Lactation & Breastfeeding

Magazine of the European Lactation Consultants Alliance • www.elacta.eu • ISSN 1614-807x

2 • 2016 28th volume

EDITORIAL

Dear colleagues, dear readers,

The magazine production takes time. In most cases the production of the next issue starts long before the previous issue appeared. At the time that you receive this magazine, ELACTA Conference has already taken place and ELACTA will already have a new board and a new president. The detailed information on the general assembly, the new board and the new president will be part of the issue 3/16.

Thus this is going to be my last editorial for Lactation & Breastfeeding. Although I will carry on being a part of the editorial team, it is about time to step down as president and to thank all, who enriched our work for ELACTA in the last two years and before that. Great thanks to my six board colleagues (Karin, Juanita, Mirjam, Heli, Renata and Maja), to the members of the national associations and especially to their presidents (we recently also have a male president), to the editorial team, that invests its talent and heart in producing Lactation & Breastfeeding, to those colleagues I have had the chance to get to know during the preparations for the Conference in Athens, etc., etc...

I am grateful for moving encounters with you, all this new knowledge, for getting an insight into the work of IBCLCs and the situation of the supported families all over Europe. We built up new networks and established new friendships.

By now, ELACTA comprises 21 IBCLC national associations from all over Europe. Furthermore, IBCLCs work in a wide range of occupational fields. During the Conference in Athens we were able to gather an interesting mixture of experiences, knowledge, and approaches to various issues in breastfeeding consultation.

Even this issue of Lactation & Breastfeeding demonstrates the various ways to find a solution to a particular problem – in this case regarding the tongue frenulum. Dr. Daniela Karall, IBCLC, Austria, and Márta Guóth-Gumberger, IBCLC, Germany, introduce us to diagnosis and treatment, in particular the surgical treatment of the tongue frenulum. Myrte van Lonkhuijsen, IBCLC, the Netherlands, identifies more practical ways of how IBCLCs can manage breastfeeding problems caused by the tongue frenulum. And finally a mother reports on her own painful breastfeeding experience and the difficult journey of finding appropriate treatment.

Matching the issue "oral health", Dr. Zsuzsa Bauer provides us with an update on the scientific evidence regarding breastfeeding and oral caries.
Breastfeeding support for refugees remains an issue as well; the moving interview of Martina Tomić Latinac speaks for itself. Let us hope that those reports will soon be considered as nothing more than having historical value.
Enjoy your reading! The team is always happy to receive reader's letters, articles, and reports from our member countries.

Yours sincerely,
Andrea Hemmelmayr, IBCLC

IMPRINT

Herausgeber:Company Information:
ELACTA European Lactation Consultants Alliance
www.elacta.eu
Email: magazin@elacta.eu
ZVR-Nr.: 708420941

ELACTA president:
Karin Tiktak, IBCLC
president@elacta.eu

Editorial and project coordination:
Eva Bogensperger-Hezel, IBCLC
Email: magazin@elacta.eu

Team:
Andrea Hemmelmayr, IBCLC
Stefanie Frank, IBCLC
Elke Cramer, Ärztin, IBCLC
Kathrin Meier, IBCLC
Bärbel Waldura, IBCLC
Zsuzsa Bauer, Dr. phil
Márta Gúoth-Gumberger, IBCLC
Gudrun von der Ohe, Ärztin, IBCLC

Translations:
Márta Gúoth Gumberger, IBCLC
Elizabeth Hormann, IBCLC
Annika Cramer, Martina Hezel, Vera Bogensperger

Einzelabonnements:
E-Mail: abobestellung@elacta.eu
Jahresabonnement: 41 €
Einzelnummer: 12 €

Photos: © as mentioned on the photos; Coverphoto: iStock

Layout: Christoph Rossmeissl

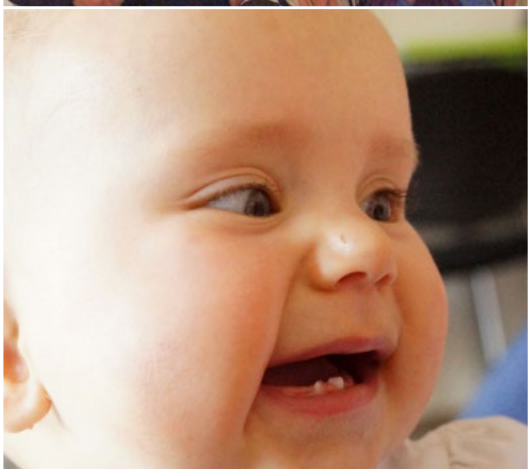
Production: EinDRUCK

Edition: 2.500

Published quaterly at the end of March, June, September and December

Deadline: 15 January, 15 April, 15 July, 15 October

Dear readers! We want to know what you think. Please send your letters and comments to the following email address:
magazin@elacta.eu



Contents

Nipple Shields and reduced breastfeeding duration – is there a causal association?

Letter to the editor: Does the Use of Nipple Shields Influence Breastfeeding Duration?

