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Use of Alternative Feeding Methods in the Hospital

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This issue's RoundTable Discussion discusses the use of alternative feeding methods among healthy and compromised infants at 5 hospitals, in Palestine, Sri Lanka, Sweden, Taiwan, and the United States. It is interesting to note that "alternative feeding methods" in some cultures has come to imply "alternatives to the bottle" when breastfeeding is not possible. In other cultures, bottles are rarely used, and thus, it implies, "alternatives to the breast." It is generally agreed that a lack of evidence-based research exists regarding the efficacy of one alternative means over another. A Cochrane Review stated that cup feeding was not recommended over bottles in the hospital setting,¹ but according to a World Health Organization Commentary on this Review, the conclusion was of limited applicability, "since most of the studies included in the review had been conducted in hospitals in developed countries."² Responses below highlight both differences and similarities in approach from a range of settings in different nations.

Do you use any alternative feeding methods in your hospital?

Bandara: At our hospital in Sri Lanka, we don't use *any* bottles. We use cups, syringes, spoons, and tube feeds as alternatives to breastfeeding in the NICU, on the postpartum wards, and in the lactation management center.

Procaccini: Yes, in our hospital in New Jersey, we have cups, periodontal syringes, oral syringes, tubes at the breast, and spoons as alternatives to the bottle, when breastfeeding mothers cannot feed at the breast.

Musmar: In most situations, in Palestine, spoons, syringes, or NG tubes are used as alternatives to bottles when breastfeeding is not feasible. Bottle-feeding is only used when all other feeding methods fail.

Hedberg Nyqvist: At the Uppsala University Hospital in Sweden, bottles are not considered an alternative but an exception, to be used only when (a) the mother will not be able to breastfeed at all or fully, (b) the mother or father do not want to use a cup

after having been informed about the reasons for using cup feeding, (c) the mother is unable to breastfeed because of certain types of breast surgery or long-term illness/medications that are not compatible with breastfeeding.

Wang: At the Buddhist Tzu-Chi General Hospital, we use feeding tubes (for preterm infants and babies with neuromuscular disorder) and cup feeding [as alternatives to the bottle for breastfeeding babies].

What alternative feeding methods do you use in which circumstances?

Hedberg Nyqvist: The first choice for oral feeding method (after breastfeeding) is cup feeding. The cup we use looks just like the Indian paladai, but is actually a common Swedish vessel. It can be introduced from a gestational age of 29 weeks and is used in the mother's absence, and when a premature infant does not want to latch on to the mother's breast after the baby has sucked for some time and is still awake. The first time a baby is cup fed, a nurse shows the parent how it is done, then the parent takes over. After that, parents perform all feeding when present. (Parents' presence in hospital is facilitated by the national parental insurance, which makes it possible for them to stay off work with a benefit and spend all their time, or as much time as possible, in the hospital with the infant. Also, in the NICU it is becoming increasingly common to provide parents with opportunities for staying 24/7 at the bedside or at least in a separate parent room.) Sometimes a tube is taped to the mother's breast, attached to a syringe, and the plunger is gently pressed—or the milk flow is controlled by elevating or lowering the syringe (gravity).

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Musmar: Premature babies and any other babies who have sucking difficulties are offered the alternate methods. Usually premature babies are fed by NG tube until they are strong enough to suck.

Procaccini: Parents are offered alternatives to bottles when they are breastfeeding and a supplement is needed or the baby has not been feeding well at the breast. We use spoons most often because manual expression is so easy and it is helpful especially with late pretermers and “sleepy” or disorganized infants. Moms do not need lots of help to spoon feed. Infants who are not sucking well are often helped by finger feeding—dads usually do this. In general, however, parents most often choose a bottle for supplementation because they are most familiar and comfortable with it. Nurses in general seem to stay away from all these alternatives even though they have all been trained, because in the end, the bottle is what they are also most comfortable with. None of our IBCLC’s really seems to like using a tube at the breast—we don’t think this method is user friendly. None of these devices would be offered to a totally formula-fed infant, but “slow flow” nipples are the standard to avoid overfeeding.

