

# 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 integrated 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 and to **support parents taking lead in care giving**
- Staff satisfaction
- Improved neurodevelopmental outcomes

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

## 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"> <li>• Plan and deliver individualised care and interventions (nursing and medical), in accordance with baby’s cues, promoting physiological stability and self-calming behaviours</li> <li>• Protect baby’s sleep and ability to self-regulate</li> <li>• Avoid pain, distress and iatrogenic injury</li> <li>• Protect developing musculoskeletal systems by promoting midline postures and symmetry</li> <li>• Increase parents’ confidence and competence</li> </ul>	<ul style="list-style-type: none"> <li>• Closely observe baby’s physiological, motor and behavioural cues. Plan, adapt and pace care-giving and interventions in response</li> <li>• Have all necessary equipment ready before starting</li> <li>• Approach baby carefully, using soft voice and gentle touch, allowing time to adjust before beginning</li> <li>• Keep lighting and noise levels low</li> <li>• Support and comfort baby throughout:               <ul style="list-style-type: none"> <li>• administer appropriate analgesia including sucrose and MEBM</li> <li>• avoid totally exposing baby</li> <li>• facilitate baby’s self-calming strategies according to behavioural cues e.g. non-nutritive sucking, grasping, hand-to-mouth and foot bracing</li> <li>• use swaddling and containment (hands/nest/soft blanket or clothing) to provide support during care or procedure</li> <li>• allow baby ‘time-out’ to recover if cues indicate stress. Recommence when baby is calm</li> </ul> </li> <li>• 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</li> <li>• 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</li> <li>• Promote positive touch and active parental role</li> <li>• Promote kangaroo care as soon as possible (see <b>Kangaroo care</b> guideline)</li> <li>• Ensure baby settled, comfortable and stable before leaving bedside</li> </ul>