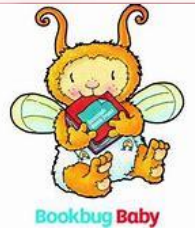




Premature and Sick Babies





The Reality of Intensive Care





IN a NICU environment we focus on the biomedical model and the psychosocial model get overlooked.

Biological

Psychological

Social



Individual



Risk of Sensory Development from the Environment

- High noise levels
- Lack of pleasant touch
- Lack of pleasant smells
- Intrusive light levels
- Lack of visual stimulation
- Lack of light/dark cycle
- Interrupted sleep

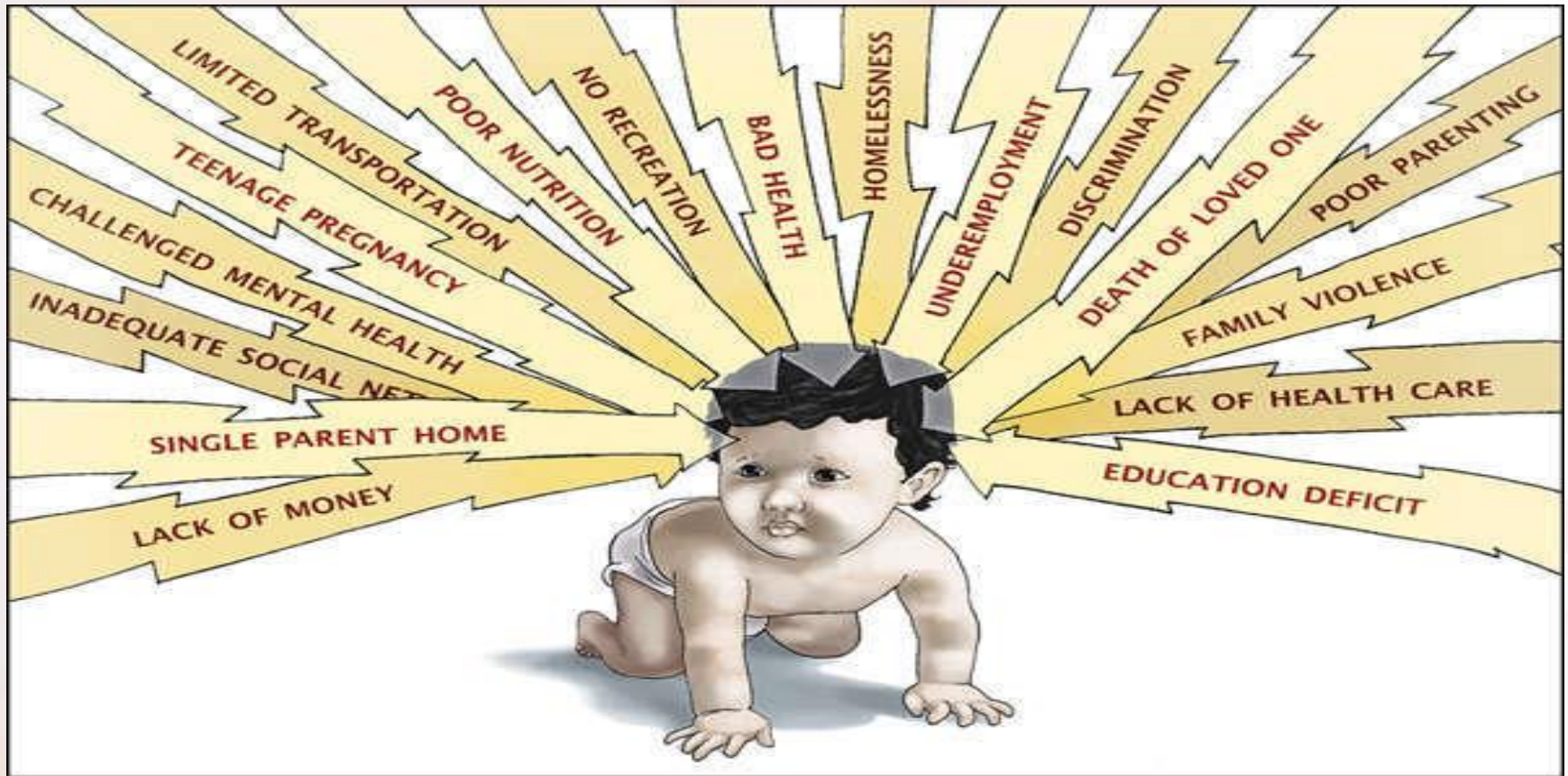


Risk of Sensory Development

Ambient noise
on a neonatal unit

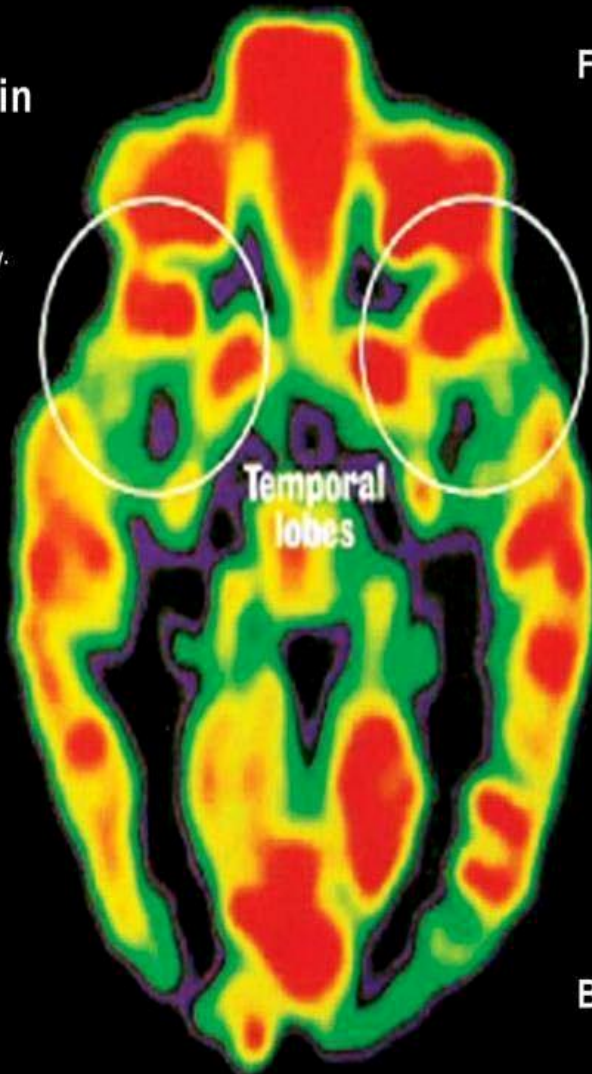


Toxic Stress



Healthy Brain

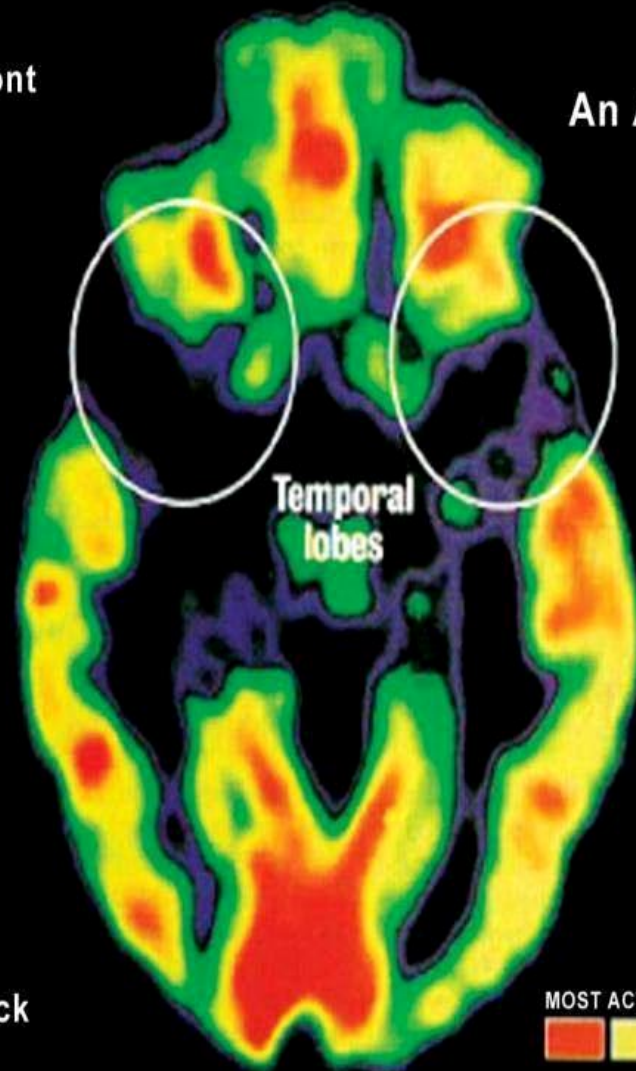
This PET scan of the brain of a normal child shows regions of high (red) and low (blue and black) activity. At birth, only primitive structures such as the brain stem (center) are fully functional; in regions like the temporal lobes (top), early childhood experiences wire the circuits.



Front

An Abused Brain

This PET scan of the brain of a Romanian Orphan, who was institutionalized shortly after birth, shows the effect of extreme deprivation in infancy. The temporal lobes (top), which regulate emotions and receive input from the senses, are nearly quiescent. Such children suffer emotional and cognitive problems.



Babies are capable of telling the trained eye if they are stressed or comfortable.



“it’s the responsibility of everyone to make sure “ I am alright”



