

and clinical examinations acquired over adult clinical exposure are not entirely transferrable to children hence it is anticipated that they do so with apprehension.

Methods A questionnaire was developed and made available online. The list of clinical skills and examinations used in this questionnaire were derived from the set of learning objectives provided to students prior to their placement. In addition to basic demographics, frequency of clinical skills, history-taking and the confidence at which they were performed were collected. Data was collected from 90 medical students.

Results Only a proportion of students could identify a cardiopulmonary arrest on their attachment. This could be explained by lack of confidence in interacting with children. It appears that District General Hospitals offer more learning opportunities in paediatrics than tertiary institutions.

Conclusions Learning objectives are not being met by all students on attachment at St George's Medical School London. This could be due to the lack of learning opportunities such as teaching, feedback given and varying clinical environments.

1017 SIMPLE METHODS TO HELP IMPROVE PAEDIATRIC MEDICAL STUDENT EDUCATION: AN EXAMPLE

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There have been huge efforts to improve medical education including paediatrics. However, most is aimed at graduate level rather than medical school. The latter needs to be focused on more as unlike other specialities, paediatrics cannot use the student-led learning of clerking patients on wards as much. This is due to the strict yet important regulations upheld on wards to protect those children and their parents.

The report sets out an example of how students in the Bristol University Medics Paediatric Society encouraged additional learning of paediatrics in a simple yet effective way. Such approaches are valuable in this time of limited resources and target constraints.

The society held a mock OSCE for 60 fourth year students about to take their paediatric OSCE exam. Thirty-five schoolgirls aged 8 to 11 years acted as the patients. All had parental consent with parents the evening. Students mainly practiced the clerking station of their OSCE exam consisting of a ten-minute station to take a history from a parent and examine a child. Fifth years and F1s acted as examiners marking crib sheets so students could learn from the session and improve their examinations. Each student was also given a handout with the exam format, sample examinations and some simple exam tips.

The feedback was mainly positive and showed ways to further improve things in the future. This model can be applied to other specialities and is a simple yet effective student-led approach to encouraging and furthering medical student learning.

1018 THE USE OF VIDEO PODCAST IN PAEDIATRIC UNDERGRADUATE TEACHING. AN ONLINE SURVEY

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Background and Aims E-learning resources such as podcasts have become a commonly used tool in undergraduate medical education. We conducted a survey of medical students during their Paediatric attachments using an online questionnaire. We wanted to know what they think about having an e-learning resource in addition to more traditional learning methods.

Methods A total of 90 medical students were given the opportunity to revise teaching material in the format of a video podcast. The content of the podcast was identical to a previously attended live lecture. All students were contacted via email with a link to an online survey tool. The questions covered areas such as usefulness, user friendliness, advantages and disadvantages over more traditional learning and teaching methods.

Results The majority of the students found the video podcast helpful and easy to access. Some also commented that the video aspect compared to audio only podcasts enhanced the learning effect. Only a small number would prefer podcasts to completely replace traditional lectures.

Conclusions There clearly was a high acceptance of the video podcast, not necessarily as a replacement of traditional lectures, but as a useful tool for revision. It not only has a role in Paediatric but the whole spectrum of medical undergraduate education.

1019 MINISTRY OF ETHICS – A VALUABLE ONLINE RESOURCE FOR PAEDIATRIC ETHICS AND LAW

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Background and Aims Doctors involved in child health face unique and ever changing legal and ethical challenges. The Institute of Medical Ethics introduced a Consensus Statement (2010) which provided key learning objectives for doctors in medical ethics and law (MEL) including child health. However, a comprehensive online resource covering these topics remains deficient. Our aim was to address this deficiency with a freely accessible learning resource for the UK and Europe.

Methods MinistryofEthics.co.uk was designed to cover a wide-range of UK MEL topics. Using feedback from collaborating senior doctors in child health, we identified four main paediatric topics: child protection, mental health and disability, end of life, and general paediatrics. Great emphasis was placed in using a variety of online mediums to target differences in individual learning styles. Use of freely available web-authoring software and new video production technologies allowed for the creation of voice-over animations, all presented on a website specifically designed for enhanced MEL learning.

Results We produced a comprehensive set of paediatric topic and case study notes, 3D-video animation of real-life ethical scenarios, a purpose built MCQ database with graphical user statistics, and online sharing of files and comments between learners and educators. We continue to experience a rapid expansion of our user base, corroborated by an overwhelmingly positive user response.

Conclusion A free-to-use interactive online resource is now available enabling students and clinicians to learn about paediatric MEL using a variety of media and self-assessments. Our low-budget approach is easily updatable to reflect changes in legislation.

1020 STUDENTS SELF-ASSESSMENT IN PEDIATRICS IN AL-QADISIAH UNIVERSITY SCHOOL OF MEDICINE (IRAQ)

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Objective Student self-evaluation is an important component of clinical education and also of a comprehensive clinical evaluation system. Our aim was to determine whether student self-evaluation is a reliable method of student evaluation system in our college.

Methods The study included 72 final year medical students in the academic year 2010–2011. The students were asked to freely evaluate their selves in the final theory, traditional long case and OSCE in pediatrics by putting a score representing their performance in these exams. The students self-rating was compared with the actual scores these students obtained.

Results There was a significant correlation between students self-rating and the actual students scores in the final exam in pediatrics.

