Prospective Study on Initiation of Breast Feeding by Breast Crawl and its Maternal and Foetal Benefits

Dr. Ashish Prajapat
Department of Obstetrics and Gynaecology, RCSM GMC and Hospital, Kolhapur, Maharashtra, India

1. Introduction

Every newborn, when placed on her mother's abdomen, soon after birth, has the ability to find her mother's breast all on her own and to decide when to take the first breastfeeding. This is called the 'Breast Crawl'. It was first described in 1987 at the Karolinska Institute in Sweden (Widström et al, 1987). The description of the Breast Crawl, compiled from the article, is as follows:

'Immediately after birth the child was dried and laid on the mother’s chest, spontaneous sucking and rooting movements occurred, reaching maximal intensity at 45 minutes. The first hand-to-mouth movement was observed at a mean of 3±2 minutes after birth and at 55+ minutes the infant spontaneously found the nipple and started to suckle.

These findings suggest that an organized feeding behaviour develops in a predictable way during the first hours of life, initially expressed only as spontaneous sucking and rooting movements, soon followed by hand-to-mouth activity together with more intense sucking and rooting activity, and culminating in sucking of the breast.

Many studies with different aims were published subsequently in relation to the 'Breast Crawl'

- Study the effect of other hindering factors (Righard and Alade, 1990)
- Biological mechanisms for homing in on the nipple (Varendi et al, 1994; Varendi et al, 1996; Varendi and Porter, 2001)

Klaus reviewed many of these studies and gave a beautiful description of the Breast Crawl (Klaus 1998, Klaus and Kennel 2001). This inspired me to include the Breast Crawl in our hospital.

2. Physiology of Breast Crawling

A baby is born with many instinctive abilities which enable her to perform the Breast Crawl. With these innate programmes, the infant seems to come into life carrying a small computer chip with the set of instructions. It appears that young humans, like other baby mammals, know how to find their mother's breast (Klaus and Kennel, 2001). The Breast Crawl is associated with a variety of sensory, central, motor and neuro-endocrine components, all directly or indirectly helping the baby to move and facilitate her survival in the new world.

The Stepping Reflex helps the newborn to push against her mother's abdomen to propel her towards breast. Pressure from the infant's feet on the abdomen may also help to expel placenta and reduce uterine bleeding (Klaus and Kennel, 2001).

Study design: Prospective observational type

3. Aims and Objectives

To study the maternal and foetal benefits of initiation of breast feeding by breast crawling.

4. Method and Materials

Soon after delivery and after the baby has cried & started breathing well

- The baby should be thoroughly dried (except for the hands) with a soft cotton cloth.
- Hands must be properly washed with soap and water before touching the baby.
- Then the baby is to be shown to the mother and kept close to her and held briefly in cheek-to-cheek contact. This enables the mother to kiss the baby and also facilitates the custom of saying a holy message in the baby’s ear.
- The baby is then placed prone in between the mother’s breasts. The baby and the mother’s chest are both naked, so that the baby has full skin-to-skin contact with the mother. The baby and the mother should be covered together with a cloth, so that they keep warm while continuing with skin to skin contact.
- Care should be taken to prevent the baby from falling.
- The baby is very alert and responsive soon after delivery and hence is at her best instinctive level.
- The baby is kept warm by being in skin-to-skin contact with the mother. Touch is also a strong stimulus for neurodevelopment.
- The baby’s risk of infection is reduced because safe germs (bacteria) from the mother start to colonise her skin and intestines, and prevent harmful germs from growing.
- This position ensures early instinctive stimulation and gives warmth, love, security and food. It also initiates the bonding process between the baby and the mother.
- Whenever possible, raise mother’s head on a pillow to facilitate mother-baby visual contact.
- Kicks from the baby will give tender firm jerks to the womb stimulating it to contract. This will help to expel the placenta and reduce bleeding.
- Once the baby realizes that food is in close proximity, she starts salivating.
- Breast odour is a strong stimulus which drives the baby toward the nipple. The baby's sense of smell is well developed. The odour of a substance secreted by the nipple is similar to the smell of a substance in the amniotic fluid which surrounds the baby in the womb.
- Nipple Massage by the baby makes it protract. This helps attachment. Nipple massage also releases a hormone called oxytocin in the mother. This helps to contract the uterus, reduce bleeding and prevent maternal anaemia.
- The baby starts to make mouthing movements. The baby's hands should have amniotic fluid on them, as it guides the baby to the nipple.
- The baby's shoulder, hip and neck muscles are sufficiently developed to help her move.
- Even with her limited vision, the baby can see the areola. If the baby raises her head, she can also see her mother's face.
- The baby then reaches the nipple, raises her head and gets nicely attached onto the nipple with her mouth wide open to take a mouthful of breast.

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This first skin-to-skin contact must continue until the baby finishes her first breastfeed.

Inclusion criteria
Single tone intra uterine pregnancy with 37 weeks or more

Exclusion criteria-
Foetal distress
Instrumental delivery
Twins
Pre term delivery
Intra uterine growth retardation

Measurement of outcome of interest
Incidence of post partem haemorrhage
Incidence of breast feeding failure
Incidence of hypoglycemia in foetus
Total number of patients 100

5. Result
Result of this study revealed that there are many benefits of breast crawling to mother and foetus as below

For the Baby
Warmth / Comfort / Metabolic adaptation / Quality of attachment

For the Mother
Expulsion of placenta and reduction of postpartum haemorrhage

Advantages for Both: Bonding
Suckling enhances the closeness and new bond between mother and baby. Mother and baby appear to be carefully adapted for these first moments together.

6. Conclusion
It can be concluded by this study that breast crawling should be allowed for every patient of vaginal delivery until unless contraindicated.

7. Recommendation
For the Mother
- Use drugs for labour analgesia judiciously.
- Do not wash / wipe breast before feeding.
- Raise mother's head on a pillow to facilitate mother-baby visual contact.
- Do not move mother out of labour room until completion of the first breastfeed.

For the Baby
- A baby who has cried well does not need oro-nasal suction.
- Dry the baby thoroughly except for the hands.
- Do not pass oro gastric / nasogastric tube or do gastric suction as a routine.
- The baby and the mother should be covered together with a cloth, so that they keep warm while continuing with skin-to-skin contact.
- Delay the injection of vitamin K, weighing, routine measuring and dressing (wrapping) till after the first breastfeed.
- Baby bath is best delayed to beyond 24 hours.
- Continue the first skin-to-skin contact till completion of the first breastfeed.