

4.2. Stanyapana (breastfeeding), techniques and contraindications of breastfeeding

Unit 4 · Topic 2 Stanyapāna (Breastfeeding): technique and contraindications

Learning goals

By the end of this lesson, you will be able to: define **Stanyapāna**, state the **timing and duration** of optimal breastfeeding, demonstrate **correct positioning and attachment**, recognise **effective vs. ineffective feeding**, perform **hand expression** and safe **cup/spoon feeding** of expressed breast milk (EBM), troubleshoot common breastfeeding problems, and list **absolute/relative contraindications** to breastfeeding with safe alternatives.

1) What is Stanyapāna? (definition & goals)

Stanyapāna is the **direct feeding of human milk from the mother's breast**, the primary *āhāra* for the infant in the first months of life. Its goals are: nutrition, immune protection, thermoregulation, growth and neurodevelopment, bonding, and maternal benefits (uterine involution, lactational amenorrhoea, reduced risk of breast/ovarian cancers).

When to start and how long to continue (exam lines):

- **Initiate within the first hour** after birth (early skin-to-skin and latch).
- **Exclusive breastfeeding (EBF) for 6 months:** no water, other liquids, or foods.
- **Continue breastfeeding up to 2 years and beyond** while adding complementary foods from 6 months.

2) Core principles that make breastfeeding succeed

1. **Early skin-to-skin** contact to drive oxytocin (let-down), stabilise temperature and glucose.
2. **Rooming-in** and **on-demand feeding** (8-12 times per 24 h), including night feeds.
3. **No pre-lacteals** (sugar water, honey, ghr̥ta, animal milk) and **no bottles/teats** in the establishment phase.
4. **Frequent, effective breast emptying** — “the more milk removed, the more milk made.”
5. **Correct latch + positioning** to prevent pain, trauma, and poor transfer.
6. **Kangaroo Mother Care (KMC)** for LBW/late-preterm infants when stable.

3) Technique of breastfeeding

3.1 Positioning (mother and baby)

- **Mother comfortable:** back supported; shoulders relaxed; pain-free position (sitting or side-lying).
- **Baby aligned:** ear-shoulder-hip in one line; **tummy-to-tummy** with mother; nose to nipple; head slightly extended; whole body **close and facing the breast**.
- **Support:** hold breast in a **C-hold** (thumb above, fingers below, away from areola) without scissoring the nipple.

Common positions (choose based on dyad):

- **Cradle hold** (classic); **Cross-cradle** (extra head control for newborns);
- **Football/clutch** (good after Caesarean, for twins, or small babies);
- **Side-lying** (night feeds, post-operative comfort, perineal pain).

3.2 Attachment (latch) — how to get it right

1. **Tickle the upper lip** with the nipple; wait for **wide gape** (mouth open like a yawn).

2. Bring the baby **to the breast** (not breast to baby), aiming the **nipple toward the palate**.
3. **Chin touches first**, then mouth scoops a **large mouthful** of breast with **more areola visible above** than below.
4. Maintain close body contact; avoid pushing the back of the head — support from the shoulders.

Signs of a good latch (remember “4-point check”):

- **Mouth wide open**, lips flanged outward.
- **Chin touching** the breast; **nose free** or lightly touching.
- **More areola seen above** than below.
- **Suck-swallow-breathe** pattern: slow, deep sucks with audible swallows and brief pauses; no clicking/smacking.

Signs of poor latch: pinching/pain, nipple creasing/blanching after feeds, clicking sounds, dimpling of cheeks, baby persistently sleepy at breast with short, shallow sucks, inadequate output/weight gain.

