

# **مرکز آموزشی درمانی قلب و عروق شهید مدنی اعتباربخشی ملی ایران** آموزش های مجازی اعتباربخشی



پیام شماره ۱

محور مراقبت و درمان-زیر محور مراقبت های عمومی و بالینی

کلید واژه: ارزیابی پرستاری

ارزیابی پرستاری به سه دسته تقسیم می گردد:

ارزیابی بدو پذیرش: ارزیابی جامع پرستاری که شامل تاریخچه بیمار، ظاهر کلی بیمار، معاینات فیزیکی و علایم حیاتی بیمار در بدو پذیرش می باشد.

ارزیابی به عمل آمده در هر شیفت کاری: ارزیابی کوتاه پرستاری که در آغاز هر شیفت کاری یا زمانی که در طول شیفت وضعیت بیمار تغییر پیدا می کند، صورت می پذیرد.

ارزیابی متمرکز: ارزیابی جامع پرستاری از یکی از سیستم های بدن مربوط به مشکل فعلی بیمار که ممکن است شامل یک یا چند سیستم بدن باشد.

در استاندارد ب ۱-۱ منظور از ارزیابی اولیه، ارزیابی بدو پذیرش بیمار می باشد

References: The Nursing ad Midwifery Board of Australia (NMBA)

نکته ها:

تا زمان ابلاغ فرم و نحوه ارزیابی اولیه پرستاری از سوی وزارت بهداشت:

(1ارزیابی اولیه می تواند در گزارش پرستاری یا در فرم تهیه شده توسط بیمارستان ثبت شود.

(2محدوده زمانی توسط بیمارستان تعیین می گردد (از زمان پذیرش تا ۲۴ ساعت بعد از پذیرش می تواند متغیر باشد

(3ارزیابی اولیه توسط کارشناس پرستاری انجام می شود.

(4انجام ارزیابی اولیه در استانداردهای ملی بیمارستانی ایران، در بخش های بستری ارزیابی می گردد.

منابع برای مطالعه بیشتر س س س س

## **Nursing assessment**

## Introduction

Assessment is a key component of nursing practice, required for planning and provision of patient and family centred care. The Nursing ad Midwifery Board of Australia (NMBA) in the national competency standard for registered nurses states that, "The registered nurse assesses, plans, implements and evaluates nursing care in collaboration with individuals and the multidisciplinary health care team so as to achieve goals and health outcomes."

#### Aim

The aim of this guideline is to ensure all RCH patients receive consistent and timely nursing assessments.

The guideline specifically seeks to provide nurses with:

- Indications for assessment
- Types of assessments
- Structure for assessments

#### Definition of terms

**Admission assessment**: Comprehensive nursing assessment including patient history, general appearance, physical examination and vital signs completed at the time of admission.

**Shift assessment**: Concise nursing assessment completed at the commencement of each shift or if patient condition changes at any other time during your shift.

**Focused assessment**: Detailed nursing assessment of specific body system(s) relating to the presenting problem or current concern(s) of the patient. This may involve one or more body system.

## Admission assessment

An admission assessment should be completed by the nurse with a parent or care giver, ideally upon arrival to the ward or preadmission, but must be completed within 24hours of admission. Admission assessment is to be documented on the nursing admission form. Privacy of the patient needs to be considered all times.

## Patient history

History of current illness/injury (i.e. reason for current admission), relevant past history, allergies and reactions, medications, immunisation status and family and social history.

For neonates and infants consider maternal history, antenatal history, delivery type and complications if any, APGAR score, resuscitation required at delivery and Newborn Screening Tests (see Child Health Record for documentation).

## General appearance

Assessment of the patient's overall physical, emotional and behavioral state.

Considerations for all patients include: looks well or unwell, pale or flushed, lethargic or active, agitated or calm, compliant or combative, posture and movement.

- Neonate and Infant
  - Parent-infant, infant-parent interaction
  - Body symmetry, spontaneous position and movement
  - Symmetry and positioning of facial features
  - Strong cry
- Young Child
  - Parent-child, child-parent interaction

- Mood and affect
- Gross and fine motor skills
- Developmental milestones
- Appropriate speech

## Adolescent

- Mood and affect
- Personal hygiene
- Communication

## Vital signs

Baseline observations are recorded as part of an admission assessment and documented on the patients observation flowsheet. It is mandatory to review the ViCTOR graph to observe trending of vital signs and to support your clinical decision making process.