HUG_U





Helping Us Grow (HUG): Innovative Family Integrated Care

Neonatal Unit
Royal Hospital for Children
Glasgow

Twitter: @hugrhc

Facebook: @nhsggcneonatalrhc

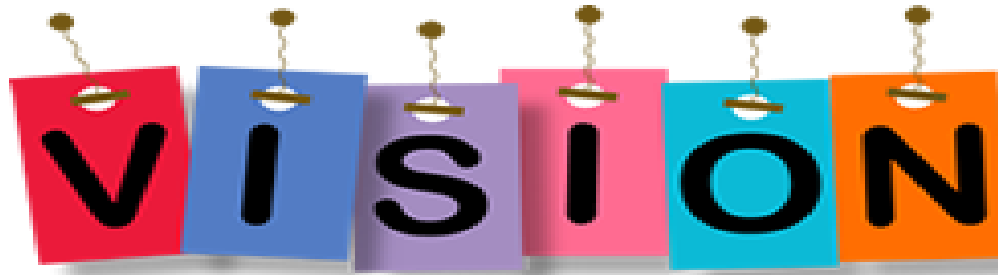
@hugrhc



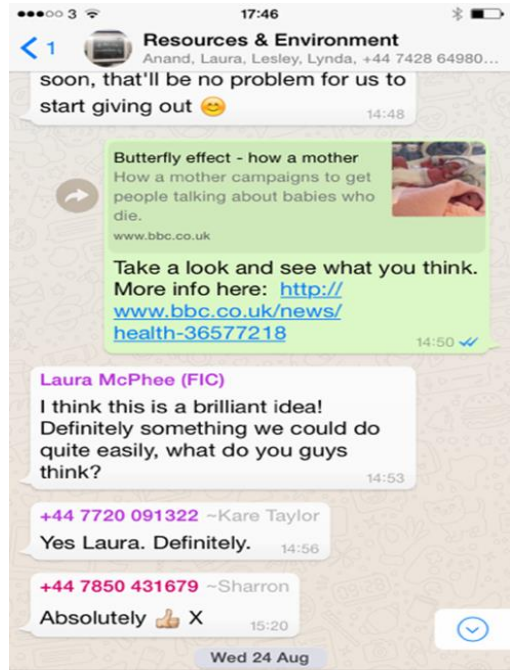
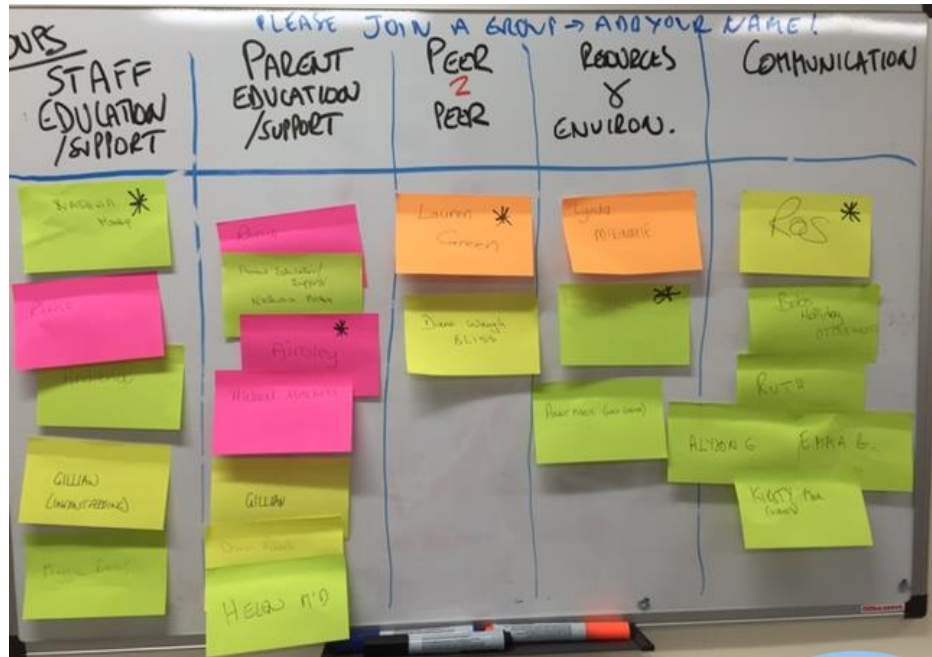


PATIENT'S NAME: <i>Your BARY.</i>					
All Routes: As Required Prescriptions					
DRUG <i>Kangaroo Care</i>			STOPPED <small>DATE</small> <small>INITIALS</small>	DATE	
DOSE <i>1 hold</i>				TIME	
ROUTE <i>cut</i>	INDICATION <i>EVERY BABY</i>			DOSE	
PRESCRIBER SIGN & PRINT <i>A DOCTOR</i>		MAX.FREQUENCY <i>AS REQUIRED</i>	DATE:	GIVEN BY	
ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY					
DRUG <i>Encouragement</i>			STOPPED <small>DATE</small> <small>INITIALS</small>	DATE	
DOSE <i>Unlimited</i>				TIME	
ROUTE	INDICATION <i>Self-doubt</i>			DOSE	
PRESCRIBER SIGN & PRINT <i>A DOCTOR</i>		MAX.FREQUENCY <i>ALL THE TIME</i>	DATE:	GIVEN BY	
ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY					
DRUG <i>RE ASSURANCE</i>			STOPPED <small>DATE</small> <small>INITIALS</small>	DATE	
DOSE <i>Plenty</i>				TIME	
ROUTE <i>AT BEDSIDE</i>	INDICATION <i>QUESTIONING</i>			DOSE	
PRESCRIBER SIGN & PRINT <i>A DOCTOR</i>		MAX.FREQUENCY <i>AS REQUIRED</i>	DATE:	GIVEN BY	
ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY					
DRUG <i>KINDNESS</i>			STOPPED <small>DATE</small> <small>INITIALS</small>	DATE	
DOSE <i>1 CUP</i>				TIME	
ROUTE <i>HUG</i>	INDICATION <i>DISTRESS</i>			DOSE	
PRESCRIBER SIGN & PRINT <i>A DOCTOR</i>		MAX.FREQUENCY <i>UNLIMITED</i>	DATE:	GIVEN BY	
ADDITIONAL INSTRUCTIONS / COMMENTS / PHARMACY					





“Everyone will work together to ensure that parents are empowered to be primary caregivers with the confidence to care for their baby during their stay in the neonatal unit, through their transition to home and beyond.”



@hugrhc



Thursday 12th
May

Nurses - Janie + Wendy



Dear Janie & Wendy,

Thank you for being my 'voice' for these past days. My communication with mommy and daddy through you has been very precious to them. And also, thank you for taking such a good care of me.