3.3 Effective feeding vs. ineffective feeding (quick table)

| Feature | Effective | Ineffective |
|-----------------|-----------------------------------|--|
| Suck pattern | Deep sucks with pauses | Rapid, shallow “nibbling” |
| Swallows | Clearly audible/visible | Rare/none |
| Baby after feed | Relaxed, content, sleeps | Fussy or falls asleep quickly, then wakes hungry |
| Breast feel | Softer after feed | No change / engorged |
| Output & weight | ≥6 wets/day by day 5; steady gain | <6 wets; poor weight gain |

3.4 LATCH scoring (for documentation)

| Letter | Item | 0 | 1 | 2 |
|--------|-------------------------|-----------------------------|-----------------------------------|--|
| L | Latch | Too sleepy/none | Repeated attempts, holds nipple | Grasps breast, tongue down, lips flanged |
| A | Audible swallow | None | A few with stimulation | Spontaneous & frequent |
| T | Type of nipple | Inverted | Flat | Everted (after stimulation) |
| C | Comfort (breast/nipple) | Engorged/ cracked/ bleeding | Filling, reddened/ small blisters | Soft, nontender |
| H | Hold/positioning | Full assist | Minimal assist | No assist, mother independent |

Total **0-10**; ≤7 suggests need for help.

3.5 How long and how often?

- **On demand:** typically every **2-3 hours**; cluster feeding is normal.
- **One breast to softening**, then offer the **other**; allow the infant to complete the first side to access fat-rich **hind-milk**.
- Wake **sleepy babies** (especially late-preterm, jaundiced, SGA) for feeds at least **8-12 times/day**.

4) Hand expression, EBM, and alternative feeding methods

4.1 Hand expression (clinical skill)

1. Wash hands; use a clean wide-mouthed container.
2. Massage the breast in circles; place thumb and first finger **just outside the areola**.
3. Press **back toward chest**, then **compress and release** rhythmically — **do not slide** on skin.
4. Rotate finger position around the areola; collect milk that sprays or drips.
5. Express both breasts until flow slows; repeat several times/day (especially when establishing supply or if baby cannot latch).

4.2 Cup/spoon feeding of EBM (when baby cannot feed at breast)

- Baby **upright**; rest cup on lower lip; let the baby **lap/sip** — **do not pour**.
- Advantages: preserves breastfeeding skills; avoids nipple confusion.

4.3 Storage of EBM

| Place | Healthy term infant |
|------------------------------|--|
| Room ($\leq 25-26$ °C) | Up to 4 hours (shorter in hot climates) |
| Refrigerator (~ 4 °C) | 48-72 hours |
| Freezer (-18 °C or lower) | 3-6 months |
| Thawed milk | Use within 24 h in fridge; do not refreeze |

Warm in a **water bath**; **do not microwave**. Label with **date/time**.

5) Special situations you must know

- **Caesarean birth**: skin-to-skin in theatre/PACU when feasible; **football/side-lying** positions reduce incision pain.
- **Late-preterm/SGA**: KMC, frequent feeds; supplement with **EBM via cup/OG** if transfer is poor; monitor weight and jaundice closely.
- **Twins**: simultaneous or sequential feeding; positions like **double football** help.
- **Flat/inverted nipples**: antenatal reassurance; use **nipple-rolling**, **reverse pressure softening** during engorgement, and skilled latch guidance; nipple shields only under specialist supervision.
- **Tongue-tie (ankyloglossia)**: assess function (e.g., Hazelbaker tool); if significant transfer problems or maternal trauma persist despite support, **frenotomy** may be indicated.
- **Cleft lip/palate**: many with **cleft lip** can breastfeed with targeted positioning; **cleft palate** often needs **EBM with specialised cup/bottle**; involve a cleft team early.
- **Jaundice**: continue breastfeeding; treat with **phototherapy** when indicated; avoid unnecessary supplementation unless **excessive weight loss/dehydration**.

6) Troubleshooting common breastfeeding problems

6.1 Engorgement

- **Prevention**: early, frequent, effective emptying; avoid missed feeds.
- **Treatment**: frequent feeds starting on the fuller side, **reverse pressure softening** around areola to help latch, **warmth** just before feeds and **cold compress** after, **NSAIDs** if needed, hand expression to comfort.

6.2 Nipple pain/trauma

- Usually **poor latch/positioning**.
- **Correct latch**, vary positions, **air-dry**; use purified lanolin if needed.
- **Rule out** tongue-tie or infection (candida/bacterial). Continue feeding while treating the cause.

6.3 Blocked duct / Mastitis / Abscess

- **Blocked duct**: localised tender cord; feed frequently, start on affected side, warm compress, massage toward areola.
- **Mastitis**: fever + wedge-shaped tender redness; **do not stop breastfeeding**; continue frequent emptying + antibiotics as per local protocol, analgesia, rest, hydration.
- **Breast abscess**: ultrasound-guided **needle aspiration** or incision & drainage; continue breastfeeding/EBM from affected breast as pain allows (milk is safe).

