative assessment of 364 medical students in their penultimate year. We recruited trained examiners and adolescent actors (all of whom had to give written feedback to the candidates) as well as administrators specifically for this station.

Results Descriptive analyses of students' OSCE marks demonstrated the feasibility of assessing and giving feedback on different elements of students' motivational interview skills, with substantial agreement between the examiners' and role-players' scores. Most students (85%) were successful in providing structure to the consultation and building rapport with adolescent role-players. However, only 50% of students sufficiently explored the young person's life circumstances and tailored the management plan and practical advice to the individual. Adopting a personalised consultation approach was identified by adolescents as a crucial factor in supporting their autonomy and improving their engagement with smoking cessation services.

Conclusion Adolescents can be key partners in improving medical education to shape the attributes of new doctors and increase the relevance of assessments to real-life clinical practice.

British Association for Paediatric Nephrology and Paediatric Intensive Care Society

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NEONATAL HYPERTENSION AS A RESULT OF TRANSIENT HYPERALDOSTERONISM: CASE SERIES

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Neonatal hypertension (NH) is an uncommon but important clinical problem in neonates. The most important non-renal association with NH is Bronchopulmonary Dysplasia (BPD).

Exact mechanism of hypertension in BPD infants is not known.

The purpose of this case series is to describe our experience with the use of spironolactone, an aldosterone antagonist, in neonates with hypertension and BPD.

Methods Retrospective case review conducted at Level II NICU in Calgary from 2013 to 2017 revealed 10 preterm infants with BPD and NH who had plasma renin and aldosterone levels done as part of their investigations for hypertension. NH was defined by blood pressure >95 th centile of the normative data. Maternal characteristics included age, smoking and drug use, history of pregnancy induced hypertension, preeclampsia, gestational diabetes, antenatal steroids and mode of delivery. Neonatal characteristics included gestational age, birth weight, sex, intrauterine growth restriction, APGAR scores, insertion of umbilical arterial catheterization and the presence of BPD. All infants had serum creatinine, electrolytes, urinalysis, plasma renin and aldosterone levels, renal ultrasound and ECHO done. Data collected also included age at diagnosis of hypertension, age at initiation of treatment, medications used, response to treatment and follow up.

Results NH in all infants was diagnosed after 36 weeks GA and treatment was started at presence of persistent hypertension >99 th centile. 3 infants were initially started on amlodipine and Furosemide with no response and were changed to aldactazide. 2 infants received only Furosemide with no response. 5 of the remaining infants were started on aldactazide as a first line treatment to target hyperaldosteronism. All infants responded within 48 hours of treatment with aldactazide. All 10 infants developed mild hyponatremia which required sodium chloride supplementation until aldactazide was discontinued. Hypertension was transient lasting from 3 months till 16 months post term and medications were discontinued with normal blood pressures.

Conclusion Transient hyperaldosteronism is one of the possible causes for hypertension in preterm infants. Our case series demonstrates association preterm of NH with elevated aldosterone and low rennin without any other apparent cause for the hypertension. All infants responded to aldactazide, an aldosterone antagonist containing medication.

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LONG-TERM OUTCOME OF PNEUMOCOCCAL HAEMOLYTIC URAEMIC SYNDROME

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Aims Haemolytic uraemic syndrome [HUS] is defined by microangiopathic haemolytic anaemia [MAHA], thrombocytopaenia and oliguria/elevated creatinine for age clinically manifesting from endothelial cell injury and microvascular thrombosis. Occurring as a rare complication of pneumococcal infection, P-HUS accounts for 5%–15% of HUS cases in young children and is characterised by a more severe disease course compared to Shiga-toxin associated HUS.¹ We determined the long-term renal outcome of P-HUS¹ and serotype profile of P-HUS following the introduction of the pneumococcal conjugate vaccines (PCV7 and PCV13) in the UK.

Methods A case note review of P-HUS was undertaken in 5 participating UK centres. P-HUS was defined as reported¹ and cases were included if followed for at least 5 years' duration.