Love,



NEWS

Home | UK | World | Business | Politics | Tech | Science | Health | Education | Entertainment

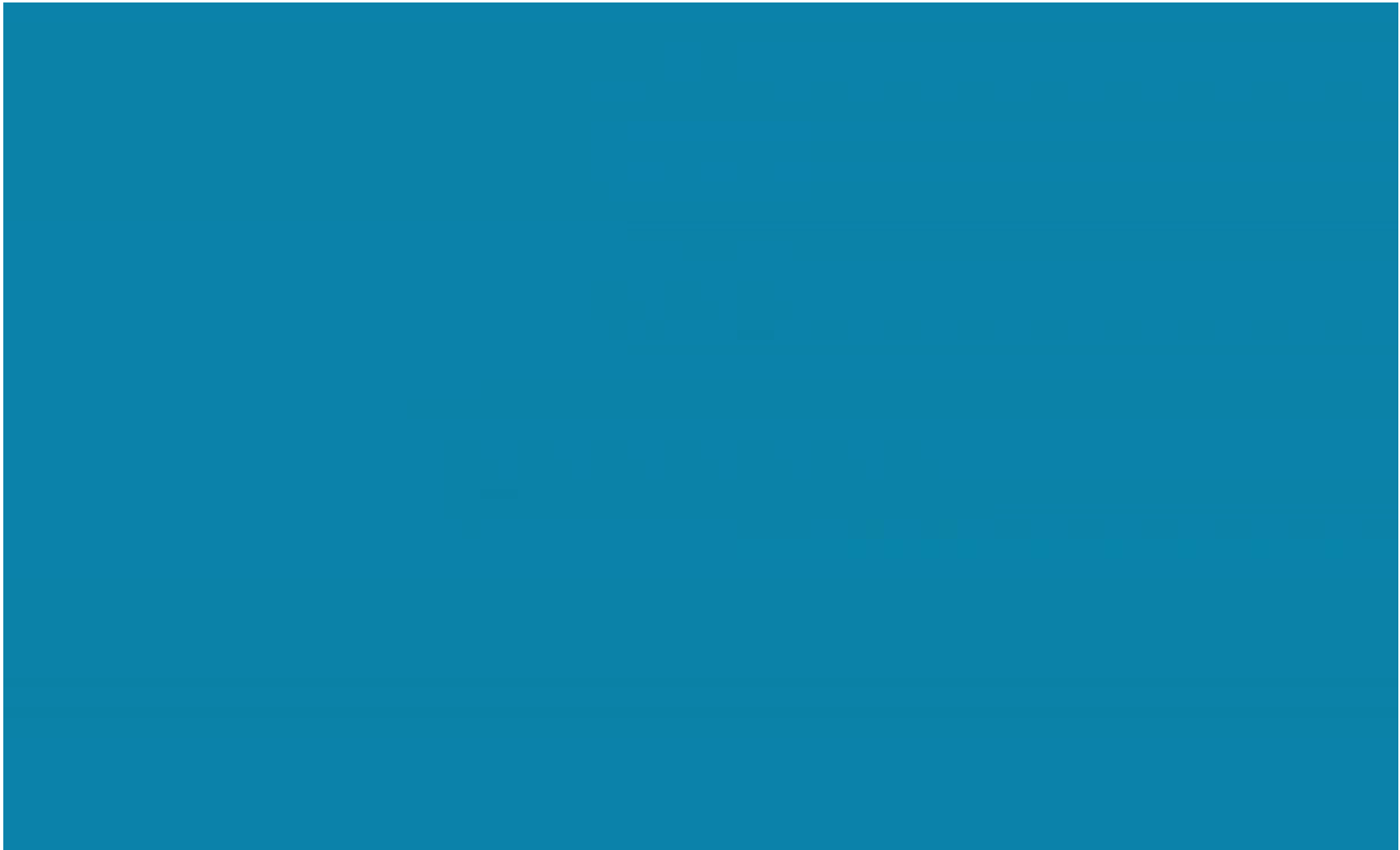
Scotland | Scotland Politics | Scotland Business | Edinburgh, Fife & East | Glasgow & West

Medics use video to help parents of neo-natal babies

















www.vcreate.tv

@hugrhc



FAMILY AWARENESS SESSIONS
MARCH 2018

NICU Level 1 Seminar Room
Next to Waiting Area 2-3pm

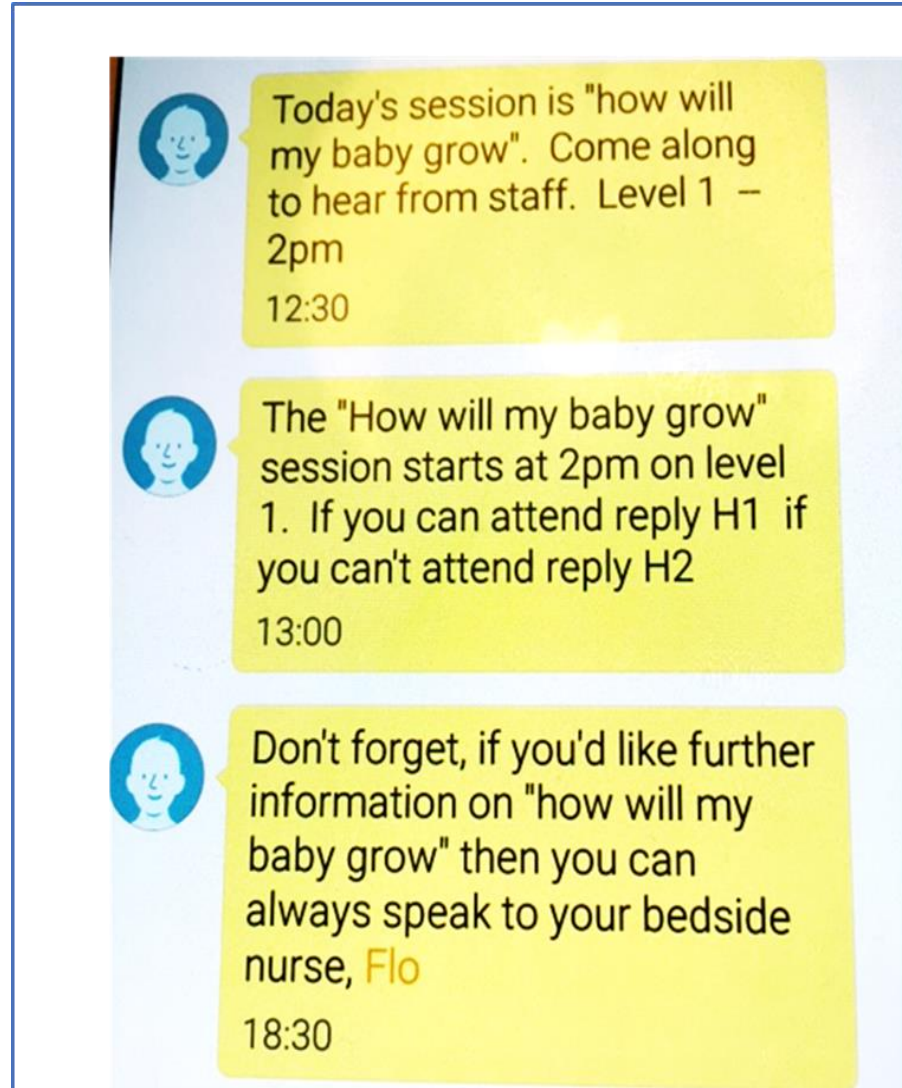
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
5 TH  "Getting Ready for Home"	6 th  "Bathing, Sterilising and Making up Feeds"	7 th	8 th  "Transition to Breastfeeding"	9 th OUR FAMILY'S TEA AND COFFEE AFTERNOON	10 th  CPR	11 th
12 th	13 th  "Level 2 Tour – Meet on Level 1 reception"	14 th  "Bookbug"	15 th  "Comforting your baby"	16 th OUR FAMILY'S TEA AND COFFEE AFTERNOON	17 th  "Bathing, Sterilising and Making up Feeds"	18 th
19 th	20 th  "Expressing Milk"	21 st	22 nd  "Tube Feeding"	23 rd OUR FAMILY'S TEA AND COFFEE AFTERNOON	24 th	25 th
26 th  "Take Time Out"	27 th  "Level 2 Tour – Meet on Level 1 reception"	28 th  "Helping Your Baby to Develop while in NICU"	29 th  Glasgow Children's Hospital Charity	30 th OUR FAMILY'S TEA AND COFFEE AFTERNOON	31 st	1 st

