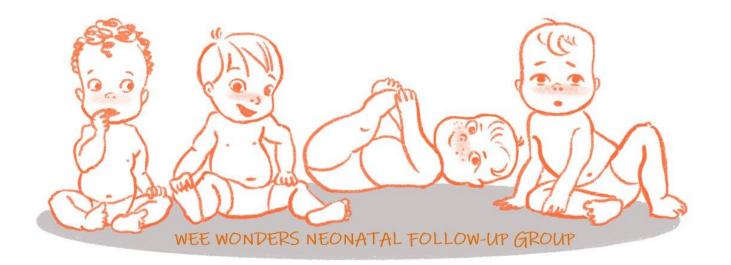


Wee Wonders: a novel & alternative approach to moderate preterm follow-up and the unexpected outcomes





Fiona McKeown Neonatal Physiotherapist Simpsons Centre for Reproductive Health Fiona.mckeown@nhs.scot @FionaMcKeownNeo

Overview

Why follow up moderate preterms

Pilot group structure

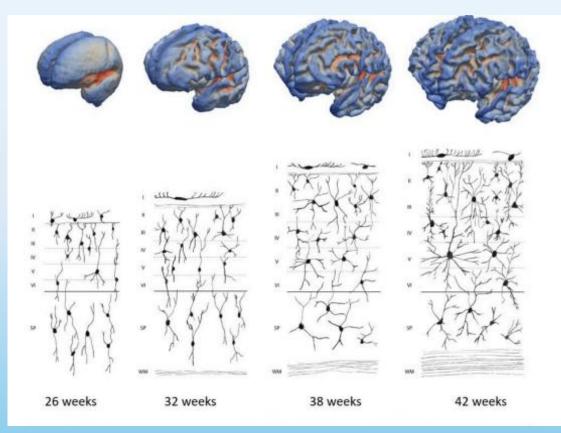
Developmental outcomes

Parental Outcomes

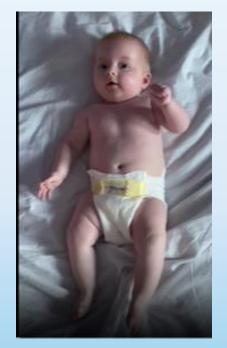
Further research

But 34 weeks isn't "that early"

Babies born at 34 weeks have 15% less time in utero than those born at 40 weeks



Parents experience the same trauma of preterm birth and separation whilst baby is on the NNU...



But! Parents feel they have less opportunities for peer support

Image from: Battalle et al. 2018."Different patterns of cortical maturation before and after 38 weeks gestational age demonstrated by diffusion MRI in vivo". Neuroimage.

But 34 weeks isn't "that early"

Babies born at 34 weeks have 15% less time in utero than those born at 40 weeks

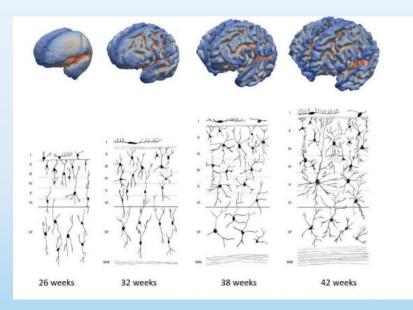
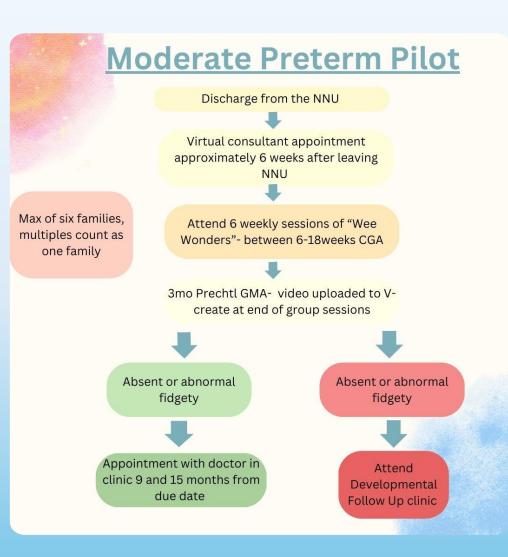


Image from: Battalle et al. 2018."Different patterns of cortical maturation before and after 38 weeks gestational age demonstrated by diffusion MRI in vivo". Neuroimage.