6.4 Perceived low milk supply

- Check **technique, frequency, and transfer**; observe a full feed.
- Ensure **8-12 feeds/day, night feeds**, and avoid unnecessary formula/bottles.
- Consider **galactagogues** only after optimising non-pharmacologic measures; use evidence-based agents with monitoring (as per unit policy).
- **Objective markers** trump perception: output, weight trajectory.

6.5 Overactive let-down / Oversupply

- Symptoms: coughing/choking at breast, gassy baby, green frothy stools, rapid weight gain.
- Measures: **laid-back positioning**, brief **hand-express** to reduce initial spray, **block feeding** under supervision.

7) Contraindications to breastfeeding

7.1 Absolute infant contraindication

- **Classic galactosaemia** (GALT deficiency): infant must avoid **all lactose/galactose** → use lactose-free therapeutic formula.
- **Maple Syrup Urine Disease / Phenylketonuria**: *not absolute*; often **partial breastfeeding** with specialised formula under metabolic team guidance.

7.2 Absolute maternal contraindications (to feeding at breast and usually to giving own milk)

- **Ebola virus disease** (until fully recovered/cleared).
- **Active, untreated brucellosis** (rare; follow specialist advice).
- **Current chemotherapy** (antineoplastics, antimetabolites) or **radioactive isotopes/therapeutic radiopharmaceuticals** (pump and discard until drug clearance).
- **Illicit drug use** with high risk substances (e.g., **PCP, cocaine, methamphetamine**); breastfeeding contraindicated until sobriety and clearance are confirmed.
- **Herpes simplex lesions on the breast**: **do not feed from the affected breast** until lesions crust/heal; may feed from the unaffected side.

Not an absolute: Maternal HIV policy varies by setting. In India (NACO), mothers on **effective ART** are supported to **exclusively breastfeed for 6 months** with continued ART and infant ARV prophylaxis, plus timely weaning and close follow-up. In settings where safe, feasible, affordable, sustainable and acceptable replacement feeding is guaranteed, formula may be considered. Always write the policy your university follows.

7.3 Temporary maternal conditions (breastfeeding may continue with precautions)

- **Pulmonary TB**: once mother is on **appropriate therapy**, breastfeeding is encouraged; mask and hand hygiene in initial weeks.
- **Mastitis/abscess**: continue feeding/EBM; treat as above.
- **Varicella**: if rash develops **within 5 days before to 2 days after delivery**, avoid direct contact until lesions crust; express milk (safe) while giving **VZIG/acyclovir** to the infant per protocol.
- **COVID-19**: breastfeeding supported with hand hygiene and mask as per current guidance.

7.4 Medicines that usually preclude breastfeeding

- **Antineoplastics** (cyclophosphamide, doxorubicin, methotrexate).
- **Amiodarone, ergot alkaloids, radioactive iodine (I-131), lithium** (relative—requires specialist monitoring if considered).
- High-dose **chloramphenicol, gold salts**: avoid.

Most common antibiotics, antihypertensives, insulin, thyroxine, and many antidepressants are **compatible**.

7.5 Conditions not contraindicating breastfeeding

- **Maternal hepatitis B/C** (give infant **HBV vaccine ± HBIG** as indicated; breastfeeding allowed).
- **Jaundice in the infant** (continue feeds; manage bilirubin according to guideline).
- **Caesarean section, fever, treatable infections** with compatible antibiotics.