ALL PARENTS & FAMILY MEMBERS WELCOME – We would love to see you all!

@hugrhc



"I love the sessions but I just lose track of time and forget"



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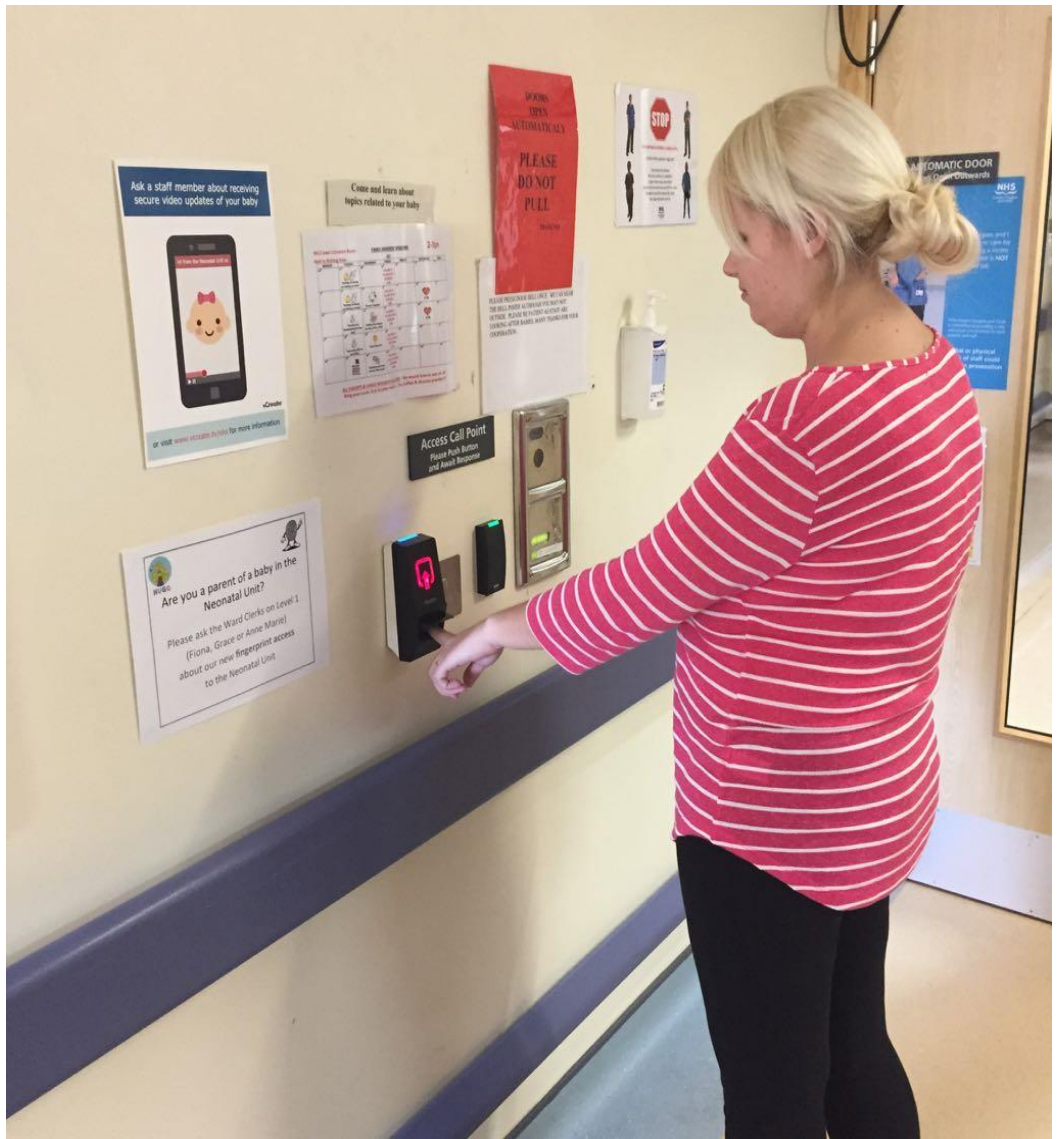


“A great opportunity to learn and socialise”

“A very emotional session....”