Parents experience the same trauma of preterm birth and separation whilst baby is on the NNU...



But! Parents feel they have less opportunities for peer support



Group Structure

Physiotherapy - developmental milestones, gross motor skills, risks of prematurity

Community nurses - resus training, choking, management of common illnesses

Psychology - parental wellbeing and bonding with your baby

Speech and Language therapy - supporting early communication

Occupational Therapy - play and interaction

Dietetics - managing nutrition in preterm babies, weaning and reflux

Outcomes for Moderate Preterm Infants at 30 months

Graphs hidden as Percentage of Currently being published



Outcomes for Moderate Preterm Infants at 30 months

Abnormal outcome on in child with GMFCS level 3 diplegia

Graphs hidden as currently being published

13-15mo 27-30mo Diagnos ASQ ASQ

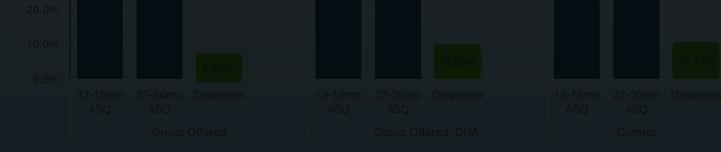
-15mo 27-30mo Diagr ASQ ASQ 3-15mo 27-30mo Diagnosis ASQ ASQ

Group Offered

A Appermate Net Completed Diagnes

Outcomes for Moderate Preterm Infants at 30 months

Graphs hidden as currently being published



Normal Abnormal Not Completed Diagnosis

Outcomes for Moderate Preterm Infants at 30 months

Graphs hidden as currently being published

Pattern of difficulty engaging with services?

13-15mo 27-30mo ASQ ASQ

0mo Diagnosis 6Q 10.7 10 27-30mo Diagn

Control

Normal Abnormal Not Completed Diagnosi

Parent Benefits



Benefits of WWG

Reduction in mild and moderate developmental problems

Earlier identification of serious complications of prematurity

Reduced cost to NHS

- Consultant time
- Health visitor contacts
- Community therapy referrals
- Parental mental health referrals

Improved parental wellbeing

- More confident
- Supportive peer group
- Reduced anxiety
- Normalising of child development reduced "abnormal" ASQ

Sometimes the real wins can't be represented by a figure, infographic or cost saving...

Mum during WWG:

"I'm not sure I could have another child and risking going through the neonatal unit again. We are lucky to have found out about A's CP really early, but what if that didn't happen again?"



Mum during WWG:

"I'm not sure I could have another child and risking going through the neonatal unit again. We are lucky to have found out about A's CP really early, but what if that didn't happen again?"

Two and half years later....

"Baby number 2 safely arrived and A is loving being a big sister. I even got to experience labour! Now 3, A is discharged from OT, has minimal physio input and it would be a challenge for any therapist to spot her CP"

Future Goals



One to one support for vulnerable families

Pre-doctoral fellowship

Health economic analysis

Parent focus groups to be run by indepndent charity

Enhanced therapy provision on NNU- across Lothian

Progress to full MDT model- AHP's available until 15 months

Geographical equity- not currently available in West Lothian

Longitudinal outcomes of fully implemented combination model





A big shout out to the most amazing team and Simpsons Special Care Babies for their ongoing support. Thank you to A's mum for sharing hers and her family's journey.



Fiona McKeown Neonatal Physiotherapist Simpsons Centre for Reproductive Health Fiona.mckeown@nhs.scot @FionaMcKeownNeo





Thank you for listening! Any questions, comments or ideas welcome

Fiona McKeown Neonatal Physiotherapist Simpsons Centre for Reproductive Health <u>Fiona.mckeown@nhs.scot</u>



@FionaMcKeownNeo



Contact: <u>fiona.mckeown@nhs.scot</u>