- **Temperature:** Tympanic temperatures for children older than 6 months. Less than 6 months use digital per axilla.
- Respiratory Rate: Count the child's breaths for one full minute. Assess any respiratory distress.
- **Heart Rate**: Palpate brachial pulse (preferred in neonates) or femoral pulse in infant and radial pulse in older children. To ensure accuracy, count pulse for a full minute.
- **Blood Pressure**: Baseline measurement should be obtained for every patient. Selection of the cuff size is an important consideration. A rough guide to appropriate cuff size is to ensure it fits a 2/3 width of upper arm. For neonates without previous hospital admissions do a blood pressure on all 4 limbs.
- Oxygen Saturation: As clinically indicated.
- Pain: FLACC, Faces, numeric scale, Neonatal Pain Assessment Tool. Current pain relief medications/practices

#### Additional measurements:

- Weight: on admission and/or weekly/daily as clinically indicated.
- Height: as clinically indicated.
- Head circumference: as clinically indicated.
- Blood sugar level (BSL): as clinically indicated.

## Physical assessment:

A structured physical examination allows the nurse to obtain a complete assessment of the patient. Observation, inspection, palpation, percussion and auscultation are techniques used to gather information. Clinical judgment should be used to decide on the extent of assessment required. Assessment information includes, but is not limited to:

- Airway: noises, secretions, cough, artificial airway
- Breathing: bilateral air entry and movement, breath sounds (normal and adventitious), respiratory rate, rhythm, work of breathing: spontaneous/ laboured/supported/ ventilator dependent, any oxygen requirement and delivery mode.
- **Circulation**: pulses (location, rate, rhythm and strength); peripheral temperature, skin colour and moisture, skin turgor, capillary refill time; lip, oral mucosa and nail bed colour.
- **Disability**: Use assessment tools such as, Alert Voice Pain Unresponsive score (AVPU) or University Michigan Sedation Score (UMSS), Gross Motor Function Classification System (GMFCS). Identify any aids required such as mobility aids, transfer needs, glasses, hearing aids, prosthetics, orthotics etc. Any abnormal movement or gait.

- **Focused Assessment**: Detailed nursing assessment of specific body system(s) relating to the presenting problem or current concern(s) of the patient. This may involve one or more body systems. For example, cardiovascular, respiratory, neurological.
- **Skin**: Colour, turgor, lesions, bruising, wounds, pressure injuries.
- **Input/Nutrition**: appetite, appropriate weight for age, food intolerance, nausea or vomiting, dietary requirements, breast fed, formula, oral, NG, Gastrostomy, Jejunal, IV, Fluids, Hydration state.
- Output/Elimination: Bowel and Bladder routine(s), incontinence management, drains and other losses.

## Wellbeing:

Mood, emotional state, comfort objects, sleeping habits and outcome, coping strategies, support networks, reaction to admission. Psychosocial assessments e.g. HEADSS

#### Social/cultural:

Parents/ carers/ guardian, living arrangements, siblings, visiting plans, transport, specific cultural requirements

#### Shift assessment

At the commencement of every shift an assessment is completed on every patient and this information is used to develop a plan of care. Initial shift assessment is documented on the assessment flowsheet and further assessments or changes to be documented in the assessment flowsheet/progress notes. The Shift Assessment includes:

- Airway: noises, secretions, cough, artificial airway
- **Breathing**: bilateral air entry and movement, breath sounds, respiratory rate, rhythm, work of breathing, spontaneous/ supported/ ventilator dependent, oxygen requirement and delivery mode
- **Circulation**: pulses (rate, rhythm and strength); peripheral temperature, colour and capillary refill time; skin, lip, oral mucosa and nail bed colour.
- **Disability**: Use assessment tools such as, Alert Voice Pain Unconscious scale(AVPU) or University Michigan Sedation Score (UMSS) and record on observation chart. Any aids, mobility or transfer requirements, prosthetics/orthotics required. Blood sugar levels as clinically indicated.
- **Focused**: assessment of presenting problem(s) or other identified issues, eg. cardiovascular, respiratory, gastrointestinal, renal, eye, etc.
- Pain: FLACC, Faces, numeric scale, Neonatal Pain Assessment Tool.
- Hydration/Nutrition: oral, nasogastric, gastrostomy, jejunal, fasting, breast fed, diet, IV fluids.
- Output: urine, bowels, drains, losses, fluid balance
- Risk: pressure injury risk assessment, falls risk assessment, ID bands
- Wellbeing: Mood, sleeping habits and outcome, coping strategies, reaction to admission
- Social: family/ guardian, discharge plan
- Review the history of the patient recorded in the IP summary, However, it may be appropriate to ask questions to add additional details to the history

## Focused assessment

A detailed nursing assessment of specific body system(s) relating to the presenting problem or other current concern(s) is required. This may involve one or more body system.