“It’s nice to meet other young mums, to bond and perhaps develop friendships”







My family Profile

my mum & dad are.....

I was born on _____
 at _____ hospital
 _____ weeks premature
 by _____

things I like are:
 my favourite position is _____
 I have a soother Yes/no
 Singing Stomachs

I am fed;
 mums milk
 mums milk + formula
 formula
 mum expresses mls day
 Mum has accessed support to express. yes/no.
 mum would like support to express. yes/no.

my mum & dad like to / can / are trained to;
 change nappy ^{signs to change}
 change clothes / wash
 tube feed
 bottle feed
 take temp
 warm milk
 replenish breasts
 other _____

What matters to me  **What matters to my family**

I was born on _____
 at _____
 weighing in at _____
 weeks gestation

My family are _____

WHAT DO I LIKE?

PLEASE COULD I HAVE A PERSONALISED VIDEO MESSAGE

I WOULD LIKE TO RECEIVE UPDATE TEXTS

My feeds are _____

My family can

	Un-aided	Help us
Cuddle me	<input type="checkbox"/>	<input type="checkbox"/>
Kangaroo Care	<input type="checkbox"/>	<input type="checkbox"/>
Bath time	<input type="checkbox"/>	<input type="checkbox"/>
Changing	<input type="checkbox"/>	<input type="checkbox"/>
Getting my milk	<input type="checkbox"/>	<input type="checkbox"/>
Oral Feeds	<input type="checkbox"/>	<input type="checkbox"/>
Tube Feeds	<input type="checkbox"/>	<input type="checkbox"/>
Giving medicine	<input type="checkbox"/>	<input type="checkbox"/>
Extra special cares	<input type="checkbox"/>	<input type="checkbox"/>

We'd like to talk about
 Expressing Bottlefeeding

My mum is expressing
 _____ mls today

I would like to see the rest of the unit





KANGATHON

MAY 1 ST		
MAY 2 ND		
MAY 3 RD		
MAY 4 TH		
MAY 5 TH		
MAY 6 TH		
MAY 7 TH		
MAY 8 TH		
MAY 9 TH		
MAY 10 TH		
MAY 11 TH		
MAY 12 TH		
MAY 13 TH		
MAY 14 TH		
MAY 15 TH		





	2015 (Pre-HUG)	2017-2018
Are you able to be with your baby as much as you want?	56 %	100%
Were you made to feel at home in the Neonatal Unit?	83 %	94%
Do you feel involved in your baby's care as much as you would like to be?	76 %	89 %

Unicef Baby Friendly Audit



@hugrhc



PRACTISING REALISTIC MEDICINE



CHANGE OUR STYLE TO
SHARED DECISION MAKING?

BUILD A **PERSONALISED**
APPROACH TO CARE?



REDUCE **HARM**
AND **WASTE**?



REDUCE **UNWARRANTED**
VARIATION IN PRACTICE
AND **OUTCOMES**?

MANAGE RISK BETTER?



BECOME **IMPROVERS**
AND **INNOVATORS**?



HELPING US GROW GROUP (HUGG), ROYAL HOSPITAL FOR CHILDREN, GLASGOW.

The Helping Us Grow Group (HUGG) is a unique inclusive collaboration of families and staff in the neonatal unit. Our aim is to support parents to be primary caregivers for their baby, no matter how sick, in partnership with clinical staff. This is our model of Family Integrated Care (FIC). Two key elements of our work are education for families and encouraging peer-to-peer support.

Inspired by other leading FIC centres, and motivated by feedback from families in our unit, we organised a programme of innovative daily Family Awareness Sessions (Figure 4). These are held most days from 2-3pm for all families in the neonatal unit and aim to give parents skills and knowledge to care for their baby, as well as an important to meet and support each other. Topics are requested by parents and sessions are led by staff of all backgrounds including staff nurses, nursery nurses, neonatal doctors, pharmacists, dieticians and psychologists. "Veteran" parents, both mothers and fathers, also return to lead sessions and share their experiences.

Figure 4 HUGG Family Awareness Session



Family feedback is extremely positive. Parents tell us they feel more confident, have improved understanding of their baby's condition and care, and are forming strong and long-lasting friendships.

These sessions are organised by a fantastic group of staff nurses, working above and beyond their normal clinical duties. HUGG has empowered them to lead change and improve care for our patients.

In order to foster collaboration we also developed a simple but effective innovation: shared whiteboards at each cot-space. Families are able to leave messages for staff, including when they can be present to care, which care they want to be involved in and their baby's likes and dislikes. Staff, especially those on nightshift, write updates and messages of support, including translations for non-english speaking families. Parents are delighted to know that staff are listening. These simple white-boards have created a new relationship with staff, as one parent wrote "thank you for being a voice for my baby".

Another innovation was inspired by a father in the neonatal unit. He told us that he used video messaging for his clients, and asked if we could send him a video of his baby. Working with an industry partner, IT and governance teams we developed and piloted a secure video-messaging system in the neonatal unit in March 2017. Staff create short, friendly video updates for parents when they cannot be with their baby (Figure 5).

