

DEVELOPMENTAL CARE

INTRODUCTION

- Developmental needs are an integral part of care planning; these differ according to gestational age, postnatal age and health status. Assess developmental needs and plan care responsive to baby's stress threshold and sleep/wake pattern

Key concepts

- Promoting organised neurobehavioural and physiological function
- Altering the physical environment to protect vulnerable developing sensory systems
- Family-centred care

Goals

- Improved physiological stability
- Reduced stress and pain
- Appropriate sensory experience
- Protection of postural development
- Improved sleep patterns
- Improved feeding
- Confident parenting and attachment
- including improvement for parents'/carers' mental wellbeing – reduction of stress levels, anxiety and depression
- Staff satisfaction
- Improved neurodevelopmental outcomes
- Help with breastfeeding
- Possible reduced length of stay

OBSERVATION AND RECOGNISING BEHAVIOURAL CUES

- Recognition of signs that baby may be experiencing stress is vital. Babies will display different cues at different stages of development according to their behavioural state (wake/sleep state)

Defensive/avoidance behaviour	Coping/approach behaviour
<ul style="list-style-type: none"> • Any of the following indicate baby may need help or some time-out: <ul style="list-style-type: none"> • respiratory pauses, tachypnoea, gasping • yawning, sighing • gagging, possetting • hiccoughing • sneezing • coughing • straining • flaccidity (limp posture) trunk, limbs, face, mouth • hypertonicity with hyperextension (stiff posture) • arching • finger splays, 'high guard hands', 'saluting' • hand-on-face, fisting • facial grimace • Frantic diffuse motor activity: <ul style="list-style-type: none"> • squirming • disorganised transition between and rapid changes of behavioural state • fussing or irritability • staring or gaze averting • hyper alertness • crying/whimpering 	<ul style="list-style-type: none"> • The following may indicate how well baby is able to settle itself, cope with interventions and to interact: <ul style="list-style-type: none"> • able to regulate colour and breathing pattern • reduction of tremors, twitches and autonomic stress cues • smooth well-modulated posture and normal tone • smooth movements • hand and foot claspings • grasping • hand-to-mouth activity • hand holding • hands to midline • rooting/sucking • defined sleep states • focused, shiny-eyed alertness or animated facial expression • 'ooh' face • cooing • attentional smiling • easily consoled

CARE-GIVING AND INTERVENTIONS

- Handling and invasive procedures may cause:
 - destabilisation of blood flow, cardiac regulation, oxygenation and digestive functions
 - discomfort, pain and iatrogenic injury
 - poor thermoregulation
 - disrupted growth
 - altered sleep patterns with disordered transition between states
 - delay in development of normal movement and posture
 - diminished parental confidence and competence

Whenever possible all care-giving and intervention should be carried out by 2 people, 1 person performs the intervention; the other provides the baby with comfort and support

Aim	Method
<ul style="list-style-type: none"> • Plan and deliver individualised care and interventions (nursing and medical), in accordance with baby's cues, promoting physiological stability and self-calming behaviours • Protect baby's sleep and ability to self-regulate • Avoid pain, distress and iatrogenic injury • Protect developing musculoskeletal systems by promoting midline postures and symmetry • Increase parents' confidence and competence 	<ul style="list-style-type: none"> • Closely observe baby's physiological, motor and behavioural cues. Plan, adapt and pace care-giving and interventions in response • Have all necessary equipment ready before starting • Approach baby carefully, using soft voice and gentle touch, allowing time to adjust before beginning • Keep lighting and noise levels low • Support and comfort baby throughout: <ul style="list-style-type: none"> • administer appropriate analgesia including sucrose and MEBM • avoid totally exposing baby • facilitate baby's self-calming strategies according to behavioural cues e.g. non-nutritive sucking, grasping, hand-to-mouth and foot bracing • use swaddling and containment (hands/nest/soft blanket or clothing) to provide support during care or procedure • allow baby 'time-out' to recover if cues indicate stress. Recommence when baby is calm • Use side-lying position for cares, including nappy changes. Promote a flexed position with limbs tucked in. Do not lift baby's legs, place soles of feet together and roll side-to-side instead • Use containment and swaddling for transfers into/out of incubator/cot, weighing, and bathing. Move baby slowly, in flexed, side-lying position, close to carer's body • Promote positive touch and active parental role • Promote kangaroo care as soon as possible (see Kangaroo care guideline) • Ensure baby settled, comfortable and stable before leaving bedside