## Neurological system

A comprehensive neurological nursing assessment includes neurological observations, cognitive growth and development, fine and gross motor skills, sensory function, seizures and any other concerns.

#### Neurological observations

- RCH uses a modified version of the Glasgow Coma Scale to assess and interpret the degree of consciousness and is documented on the neurological observation chart.
  - Assess the child's eye opens spontaneously, only when touched or spoken to, only to pain or not at all.
  - Observe the child's best age appropriate verbal response? For infants, an assessment is made of their cry and vocalization.
  - Observe the child's best age appropriate motor response?
- Arm and leg movements, assess right and left and document any differences.
- Pupil size and reaction to light.
- For neonates, check fontanels, check for presence of marks from forceps or vacuum delivery device, or presence of cephalohematoma or caput succedaneum.

## Growth & development

- Observe the head, shape, size and mobility. Head circumference should be measured, over the most prominent bones of the skull (e.g. frontal and occipital bones)
- In neonates and infants palpate fontanels and cranial sutures
- Inspect the spine looking for midline, lumps, dimples, hair or deformities
- Quality of cry or vocalization
- Review the history on attainment of developmental milestones, including progression or onset of regression. Consider attainment of rolling, sitting, crawling, walking, language development, bladder/bowel control, reading etc.

## Fine & gross motor skills

- Observe posture and tone
- Spontaneous versus controlled movement
- Bilateral symmetry
- Coordination and strength of movements
- Gait and balance
- Reflexes
- Neonatal reflexes : sucking, rooting, Moro, palmar, plantar

## Sensory functions

- Taste- sweet, sour, salty
- Hearing in each ear
- Response to tactile stimuli (touch)
- Vision including the range of motion of both eyes
- Smell
- Proprioception

## Seizures

- Onset of seizures
- Description of the type of seizure
- Duration of seizures
- Precipitating factors

## Respiratory system:

Respiratory illness in children is common and many other conditions may also cause respiratory distress. Respiratory assessment includes:

#### History

- Onset + duration of symptoms cough / shortness of breath
- Triggers ( dust / aerosol / pollen)

## Inspection/observation

- Observe the overall appearance of the child: alert, orientated, active/hyperactive/drowsy, irritable.
- Colour(centrally and peripherally): pink, flushed, pale, mottled, cyanosed, clubbing
- Respiratory rate, rhythm and depth (shallow, normal or deep)
- Respiratory effort (Work of Breathing WOB): mild, moderate, severe, inspiratory: expiratory ratio, shortness of breath
- Use of accessory muscles (UOAM): intercostal/subcostal/suprasternal/supraclavicular/substernal retractions, head bob, nasal flaring
- Symmetry and shape of chest
- Tracheal position, tracheal tug
- Audible sounds: vocalisation, wheeze, stridor, grunt, cough productive/paroxysmal
- Monitor for oxygen saturation

## Auscultation

- Listen for absence /equality of breath sounds
- Auscultate lung fields for bilateral adventitious noises e.g.: wheeze, crackles etc.

## Palpation

- Bilateral symmetry of chest expansion
- Skin condition temperature, turgor and moisture
- capillary refill (central/peripheral)
- Fremitus (tactile)
- Subcutaneous emphysema

## Cardiovascular

Assessment of the cardiovascular system evaluates the adequacy of cardiac output and includes.

