

Conclusions Rates of extubation failure were not significantly different between the groups. HFNC resulted in significantly less nasal trauma than NCPAP. This benefit may need to be considered in post-extubation respiratory support for preterm infants.

138 MASK OR NASAL TUBE TO PROVIDE POSITIVE PRESSURE VENTILATION (PPV) TO PRETERM INFANTS IN THE DELIVERY ROOM (DR)-THE MONT TRIAL

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Background For initial PPV a face mask is used, but obstruction and leak often occurs. A nasal tube is an alternative interface in the DR to provide PPV. Its safety and efficacy have not been tested in a large RCT in extremely preterm infants.

Objective To determine whether a single nasal tube is more effective than face mask during the stabilisation of infants born between 24 and 29 weeks.

Design and methods An RCT performed in Melbourne and Leiden. Infants were randomized immediately prior to birth to receive PPV using a T-piece with either a nasal tube or round mask. Resuscitation guidelines were standardised. Criteria for intubation: cardiac compressions, apnea, CPAP >7cmH₂O and FiO₂ >0.4.

Primary outcome: intubation in the first 24 hours from birth.

Results In total 368 infants were randomized. Baseline variables, primary and secondary outcomes were similar (table).

Abstract 138 Table 1 Baseline characteristics and outcome

	Mask (N= 187)	Nasal Tube (N= 181)	OR (95% CI)
GA (wks)	27 (26–29)	27 (26–28)	-
Birthweight (g)	1000 (807–1196)	946 (780–1182)	-
Intubation in first 24hrs	102 (54)	97 (54)	0.96 (0.64–1.45)
Intubation in DR	58 (31)	41 (23)	0.65 (0.41–1.04)
Air Leak	14 (8)	11 (6)	0.80 (0.35–1.81)
Total (MV+CPAP) days of ventilation	13 (6–41)	16 (4–41)	NS
Death or BPD	68 (36)	64 (35)	0.96 (0.62–1.47)

Conclusions In infants < 30 weeks gestation receiving PPV in the DR, there were no differences in short term outcomes using the nasal tube compared to the face mask.

139 RESEARCH NETWORKS IN PEDIATRIC PRIMARY CARE: EAPRASNET

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EAPRASnet is the European Academy of Paediatrics Research in Ambulatory Setting Network, whose members are European primary care paediatricians committed to research in their practices that expressed their will to join a research network.

The network is the research laboratory of the primary care setting and in the latest study, EAPRASnet has enrolled a total of 685 paediatricians from 21 countries.

A recruitment survey showed that areas of most interest for research were: quality of care indicators, communication with parents, obesity, attention deficit hyperactivity disorder and effective

well child care. Main incentives for participation in a research project were interest in the topic (81%) and effort to improve quality of care (71%). Lack of time was the leading reported obstacle (72%).

A second electronic survey assessing primary care paediatricians' estimations and practices regarding parents' vaccination refusal was sent to 395 EAPRASnet members, with a response rate of 87%. Of respondents who vaccinate in their clinic, 93% estimated the total vaccine refusal rate less than 1%. Sixty nine percent of all respondents prefer a shared decision making approach to handle parents' vaccine hesitancy.

A recent survey on Use of Antibiotics in Upper Respiratory tract infections has been performed to evaluate European primary care paediatricians' knowledge, attitudes and practice regarding antibiotic prescribing for upper respiratory infections in order also to identify targets for future intervention studies.

140 RESEARCH NETWORKS IN PEDIATRIC PRIMARY CARE: TRANSITION TO REALITY

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Research networks in pediatric primary care, often called practice-based research networks (PBRN) in the United States, have an increasingly important role in the spectrum of research that spans from basic research to practical and effective application in primary care settings. In addition to assessing efficacy, PBRN's are particularly critical in assessing effectiveness in the real world of community practice - the final step in translating new discovery into practice. Key elements of effective translation that can be assessed by PBRN's include rapidity of adoption, adherence, and quality improvement systems to assure consistent application. This presentation will discuss PBRN's in the context of the National Institute of Health's "Roadmap for Medical Research" and an emphasis on translational research. Examples of the use of pediatric PBRN's in this capacity, including ADHD and asthma, with a focus on effectiveness will be discussed.

141 TRANSCUTANEOUS ELECTRICAL STIMULATION (TES) AND INTRACTABLE CHRONIC CONSTIPATION IN CHILDHOOD

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Background and aims Intractable chronic constipation in the form of slow-transit constipation (STC) often resistant to medical treatment. Some children required appendicostomy for antegrade enemas to improve symptoms. Transcutaneous electrical stimulation (TES) was used by physiotherapists to overcome STC in children successfully. This study aimed to examine the effectiveness of home-based TES when STC children were trained by a naïve clinician. We hypothesized TES would improve symptoms with reduce laxative use.

Methods A prospective study (2009–2011) whereby a surgeon was trained to deliver TES method to STC children/parents, who then self-administered TES at home (1 hr/day x 6 months) using a battery-powered interferential stimulator. Daily continence diary (including laxative use) was recorded before and throughout TES; PedsQL4.0 questionnaires and gastrointestinal nuclear transit scintigraphy (NTS) were completed before and after TES. Appendicostomy for antegrade enemas was offered if TES failed to improve

symptoms. Statistical analyses performed with paired t-test & chi-square test; $p < 0.05$ considered significant.