Figure 5 HUGG Video Messaging



The positive impact of this innovation has far exceeded all of our expectations. Parents tell us they feel reassured, less anxious and sleep better. They feel a deeper trust and connection to staff who took the time to make and send the video message of their baby. With the support of grateful families we are now spreading our system to over 60 neonatal units throughout the UK, and to other clinical areas in our organisation.



Glasgow Children's Hospital Charity

Bliss for babies born premature or sick

Scottish Book Trust inspiring readers and writers

vCreate





Thank you

Twitter: @hugrhc

Facebook: @nhsggcneonatalrhc

Family Integrated Care: changing the culture in the neonatal unit. Archives of Disease in Childhood 2017.

www.vcreate.tv

<https://player.vcreate.tv/royalhospitalforchildren/kmc2018>

<https://player.vcreate.tv/royalhospitalforchildren/kmc2017>

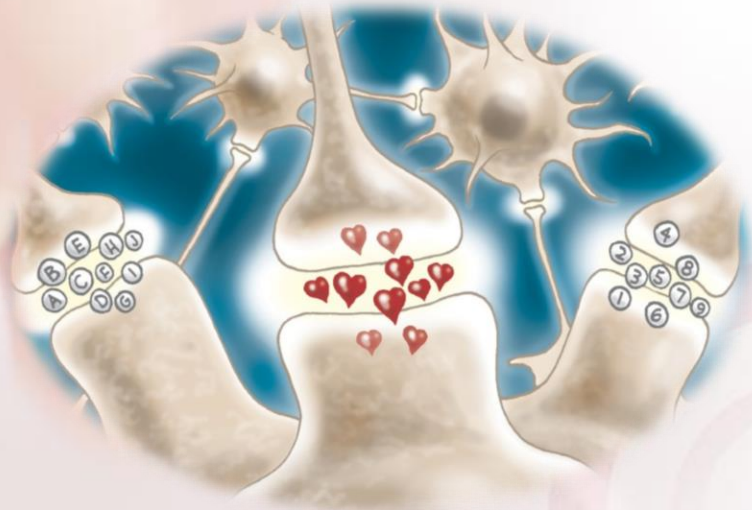
<https://player.vcreate.tv/royalhospitalforchildren/nmuxmas2016>



*Empowering Parents
Improving Outcomes*



Bookbug Baby



Role of the Parent



The Book-Bug

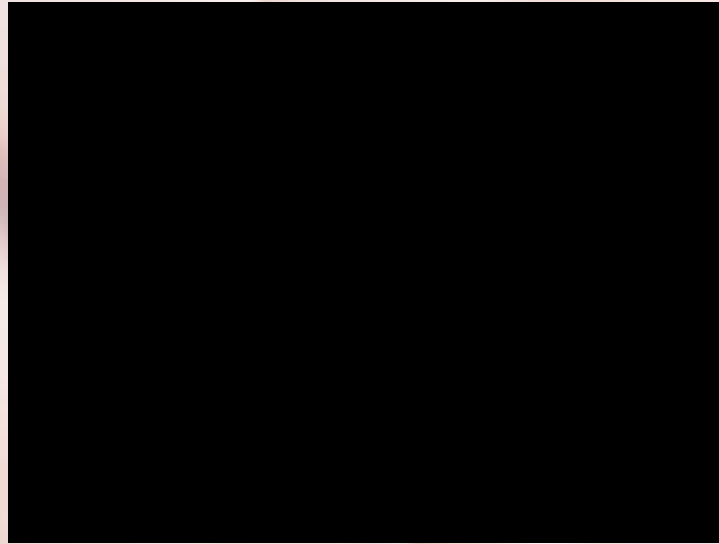
“Look at me, I am talking to you !”
Behaviour is my language