Some Medications Contraindicated for Breastfeeding Mothers

| Drug Class | Examples | General Concerns and Specific Effects in Infants |
|---|--|--|
| Anticoagulants | Dicumarol/Warfarin | May be given cautiously but, in very large doses, may cause hemorrhage (heparin is not excreted in milk) |
| Cytotoxic medications | Cyclophosphamide, Cyclosporine, Doxorubicin, Methotrexate | May interfere with cellular metabolism of a breastfeeding infant, causing possible immunosuppression and neutropenia. Unknown effect on growth and unknown association with carcinogenesis |
| Psychoactive medications | Anxiolytics, including benzodiazepines (alprazolam, diazepam, lorazepam, midazolam, prazepam, quazepam, temazepam) and perphenazine. Antidepressants (tricyclics, selective serotonin reuptake inhibitors, bupropion). Antipsychotics (chlorpromazine, chlorprothixene, clozapine, haloperidol, mesoridazine, trifluoperazine) | For most psychoactive medications, unknown effect on infants, but because medications and metabolites appear in breast milk and in infant plasma and tissues, possible alteration of short-term and long-term central nervous system function. Fluoxetine: Linked to colic, irritability, feeding problems and sleep disorders, and slow weight gain. Chlorpromazine: Possible drowsiness, lethargy, decline in developmental scores. Haloperidol: Decline in developmental scores |
| Individual medications that are detectable in breast milk and pose theoretical risk | Amiodarone | Possible hypothyroidism |
| | Chloramphenicol | Possible idiosyncratic bone marrow suppression |
| | Clofazimine | Potential for transfer of high percentage of maternal dose. Possible increase in skin pigmentation |
| | Corticosteroids | With large maternal doses given for weeks or months, can produce high concentrations in milk and may suppress growth and interfere with endogenous corticosteroid production in the infant |
| | Lamotrigine | Potential for therapeutic serum concentrations in the infant |
| | Metoclopramide | None described |
| | Metronidazole/Tinidazole | In vitro mutagens. May stop breastfeeding for 12-24 hours to allow excretion of dose when a mother is given a single dose of 2 g. Safe after the infant is 6 months old |
| | Sulfapyridine/Sulfisoxazole | Caution required if infants have jaundice or G6PD deficiency or are ill, stressed, or premature |

| Drug Class | Examples | General Concerns and Specific Effects in Infants |
|--|--|--|
| Individual medications that are detectable in breast milk and have documented risk | Acebutolol | Hypotension, bradycardia, tachypnea |
| | Aminosalicylic acid | Diarrhea |
| | Aspirin (salicylates) | Metabolic acidosis With large maternal doses and sustained use, may produce plasma concentrations that increase risk of hyperbilirubinemia (salicylates compete for albumin-binding sites) and hemolysis only in G6PD-deficient infants who are < 1 month |
| | Atenolol | Cyanosis, bradycardia |
| | Bromocriptine | Suppresses lactation May be hazardous to the mother |
| | Clemastine | Drowsiness, irritability, refusal to feed, high-pitched cry, neck stiffness |
| | Ergotamine | Vomiting, diarrhea, seizures (with doses used in migraine medications) |
| | Estradiol | Withdrawal vaginal bleeding |
| | Iodideslodine | Goiter |
| | Lithium | One third to one half therapeutic blood concentration in infants |
| | Phenobarbital | Sedation, infantile spasms after weaning, methemoglobinemia |
| | Phenytoin | Methemoglobinemia |
| | Primidone | Sedation, feeding problems |
| | Sulfasalazine (salicylazosulfapyridine) | Bloody diarrhea |
| | Nitrofurantoin, sulfapyridine, sulfisoxazole | Hemolysis in infants with G6PD deficiency; safe in others |
| Drugs of abuse* | Amphetamine | Irritability, poor sleeping pattern |
| | Alcohol | With < 1 g/kg daily, decreased milk ejection reflex With large amounts, drowsiness, diaphoresis, deep sleep, weakness, decrease in linear growth, abnormal weight gain in the infant |
| | Cocaine | Cocaine intoxication: Irritability, vomiting, diarrhea, tremulousness, seizures |
| | Heroin | Tremors, restlessness, vomiting, poor feeding |
| | Marijuana | Components detectable in breast milk but effects uncertain |
| | Phencyclidine | Hallucinogen |

* Effects of smoking are unclear; nicotine is detectable in breast milk, and smoking decreases breast milk production and infant weight gain but may decrease incidence of respiratory illness.

8) Counselling script

- “Hold your baby **tummy-to-tummy**, chin to breast, nose near nipple. Wait for a **wide gape**, then bring baby to you. You should feel **tugging but not pain**. Listen for **swallows**. Feed **on demand**, at least **8-12 times/day**. If unsure, **call me to observe a full feed**. If breasts are too full, **hand-express** a little to soften before latch. For any cracks, we will **fix the latch first**.”