Wang: About 20%-30% of babies in intensive care use alternatives to bottles, usually cups, when their mothers plan to breastfeed but cannot be there in person temporarily, or the babies are in a transitional period from NPO, bottles, OG feeding, to breastfeeding. We use cup feeding for full-term breastfeeding babies whose mothers worry that don’t have enough milk. If the baby needs to be hospitalized for a long period of time, though, the parents will usually ask for bottles.

Bandara: We use alternatives to the breast for babies who are not suckling effectively because they are preterm, ill, or have an abnormality such as cleft lip and/or palate. We also use them when infants are separated from their mothers, for example, if the mother is critically ill, or if infants are not breastfeeding effectively and not gaining weight, or the mother has flat or inverted, or sore or cracked nipples, engorged breasts, mastitis, or an abscess.

What is your rationale for using alternate feeding methods?

Musmar: Nurses, doctors, and mothers strongly believe that temporarily bottle-fed babies will become used to bottles as an “easier method” and will refuse to take to breastfeeding later on.

Bandara: We want to train parents to cup feed on discharge home because there is less risk of

contamination from cup feeds and cups are easy to clean. We are not sure about the impact of cup feeding on the duration of exclusive breastfeeding.

Procaccini: The evidence in the literature is not very clear about why we should or should not be using any of these devices in the United States or other nations with effective sanitation. Keeping breastfeeding infants away from bottle-feeding in early breastfeeding is probably a good idea, but I’m not personally convinced that using alternative methods needs to be a standard of care.

Hedberg Nyqvist: Breastfeeding is the norm. Cup feeding is the second choice.

Which staff work with mothers in the use of alternative feeding methods?

Wang: Most of the time, it is the RN’s responsibility in both regular and special care units.

Procaccini: All our staff have received competencies in these areas as part of their standard breastfeeding education, but it’s mostly IBCLCs who initiate alternative feeds—after we start it, however, the nurse is much more likely to continue.

Hedberg Nyqvist: In Sweden, there are very few IBCLCs or peer counselors in the hospital. The standard is that all nursing staff (nurse midwives, RNs, and licensed practical nurses) are involved equally in infant feeding practices; there are no specialty staff. Training is included in the standard curriculum for all new employees.

Bandara: Staff nurses who are specially trained in lactation management. We do have a lactation management center attached to the unit where babies with breastfeeding problems are referred.

Musmar: The only staff working with mothers in our hospital are the nurses. They have not received any specific training for alternative methods of feeding, but all nurses have received education and training in breastfeeding.

What response do you have from parents regarding use of alternate feeding methods?

Musmar: In general, parents are very keen to support breastfeeding, and our culture encourages breastfeeding. The parents will do whatever it takes to provide breastfeeding for their babies. Occasionally, exhausted mothers with not enough support will ask for bottle-feeding instead.

Wang: Most parents are not used to cup feeding. It might be okay for them for a few days, but if longer than that, they prefer bottle-feeding.

Procaccini: Parents who are really concerned about nipple confusion seem to be positive about short-term use of these methods, but some parents become so overwhelmed by all the “plastic” that they become very upset. As with all things in lactation, care must be individualized and evaluated for use on a case-by-case basis.

Bandara: Mothers are scared to use cup feeds initially, but most become comfortable with some training. Most prefer spoon feeds and syringe feeds over cup feeds at the beginning. Mothers of preterm babies are glad to see the weight gain of their babies when they are given top-up cup feeds.

Hedberg Nyqvist: Sweden has a strong breastfeeding culture, and breastfeeding is considered the norm. Very few parents do not accept cup feeding. Fathers especially appreciate the opportunity to feed their breastfed baby in the mother’s absence.

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Respondents

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Diane B Procaccini, RN, MN, IBCLC, is Coordinator of Lactation Services at Capital Health Hospital, New Jersey, USA, which has 2500 births per year, and a 30-bed NICU.

Shu-Fang Wang, PhD, RN, IBCLC, practices at the Buddhist Tzu-Chi General Hospital, Hualien, Taiwan. The hospital has approximately 450 births per year, a 3-bed NICU, and a 10-bed Observation Unit for unstable newborns.