Bringing Bookbug into the neonatal unit



Singing, talking, rhyming, bonding

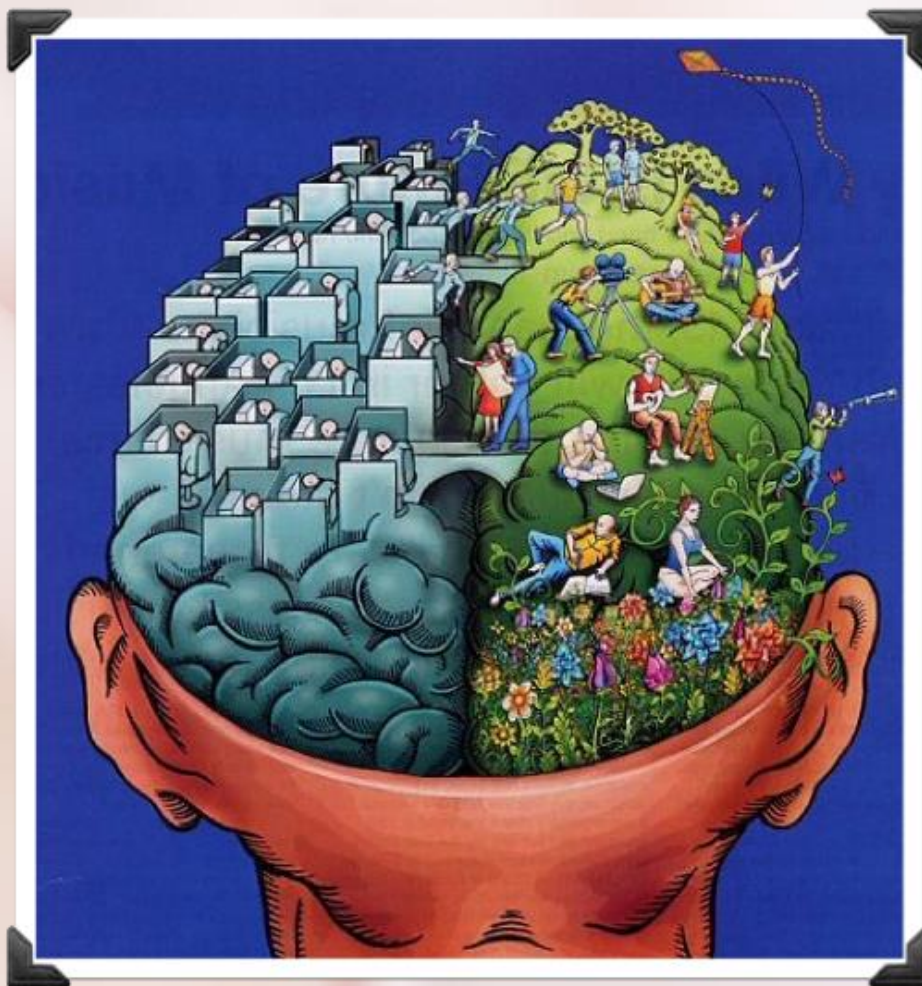


Building relationships





The Impact of prematurity on social life and Education



The Preterm Phenotype: Implications for Learning

- Cognitive Profile
- Self-regulation: Attention
- Behaviour
- Emotions and Social Relationships
- Visual spatial skills , processing speed and working memory



The Human Brain Under Stress: key brain regions

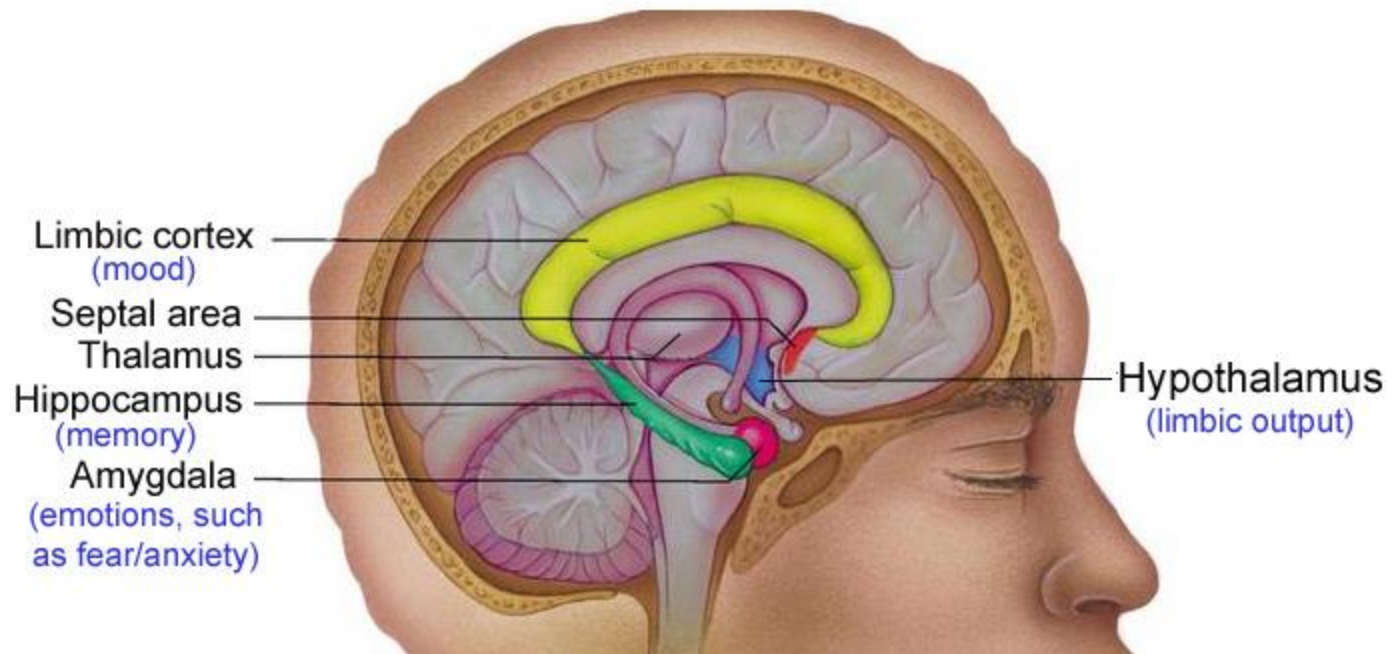
Prefrontal cortex
Executive function, working memory
Atrophy



Hippocampus
Contextual, episodic, spatial
memory
Atrophy

Amygdala
Emotion. fear, anxiety
Hypertrophy.
later atrophy

Limbic System



Early Developmental intervention programs provided post hospital discharge to prevent motor and cognitive impairment in preterm infants

Spittle et al Cochrane Library developmental intervention 2015



Evidence suggests that early developmental interventions improve cognitive outcomes up to preschool age.



Parent behaviour moderate the relationship between neonatal pain and internalizing behaviors at 18 months CA in VP

Vvinall et al Pain 154 (2013) 1831-1839

Positive parent interaction and lower stress appears to ameliorate negative effects of neonatal pain on stress-sensitive behaviors in the VP (<32/40)



Maternal-Preterm Skin to Skin Contact Enhances Child Physiologic Organisation and Cognitive Control Across the First 10 Years of Life

Ruth Feldman et al
BIOL Psychiatry 2014;75:56-64

- **KC improved both child physiologic organisation and maternal behaviour**



Cerebral motor function in VP at birth adolescents: a brain stimulation exploration of kangaroo mother care effect

Schneider et al
Acta Paediatrica 2012,101 1045-1053

- **KMC adolescents presented faster conduction times**
- **KMC positively influenced the premature brain networks and synaptic efficacy up to adolescents.**



WHAT?
CAN WE DO ●



Practical points

How to promote development through prevention

- **Infancy**
- **Toddler**
- **Pre-school**
- **School readiness**