## Inspection:

Examine circulatory status and hydration status of upper and lower extremities:

- Colour (central and peripheral): pink, flushed, pale, mottled, cyanosed, clubbing
- Capillary Refill Time (CRT): brisk (< 2 sec) or sluggish
- Presence of oedema (central and/or peripheral)
- Hydration status: Skin turgor, oral mucosa, and anterior fontanels in infants

## Palpation:

- Palpate central and peripheral pulses for rate, rhythm and volume
- Skin condition temperature, turgor and diaphoresis

## Auscultation:

- Auscultate the apical pulse
- Compare peripheral pulse and apical pulse for consistency (the rate and rhythm should be similar).
- Auscultate the chest for heart sounds and murmurs

#### Gastrointestinal

Assessment will include inspection, auscultation and light palpation of the abdomen to identify visible abnormalities; bowel sounds and softness/tenderness. Ensure stomach is not full at time of assessment as this may induce vomiting.

## History

- Feeding (type of feed/patterns / difficulties) e.g. TPN, formula feeds, breastfeeding, any allergies / intolerances of feed
- Elimination (frequency, consistency, colour, bleeding)
- Pain, cramping, nausea, vomiting (frequency, colour, bleeding, consistency)
- Previous stoma?
- Previous NGT/NJT/PEG/PEJ

## Inspection

- Shape /symmetry of the abdomen (flat, rounded, distended, scaphoid)
- Contour of the abdomen(Smooth, lesions, malformations, any old or new scars)
- Distention (mild / moderate / severe tight / shiny)
- Umbilicus (bulging, scars, piercings) In neonates observe for redness, inflammation, discharge, presence of cord stump
- Inguinal area (bulging, herniation)
- Visible peristalsis
- Presence of NG / NGT / PEG/PEJ (indication)
- Stoma site (dressing regimen / frequency and consistency of output)

## **Palpation**

Light palpation only to identify

- Guarding
- Tenderness
- Pain (location, characteristics)

## Auscultation

- Four quadrants (RUQ, RLQ, LUQ, LLQ) for bowel motility
- Bowel sounds present (frequency / character)
- Absent bowel sounds (one or all quadrants)
- Abdominal girth measurement as clinically indicated

#### Renal

An assessment of the renal system includes all aspects of urinary elimination

- Urinary pattern, incontinence, frequency, urgency, dysuria
- Hydration status including fluid balance, BP and weight
- Growth and feeding, diet or fluid restrictions
- Skin condition: temperature, turgor and moisture
- Urine output (Normal children <2yrs is between 2-3ml/kg/hr, >2yrs is between 0.5-1ml/kg/hr)
- Urinalysis (pH, ketones, protein, blood, leukocytes, specific gravity)
- Review blood chemistry results, urea, creatinine, electrolytes, albumin and haemoglobin

#### Musculoskeletal

A musculoskeletal assessment can be commenced while observing the infant/child in bed or as they move about their room. Be aware that during periods of rapid growth, children complain of normal muscle aches. Throughout this assessment limbs/joints should be compared bilaterally.

## Inspection

- Child's gait and ambulation
- Posture, movement and body symmetry
- Limbs for swelling, redness and obvious deformity
- Joint range of motion is it passive or independent? Are limbs moving equally, is there pain on movement?
- Joints for redness or swelling

## Palpation

- Limbs for muscle mass, tone and strength
- Limbs for pain or tenderness

#### Skin

Skin assessment can identify cutaneous problems as well as systemic diseases.

## Inspection/observation

- Colour of the skin(pale/flushed, cyanotic, burned tissue)
- Rash: Note the size, colour, texture and shape of the lesions (e.g. raised or flat, fluid filled) and the number and distribution (e.g. sparse, numerous, over limbs etc.), itchy, painful.
   Note which area of the body it covers. Obtain a history of the rash from a parent /carer.
   Non-blanchable petechial rash should be reported immediately.
- Bruising/wounds/pressure injuries: Assess any existing wounds and utilise a Wound Care
  Assessment and Treatment Chart, for ongoing wound assessment and management.
  Examine high risk areas regularly, including bony prominences and equipment sites (masks,
  plasters, tubes, drains, etc.) for pressure injuries (<u>Pressure injury prevention guideline</u>). Report
  any irregular bruising.
- Nevi/Moles: Observe for size, any irregular borders, variation in colours.
   Larger nevi and changing ones should be reviewed by appropriate medical staff.
- Hair: observe the condition of the scalp. Cradle cap is most common in newborns and is identified by thick, crusty scales over the scalp. Observe for lice or ticks.

## Palpate

- Skin temperature, moisture, turgor, oedema, deformities, hematomas and crepitus
- Hair texture for brittleness and moisture

## Eye

Inspection of the eye should always be performed carefully and only with a compliant child.

