Abstracts

¹A Soni, ¹N Fahey, ²A Ross, ³AG Phatak, ^{3,4}SM Nimbalkar, ¹EB O'Keefe. ¹Department of Health Sciences, Boston University; ²School of Public Health, Boston, MA, USA; ³Central Research Services, Charutar Arogya Mandal; ⁴Department of Pediatrics, Pramukhswami Medical College, Anand, India

Background and aims Health-care seeking behavior is affected by various socio-economic, physical and cultural factors. A proper understanding of such factors can improve access to health-care and focus the development of health outreach programs. We determined factors that influence and differentiate health-seeking behaviors for children compared to care for mothers among women in rural India. **Method** Cross-sectional health survey of women, 18–45 years conducted by female interviewers in a hospital clinic and in sixteen surrounding villages in rural Gujarat, India. As a part of the survey, respondents identified the "most significant factor" that influences their decision when selecting a health-care provider. Additionally, respondents with a living child were also asked the same question in regards seeking care for their children.

Results 681 women completed the survey, of which 496 reported having a living child. Of these 496, 193 (39%) identified cost as "most significant factor" when choosing a provider for themselves compared with only to 73 (15%) for their children (χ^2 , p<0.0001). Quality of the care provided is a more significant factor when seeking care for children (11%) than for mothers (4%) (χ^2 , p<0.0001). Education and income significantly influence mothers' behavior when choosing a healthcare provider for themselves, but not for their children.

Conclusion Health-seeking behavior is an important variable in the success of outreach health programs. Mothers in this area of India consider quality of care more and cost less when selecting provider for their children's care in contrast to their own.

06 COMMUNICATION BETWEEN DOCTORS AND PATIENTS/ PARENTS IN PAEDIATRIC OUT-PATIENT CLINIC SETTING

doi:10.1136/archdischild-2012-302724.0006

¹M Ahmed, ²L Reynolds, ²N Turley, ²H Alazzani, ¹R Chakupurakal, ³T Reynolds. ¹Paediatrics, Burton Hospitals NHS Foundation Trust, Burton Upon Trent; ²Final Year Medical Student, University of Leicester, Leicester; ³Clinical Chemistry, Burton Hospitals NHS Foundation Trust, Burton Upon Trent, UK

Background General Medical Council (GMC) has produced guidance to standardise what constitutes 'good communication' in order to provide a framework for clinicians. Excellent communication in the paediatric setting is challenging and paediatricians are faced with the challenge to meet the needs of heterogeneous paediatric patient group of different ages along with the presence of parents/extended family during the consultation.

Aim To evaluate the communication between doctors and patients/parents in paediatric out-patient clinic setting.

Methods Willing parents and young persons were asked to fill out a standardized questionnaire following their consultation in the children's out-patient clinic. In order to limit bias, the clinicians were blinded and data collection was carried out in the reception area without their knowledge.

Results 100 questionnaires were completed. All parameters scored at least 47% in the 'excellent' category. The highest proportions of 'excellent' (70%) results were seen in the 'polite and caring' category (95% CI 61.02 to 79.98). The area requiring most attention was 'giving the parents/patients opportunity to ask questions'. Consultants received a higher proportion of 'excellent' results than paediatric trainees. Overall satisfaction rate (good and excellent) was close to 90%.

Conclusion Although majority of the feedback on communication was good to excellent, there was room for further improvement. This can be targeted using communication skills tools involving role players in simulated setting during departmental and regional

teaching sessions. Assessment of communication should constitute one of the components of annual appraisals for junior paediatric trainees. This should also be incorporated into GMC's revalidation procedure.

07

HYPOGLYCAEMIA AND HIGHER LEVELS OF HOMOCYSTEINE ARE ASSCOCIATED WITH WATERSHED AND WHITE MATTER INJURY IN NEONATAL ENCEPHALOPATHY FOLLOWING HYPOXIA-ISCHEMIA

doi:10.1136/archdischild-2012-302724.0007

¹J Harteman, ¹F Groenendaal, ¹M Benders, ²A Huisman, ³H Blom, ¹L de Vries. ¹Department of Neonatology; ²Department of Haematology and Clinical Chemistry, University Medical Center Utrecht, Utrecht; ³Department of Clinical Chemistry, Metabolic Unit, VU University Medical Center, Amsterdam, The Netherlands

Objective Neonatal encephalopathy (NE) is a serious condition, primarily seen following hypoxia-ischemia. Different patterns of brain injury can be recognised following perinatal hypoxia-ischemia (HI). Whether these patterns of injury can be attributed to different associated risk factors still needs to be established.

Aim To identify the association of antenatal, perinatal and thrombophilic risk factors in infants with NE following HI with pattern of brain injury.

Methods In 110 infants with clinical signs of NE following perinatal HI, thrombophilic factors were prospectively investigated. These included factor V Leiden and prothrombin gene mutation, C677T and A1298C polymorphisms in the MTHFR gene and plasma levels of homocysteine and lipoprotein(a). Antenatal and perinatal variables were studied.

Results White matter/watershed injury was seen in 44 infants (40%), basal ganglia/thalamus injury in 34 (31%) and normal neuroimaging in 32 infants (29%). Antenatal factors did not differ across the different patterns of injury. The basal ganglia/thalamus pattern was associated with emergency Cesarean section. White matter/watershed pattern was associated with hypoglycaemia (< 2.0 mmol/L) (OR 5.3; 1.6–17.8 (95% CI)), CT or TT 677 polymorphism in the MTHFR gene and plasma homocysteine levels in the upper quartile (OR 2.9; 1.01–8.4 (95% CI)) compared to the no injury group.

Conclusion Across three patterns of injury in infants with NE following perinatal HI, predominant white matter/watershed pattern was associated with hypoglycaemia, the MTHFR 677CT or TT genotype, and higher levels of plasma homocysteine. Basal ganglia/ thalamus injury showed an association with signs suggestive for more severe, acute HI.

08

IMPACT OF INHALED NITRIC OXIDE ON HYPEROXIA-INDUCED WHITE MATTER DAMAGE IN NEONATAL RATS

doi:10.1136/archdischild-2012-302724.0008

¹H Pham, ¹G Vottier, ¹J Pansiot, ¹B Bollen, ²H Kadar, ¹J Dalous, ³S Duong-Quy, ¹J Gallego, ¹P Gressens, ²D Touboul, ²A Brunelle, ³AT Dinh-Xuan, ¹C Charriaut-Marlangue, ¹O Baud. ¹INSERM U676- Paris Diderot University- Paris VII, Paris; ²ICSN, CNRS Gif sur Yvette, Gif sur Yvette; ³Laboratoire de Physiologie Paris Descartes Hôpital Cochin, Paris, France

White matter damage (WMD) and chronic lung disease (CLD) are the two main complications occurring in very preterm infants. Clinical and experimental evidence suggest that the use of high oxygen in preterm infants lead to both WMD and CLD. Inhaled nitric oxide (iNO) has been proposed to promote alveolarization in the developing lung, and we have reported that iNO promotes myelination and induces neuroprotection in neonatal rats with excitotoxic brain damage.

We made the hypothesis that iNO may be neuroprotective in rat pups exposed to hyperoxia. Pregnant rats were randomly assigned to hyperoxia (80% O_2) or normoxia for 8 days (E21 to postnatal