

Abstract 9.8

	Group 1 (n = 16)	Group 2 (n = 18)	Group 3 (n = 24)	Group 4 (n = 50)	p Value*
Z-score change B-28 days	≥ -1	< -1	≥ -1	< -1	
Z-score change B-18 months	≥ -1	≥ -1	< -1	< -1	
Rehospitalisation	1 (0-7)	0 (0-11)	1 (0-10)	0 (0-11)	0.11
GP visits	5 (1-18)	8 (1-18)	8 (1-40)	4 (0-26)	0.25
A&E visits	1 (0-3)	0 (0-4)	0 (0-5)	0 (0-8)	0.91

B, birth. Values are median (range) number of episodes. *Wilcoxon rank sum test.

improving post-discharge growth may not result in measurable health benefits.

9.9 THE EPICURE STUDY: LONGITUDINAL GROWTH MEASUREMENTS OVER AN 11-YEAR FOLLOW-UP PERIOD

JA Fawke, V Rowell, S Thomas, N Marlow. *University of Nottingham, Nottingham, UK*

Background: Prematurity is associated with poor somatic growth in infancy but results of longer follow-up are inconsistent.

Aims: To compare serial height, weight, body mass index and occipito-frontal circumference (OFC) of all children born ≤25 + 6 weeks' gestation from 1 March 1995 to 31 December 1995 in the United Kingdom and Ireland with term born classmates.

Methods: Of 1289 livebirths, 283 of 308 survivors were seen at 30 months and 219 (72% of survivors) at 11 years with 153 age and sex-matched controls taken from randomly selected classmates. Measurements were taken by three paediatricians using a Leicester stadiometer, standardised weighting scales and a Secca head circumference tape measure. Measurements were converted to Z-scores using Child Growth Foundation norms for chronological age.

Results: Height, weight, OFC and BMI were significantly lower among preterm children than in their term born classmates, who differed only slightly from population norms; growth in OFC showed the greatest impairment at 11 years. Only growth in weight (and therefore BMI) showed catch-up between the two assessments in 200 children followed longitudinally (see table).

Conclusions: Infants born ≤25 + 6 weeks remain shorter, lighter and with smaller head circumferences compared with controls and population norms at 11 years. Only weight has shown catch-up over the intervening 8 years but the extremely preterm children remain with lower BMI compared with controls.

Abstract 9.9

	EP children Z-score (SD)	Controls Z-score (SD)	Difference of means (95% CI)	Change in Z-score 30 months to 11 years
Height	-0.55 (1.02)	0.15 (1.01)	0.71 (0.50 to 0.92)**	+0.20 (-0.02 to 0.42)
Weight	-0.42 (1.28)	0.21 (1.17)	0.62 (0.37 to 0.88)**	+0.79 (0.53 to 1.05)**
BMI	-0.22 (1.38)	0.17 (1.26)	0.39 (0.11 to 0.66)*	+0.80 (0.52 to 1.08)**
OFC	-1.27 (1.25)	0.15 (0.99)	1.26 (1.02 to 1.50)**	+0.25 (-0.02 to 0.51)

BMI, body mass index; EP, extremely preterm; OFC, occipito-frontal circumference.

*p<0.01; **p<0.001.

Session 9C NNA: Surgical Interventions

9.10 FIRST IMPRESSIONS: THE EXPERIENCES AND PERCEPTIONS OF FATHERS OF THEIR FIRST VISIT TO THE NEONATAL UNIT

¹ME Harvey, ²HM Pattison. ¹Birmingham City University, Birmingham, UK; ²Aston University, Birmingham, UK

Most fathers in the United Kingdom are present at the birth and immediate care of their baby. When a newborn baby requires admission to the neonatal unit it is generally common practice for the father either to accompany his baby or to visit shortly afterwards. However, there is limited evidence regarding fathers' experiences and feelings about their first visit to their baby in the neonatal unit. Recent directives in the United Kingdom have identified the need to empower and engage fathers. It is therefore important to understand the father's perspective of an occasion such as this.

The aim of this study was to gain an understanding of the experiences and perceptions of fathers when they first visited their baby in the neonatal unit. Semi-structured interviews were undertaken with 20 first-time fathers recruited from one neonatal unit in the United Kingdom. Fathers were asked to describe what happened and their feelings around this time. Their responses were analyzed using qualitative methods. Themes that emerged from the interviews were: the dilemma about the timing of the first visit; the impact of the sights and sounds of the neonatal unit; their recall of information given; the nature and extent of their interaction with the baby and the overall effect that this first visit had upon them.

Knowledge generated by this study will inform healthcare professional education and training and the development of policy and health education. Consequently, the quality of care provision will be enhanced and the needs of fathers more fully addressed.

9.11 NURSING WORKLOAD IN UK TERTIARY NEONATAL UNITS

¹DWA Milligan, ²P Carruthers, ³B Mackley, ¹MP Ward Platt, ¹Y Collingwood, ¹L Wooler, ¹J Gibbons, ⁴E Draper, ⁴BN Manktelow. ¹Newcastle Neonatal Service, Newcastle Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK; ²Northumberland Care Trust, Northumberland, UK; ³Mackley Management Consulting Services, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, UK; ⁴University of Leicester, Leicester, UK

Background: Neonatal intensive care requires adequate numbers of trained neonatal nurses to provide safe, effective care; but existing research into the relation between nurse numbers and the care needs of babies is over 10 years old. Since then, the preterm population and treatment practices have changed considerably.

Aims: To validate the dependency categories of the British Association of Perinatal Medicine (BAPM, 2001) and to revalidate the northern region categories (NR, 1993) in relation to contemporary nursing workload.

Setting: Three tertiary neonatal intensive care services in England.

Methods: Direct observations by trained observers captured nursing activity around each baby every 10 minutes. Time spent on each nursing activity was related to the dependency category of the baby and the grade of the nurse.

Results: Both scales detected differences between categories. Discrimination between individual categories was improved when nasal continuous positive airway pressure (nCPAP) was distinguished from ventilation. All categories attracted more time compared with 1993. Babies in BAPM1/NRA occupied nursing time for a median of 56 minutes per hour (inter-quartile range 48-70); those on nCPAP or BAPM2/NRB for a median of 36 minutes per hour, (27-42); those in BAPM3/NRC

for 20–22 minutes (15–33); and those in BAPM4/NRD for 31–32 minutes (24–36). The NR scale was easier to apply and had greater interobserver agreement (98.5%) than the BAPM scale (93%).

Conclusions: Both scales predict average nursing workload. A revised categorisation that separates nCPAP from ventilation is more robust and practical. Nursing time attracted in all categories has increased since 1993.