Conclusion In the presence of a consensus among departments on the level of knowledge and skills that need to be mastered by students during undergraduate medical education, and the implementation of active training program; students self evaluation could be used as an additional method of students evaluation and assessment.

1021 CHARACTERIZATION OF KEY ENZYMES OF THE STEROID BIOSYNTHESIS IN PRETERM INFANTS

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Background A suspected cause for relative adrenal insufficiency in preterm infants is the immaturity of adrenal key enzymes for steroid synthesis (β -hydroxysteroiddehydrogenase (β -HSD), 11β -hydroxylase (11β -HYD)). The fetus lacks β -HSD activity until the last trimester (requiring placental progesterone) and active cortisol concentration is regulated by the final step of synthesis 11β -HYD and inactivation by 11β -hydroxysteroiddehydrogenase type 2 (11β -HSD2). In this study we estimate enzyme activity in preterm infants and compare steroid profiles of preterm infants < 30 weeks gestational age (GA) and above.

Method A 24 hour profile of glucocorticoid metabolites was obtained in the urine of 61 preterm infants of < 30 wks GA and 81 preterm infants > 30 wks GA using gaschromatography-massspectrometry (GC-MS).

Results Patients < 30 wks GA in contrast to the patients >30 wks displayed a significant increase in β -HSD activity from day 3 to week 3. 11β -HYD activity decreased significantly until third week of life, this trend was stronger in preterm infants < 30 weeks. In patients < 30 weeks GA, 11β -HSD activity decreased postnatally until the third week of life to the level of more mature patients.

Conclusion Preterm infants < 30 weeks showed significant changes in enzyme activity, possibly a sign of maturation processes, that are not observed in patients > 30 weeks GA.

There was no significant difference between ill and well preterm infants, potentially signifying insufficient cortisol response and validating further study in stress response at different stages of maturation.

1022 IMMUNOREGULATORY MECHANISMS OF CHILDS FOOD IN THE CHILDREN WITH DISPEPSIA SYNDROM

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Background We studied the influence of child's food on the state of homeostasis in the children and developed recommendations by correction of dyspepsia syndrom.

Materials Were observed 27 children with dyspepsia syndrom in early-aged children (2–6 months), who used nutritive correction by therapeutic baby's formula «Humana HN (Therapeutic Diet) + MCT (Medium Chain Triglycerides)».

Results The positive dynamics of use of child's food was confirmed of the clinical symptoms at duration of Dyspepsia syndrome, condition of peripheral blood, level of electrolyte exchange, hormonal tests, cytokines levels and production of endogenous IF- γ . The level of IL-2 (2.76 \pm 0.48 to 3.36 \pm 0.53mkmoll/l) had tendency to the increase. That presents stimulation of proliferation and differentiation of activated T-cell to Thlimphocytes. Biological activity of IL-2 presence role of the typical TGF of cells of limphatic mieloid complex. The levels of IL-4 also have a tendency to the decline in the reference dates(16.48 \pm 1.78 to 15.73 \pm 1.48mkmoll/l). IL-4 is known to increase the level of production of IgE, what is confirmed the decline of level of IgE in our researches. Level of IF- γ has a tendency to the increase(38.9 \pm 1.74 to 40.1 \pm 1.24mkmoll/l) and level of IgA has same tendency too. What stipulated an increase of immunoregulatory mechanisms of child's organism.

Conclusion Used of child's food provides more active differentiation of cells of granulocytic and monocytic pool. An increase the level of IgA testifies to the improvement of local immunity by an obstacle fixing of bacteria and viruses on mucus shells. The values of IgE decreased, what represented hypoallergic influences of child's feeding.

1023 SALT CONSUMPTION, FRUIT AND VEGETABLE INTAKE AND LONG-TERM BLOOD PRESSURE DEVELOPMENT IN HEALTHY CHILDREN AND ADOLESCENTS

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Background Low salt consumption and high fruit & vegetable intake (FVI) have been shown to reduce blood pressure (BP) in adults. To date, longitudinal data regarding the relative effect strength of FVI and salt intake (SI) on BP development during growth is not available. We aimed to characterize the long term concomitant influences of SI and FVI on the BP development during childhood and adolescence.

Methods 435 healthy children and adolescents (aged 4–18 years), who had at least 3 repeated measurements of BP, 24-h urine collections, and 3-d weighed dietary records, were examined. Systolic BP (SBP) and diastolic BP (DBP) were determined by mercury sphygmomanometer using auscultatory method. SI was estimated by measurement of 24h-sodium-excretion.

Results SI tended to be positively associated with SBP ($p < 0.1$) in the pubertal group (aged 11–18yrs). An increase of 1g/d of SI was related to an increase of 0.2 mmHg SBP. SI was not associated with DBP or SBP in prepubertal children (aged 4–10yrs). FVI was negatively associated with SBP ($p < 0.05$) and DBP ($p < 0.1$, trend) in 4–10 yr-olds. The increase of SBP by a 100 g/d decrease in FVI was comparable with the increase of SBP by a 1g/d increase in SI. No FVI effect was observed in 11–18 yr-olds.

Conclusion Increased FVI may already be beneficial for BD development during childhood. Unfavorable changes of BD with higher SI were not yet observed during childhood; seem to develop however during adolescence.

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1024 INFLUENCE OF BLOOD PRESSURE UPON REGULATION OF LIPID METABOLISM IN OBESE CHILDREN

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