Results Sixty-two children (34 female, ages: 2–16yrs, mean: 7yrs) completed home-based TES successfully. Symptoms improved significantly in 56/62 (90%) STC children with gastrointestinal transit index improved after TES (Table 1). The 2 children who stopped laxative prior to TES had symptom improvement without further laxative use. Only 6 children (10%) required appendicostomy for antegrade enemas.

Abstract 141 Table 1

Parameters	Pre-TES	Post-TES	p-value
Soiling (days/week)	4.6±2.4	0.7±1.1	<0.0001 (paired t-test)
Defecation (bowel action/week)	1.6±1.6	3.5±1.9	<0.0001 (paired t-test)
Abdominal pain (days/week)	1.7±1.9	0.2±0.5	<0.0001 (paired t-test)
Laxative use	No laxative - 2 On laxative - 60	Stopped laxative - 15 Reduced laxative - 30 Same laxative - 15 Remained with no laxative - 2	<0.01 (Pearson Chi-square)
Gastrointestinal transit index	10.8±1.6	11.6±1.6	<0.002 (paired t-test)

Conclusion Home-based TES is non-invasive. It is a promising treatment for STC children with avoidance of surgery and reduced laxative use with improved symptoms in most children. Success required clinician training and close patient contact.

142 COMMUNITY-BASED FOLLOW-UP WITH/WITHOUT FOOD SUPPLEMENTATION AND/OR PSYCHOSOCIAL STIMULATION IN THE MANAGEMENT OF CHILDREN WITH MODERATE ACUTE MALNUTRITION IN BANGLADESH

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Background and aims Moderate acute malnutrition (MAM) [WLZ: < -2 to -3] is a major health problem in Bangladesh and other low-income countries. This study was conducted to assess the effect of community-based follow-up care, with/without food supplementation and/or psychosocial stimulation, as an alternative to current hospital-based follow-up care of children with MAM.

Methods 227 children with MAM aged 6–24 months were randomly assigned to one of five regimens:

1. fortnightly follow-up care (FFC) at the icddr, b's outpatient-department, including growth monitoring, health education, and micro-nutrient supplementation (H-C, n=49);
2. FFC at community follow-up unit [established in the existing primary health care centers close to the residence of the child] but received the same regimen as H-C (C-C, n=53);
3. as per C-C plus cereal-based supplementary food (SF) (C-SF, n=49);
4. as per C-C plus psychosocial stimulation (PS) (C-PS, n=43); or
5. as per C-C plus both SF+PS (C-SF+PS, n=33).

Results Baseline characteristics were similar among the groups. Follow-up attendance and gain in weight and length were greater in groups C-SF, C-SF+PS, and C-PS than C-C, and these indicators were observed least in H-C. Children in the H-C group more often

suffered from diarrhea and fever than others. Children who attended at least five of the total six scheduled follow-up visits gained more in weight, length than those who attended fewer.

Conclusions Community-based service delivery, especially including supplementary food with or without psychosocial stimulation, permits better rehabilitation of greater numbers of children with MAM compared to current hospital outpatients-based care.

143 PRIMARY CARE EXPERIENCES AND HEALTH-RELATED QUALITY OF LIFE AMONG CHILDREN IN LOWER INCOME FAMILIES IN THE U.S

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Purpose This study examines whether patient-reported indicators of primary care quality are associated with measures of health related quality of life and reported school engagement among children in lower-income families.

Methods Data on 3,258 children ages 2–18 years are from a cross-sectional survey of parents of children affiliated with a county-level insurance program in California. Primary care quality was assessed using the Parents' Perception of Primary Care and was associated with health-related quality of life (measured using the Pediatric Quality of Life Inventory–PedsQL) overall and in four domains (physical, emotional, social, and school/daycare) and four measures of school engagement. We conducted multivariable linear and logistic regressions, adjusting for demographics, insurance, and setting of medical care.

Results A higher total primary care score was associated with a higher total PedsQL score and scores in four subdomains (total beta [B]=1.77, physical B=1.71, social B=1.36, emotional B=2.22, and school/daycare B=1.69, all $p < 0.001$). It was also associated with missing fewer than three school days due to illness (odds ratio [OR]=1.12, 95 percent confidence intervals [CI]: 1.05, 1.19), excellent/above average school performance overall (OR=1.10, 95 percent CI: 1.03, 1.17) and performance in reading (OR=1.13, 95 percent CI: 1.06, 1.20) and math (OR=1.10, 95 percent CI: 1.03, 1.16).

Conclusion Patient-reported primary care quality indicators are favorably associated with HRQOL and measures of school engagement among children in low-income families.

144 PRIMARY HEALTH CARE PHYSICIANS' WILLINGNESS AND PERCEIVED BARRIERS TOWARDS CONDUCTING RESEARCH

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Background and aims Health research supports health systems in the delivery of better, fairer and more equitable health care to people. Saudi Arabia government has acknowledged the importance of research to improve the patient outcome. Accordingly, conducting research has been promoted by Saudi commission for Health Specialization and a great increase in research fund was recognized. However, still has little of a research in Saudi Arabia compared to other countries. This research is conducted to assess the primary health care physicians willingness and the perceived barriers toward conducting research.

Methods This cross sectional study was conducted among all primary health care physician in Jeddah city. A self administered questionnaire was used to investigate their willingness and perceived barriers toward conducting research.

Results Of the respondents 87.1% reported that they are willing to conduct research and 91.7% with 95% felt that it is Important to