## Inspection/Observation

- Bilateral symmetry, shape, and placement of eye in relation to the ears
- Bilateral symmetry, size and shape of the pupils, reactivity to light
- Conjunctiva, and eyelids for inflammation, color and discharge
- Color of sclera
- Iris for upslanting/downslanting of palpebral fissures
- Visual acuity, including requirement for glasses or contacts
- Visual field
- Presence of tears. Close eyes in unconscious patient to protect cornea from drying and injury

## Ear/Nose/Throat (ENT)

Assessment of throat and mouth is essential as upper respiratory infections, allergies; oral or facial trauma, dental caries and pharyngitis are common in children. This includes a thorough examination of the oral cavity. The examination of the throat and mouth is completed last in younger, less cooperative children.

## Inspection

- Inspect ears for symmetry, shape and position (dysmorphic or malposition ears).
- Observe for any external trauma, obvious cerumen, inflammation, redness or exudate, any obvious discharge, child pulling on ear.
- Inspect nose for symmetry, nasal patency, tenderness, septal deviation, masses or foreign bodies, note the colour of the mucosal lining, any swelling, discharge, dryness or bleeding.
- Inspect lips for shape, symmetry, color, dryness, and fissures at the corners of the mouth.
- Inspect teeth for number present, condition, color, alignment, and caries.
- Inspect gingival tissue noting color and condition.
- Observe for bleeding gums, trauma to tongue or oral cavity, and malocclusion.
- Look for excessive fluid/secretions in the mouth.
- Inspect the hard and soft palate for lesions, presense and shape of uvula, size of tonsils, and buccal mucosa for color, exudate, and odour.

## Palpation

- Palpate external structures of the ear (tragus, mastoid) for masses lesions or tenderness.
- Palpate frontal and maxillary sinuses for tenderness in the older child.
- Palpation of the lips, gums, mucosa, palate and tongue may be possible in the compliant or older child, noting lesions, masses or abnormalities.

## Evaluation of assessment

In the evaluation phase of assessment, ensure the information collected is complete, accurate and documented appropriately. The nurse must draw on critical thinking and problem solving skills to make clinical decisions and plan care for the patient being assessed. If any abnormal findings are identified, the nurse must ensure that appropriate action is taken. This may include communicating the findings to the medical team, and the Associate Nurse Unit Manager in charge of the shift. Patients should be continuously assessed for changes in condition while under RCH care and assessments are documented regularly.

## <u>Links</u>

Observation and Continuous Monitoring clinical guideline (nursing)

Pressure Injury Prevention and Management clinical guideline (nursing)

Evidence table

Click here to view the evidence table.

## References

- Aylott, M. (2006). Observing the sick child: part 2a: respiratory assessment. Paediatric Nursing, 18(9), 38-44.
- Aylott, M. (2007). Observing the sick child: part 2c: respiratory auscultation. Paediatric Nursing, 19(3), 38-45.
- Aylott, M. (2007). Observing the sick child: Part 2b Respiratory palpation. Paediatric Nursing, 19(1), 38-45.
- Bickley, L. S., Szilagyi, P. G., & Bates, B. (2009). Bates' guide to physical examination and history taking (10th ed.): Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, .
- Chiocca, E. M. (2011). Advanced pediatric assessment / Ellen M. Chiocca (1st ed.): Philadelphia, Lippincott William & Wilkins
- Futagi, Y., Toribe, Y., & Suzuki, Y. (2009). Neurological assessment of early infants. Current Pediatric Reviews, 5(2), 65-70.
- Higginson, R., & Jones, B. (2009). Respiratory assessment in critically ill patients: airway and breathing. British Journal of Nursing, 18(8), 456.
- Hockenberry, M. J., & Wilson, D. (2009). Wong's essentials of pediatric nursing (8th ed.): Elsevier.
- Howlin, F., & Benner, M. (2010). Cardiovascular assessment in children: assessing pulse and blood pressure. Paediatric Nursing, 22(1), 25-36.
- Selby, M. (2010). Acute illness in children. Practice Nurse, 40(3), 14-17.
- Susan, S. (2012). Pediatric Physical Examination & Health Assessment: Jones & Bartlett Learning.
- Yock, A., & Corrales, M. S. (2010). Assessment of the unwell child Australian family physician, 39(5), 270-275.

Please remember to read the disclaimer.

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