9) Documentation checklist (ward notes)

- Time of first feed; **skin-to-skin** started (Y/N).
- Position/attachment assessed; **LATCH score**.
- Output (voids/stools), weight trend.
- Maternal nipple/breast status.
- Any supplements given (why, how much, how fed).
- Education provided; planned **follow-up**.

Self-assessment

MCQs (one best answer)

1. The **most reliable sign** of effective breastfeeding is:
 - A. Baby feeds for ≥ 30 min each side
 - B. **Audible swallows with slow, deep sucks and softening of breast after feed**
 - C. Baby sleeps after every feed for 3 h
 - D. Milk seen dribbling from mouth
2. A mother with **mastitis** should:
 - A. Stop breastfeeding until antibiotics finish
 - B. **Continue frequent feeding/emptying; start appropriate antibiotics**
 - C. Switch to bottles permanently
 - D. Bind the breasts
3. **Absolute infant contraindication** to human milk is:
 - A. Late-preterm status
 - B. G6PD deficiency
 - C. **Classic galactosaemia**
 - D. Infant jaundice
4. A correct step in **hand expression** is:
 - A. Sliding fingers down the breast toward the nipple
 - B. **Press back toward chest, then compress-release without sliding**
 - C. Squeezing the nipple tip repeatedly
 - D. Using soap to "lubricate" the areola
5. **Good latch** is suggested by:
 - A. Lips rolled in, cheeks dimpled
 - B. **Chin touching breast, more areola visible above than below**
 - C. Nipple pinched flat after feed
 - D. Clicking sounds while sucking

Answers: 1-B, 2-B, 3-C, 4-B, 5-B.

Short-answer prompts (3-5 lines)

1. List **four** features that distinguish **effective** from **ineffective** breastfeeding.
2. Outline the **LATCH** scoring system and how you will use it in ward documentation.
3. Write the **five steps** of **hand expression**.
4. Enumerate **four maternal** and **four infant** situations where you will **seek specialist input** before advising breastfeeding cessation.
5. Describe the **cup feeding** technique and two advantages over bottle use in the early neonatal period.



References

Classical (for orientation; no verse quoted in this lesson to avoid misattribution)

- **Kāśyapa Saṃhitā (Vṛddhajīvakiya Tantra)** — sections on *Stanya*, *Bāla-poṣaṇa*, *Stanya-doṣa* and neonatal care.
- **Aṣṭāṅga Hṛdayam** — *Sūtrasthāna* (Kṣīra-varga) and *Uttaratantra - Bālopacaraṇīya* (principles of infant nourishment, primacy of *stanya*).
- **Suśruta Saṃhitā** — *Śārīrasthāna* and *Uttaratantra* (post-natal care context; protection of *ojas* and *bala* through appropriate feeding).

Modern

- **WHO/UNICEF**. *Ten Steps to Successful Breastfeeding; Breastfeeding Counselling: A training course*.
- **IAP Textbook of Pediatrics**, latest ed. Chapters on **Breastfeeding & Lactation Management**.
- **Lawrence & Lawrence**. *Breastfeeding: A Guide for the Medical Profession*, latest ed.
- **ABM Clinical Protocols** (Academy of Breastfeeding Medicine): Mastitis, Analgesia and Anesthesia, Supplementation, Peripartum care of the breastfeeding mother.
- **NACO, Govt. of India**: *Guidelines on Infant and Young Child Feeding in the context of HIV* (for national policy framing).

60-second recap

Stanyapāna begins **within 1 hour** of birth and continues **exclusively for 6 months**, then alongside complementary foods **till 2 years and beyond**. Technique = **good position + deep latch** (chin in, mouth wide, more areola above). Feed **on demand**; evaluate with **LATCH** and **effective-feeding signs**. Learn **hand expression**, safe **cup feeding**, and **EBM storage**. Most problems resolve with **better attachment and frequent emptying**; **mastitis is not** an indication to stop. Few conditions truly **contraindicate** breastfeeding (notably **galactosaemia** in the infant; maternal **chemo/radioisotopes**, **Ebola**, **active breast HSV**). When in doubt, keep milk flowing, protect the dyad, and seek specialist advice.