With respect to the analysis of the data "Infant Nutrition Today, 2006" regarding the use of nipple shields (Laktation & Stillen, 2015/4, pp. 20 – 24) and to the letter of Dr. phil. Zsuzsa Bauer (Laktation & Stillen, 2016/1, p. 4) replying to the aforementioned article, I would like to add something to the topic:

Many thanks to Mrs. Bauer for indicating the causal relationship and for her respectful and professional analysis of the study design. Her perfectly competent explanations confirmed me in my judgement.

For several weeks now, the article lies on my desk and in the course of a comprehensive analysis of scientific work, I kept it at hand for reference and analysis. It elicited many content-related as well as formal discussions with colleagues in daily clinical practice.

Every professional IBCLC must critically scrutinise their indication for the use of nipple shields and know about the consequences. This goes without saying.

However, in the whole context of the usage and the controversial debate on pros and cons of nipple shields, one quite crucial factor is given insufficient attention: i.e. using a nipple shield restores self-efficacy to the mother-child dyad since breastfeeding would not be possible without the nipple shields. I work as an IBCLC at a "Baby-friendly Hospital" in Switzerland with more than 1000 deliveries a year and I frequently observe the in my opinion false ambition of weaning mother and child

22 SCIENCE

Does the Use of Nipple Shields Influence Breastfeeding Duration?

Analysis of the Austrian study "Infant Feeding Today, 2006" Dr. Beate Pietschnig for "Österreichische Stillkommission des Obersten Sanitätsrates", (2004–2010); translation: Elizabeth Hormann, IBCLC

ABSTRACT:

Background
Nipple shields are frequently recommended at the beginning of breastfeeding to help mothers with sore nipples and with nipples with anomalies. Nipple shields are intended to enable mothers to breastfeed, although the data is very contradictory. The goal of the study was to examine the effects of nipple shields on breastfeeding duration.

Material and Methods
Data on the use of nipple shields in correlation to breastfeeding duration and the infant´s weight gain was collected and analyzed in the context of the study "Infant Feeding Today – 2006"

719 mothers of 728 children from all over Austria were qinterviewed three, six and 12 months after birth. 25 % of the 719 mothers were given a nipple shield postpartum, 52.7 % of them due to painful nipples.

Results
Infants who were breastfed with nipple shields at the beginning showed significantly shorter times of exclusive and partial breastfeeding. The weight gain patterns of the children did not show any significant differences.

Conclusion
The results show that nipple shields negatively influence the duration of breastfeeding. Thus, the uncritical and unsupported use of nipple shields is not recommended.

Keywords:
› breastfeeding
› breastfeeding counselling
› nipple shields
› breastfeeding duration

Exclusive breastfeeding for approximately the first six months of the infant's life is nationally and internationally recommended[1, 2, 3, 4, 5, 6, 7], **as breastfeeding is amongst the most effective health-promoting measures in the health care system** [8]

The use of nipple shields is recommended for treatment or prevention of pain and sore nipples and to ease attachment. Especially in anatomical variations (such as inverted or flat nipples) , nipple shields can enable breastfeeding at all! On the other hand, nipple shields can lead to breastfeeding problems.

Breastfeeding counsellors report that mothers are often given nipple shields in the first few days in hospital unreflected and without detailed information. In the related literature, there is little and very contradictory information on the benefits and risks of nipple shields. Although there are absolute (inverted nipples) and relative indications (i.e. flat nipples and, sometimes, premature babies) for the use of nipple shields, practice shows that nipple shields are also often recommended without specific indications. Consequences of the (unreflected) use of nipple shields include earlier supplementation and weaning of the baby.

To evaluatethe outcome of early nipple shield use, the survey "Infant feeding Today 2006", was conducted to evaluate the use of nipple shields in the initial days of life. The survey was conducted on behalf of the Austrian Federal Ministry of Health and the Austrian Breastfeeding Committee,

Methods
In the Austrian study, "Infant Feeding 2006", two topics were evaluated: - the structure of in – hospital care in the ob-

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from the nipple shields, however well-intentioned, although breastfeeding management works well.

While it is true that we as lactation consultants during puerperium or as freelancer midwives (after birth) can support mother and child to establish a good latch, but what happens if they at home or elsewhere fail to latch without our professional support? Some might argue that it must be dealt with correctly from the start, and this is perfectly justifiable. However, in daily routine the reality is somewhat different. And everyone who cares for mother and child over several days in every shift according to primary nursing concept in a hospital with 24-hour operation (and not merely during a one-to-one consultation) knows the situation of not reaching the aim without the use of nipple shields despite all efforts and interventions: The aim is to support mother and child to develop a successful breastfeeding relationship. That is why I would not advocate a positive ethics committee vote regarding experimental studies involving the impact of nipple shields on breastfeeding duration, since it would involve depriving mother-child dyads of a useful intervention.

In my daily routine as a breastfeeding consultant, women suffering from breast engorgement or mastitis attend my outpatient counselling service because in aftercare too little attention is paid to the new situation of being at home. In my personal experience, the use of nipple shields has a rehabilitative character, due to the principle: "Help me do it myself!"

With respect to the debate on nipple shields, reference is made to a review that was published in October 2015: "The use of nipple shields: a review"; Chow et al.; doi:10.3389/fpubh.2015.00236.

This review was conducted to evaluate the evidence and outcomes that are associated with the use of nipple shields.

Claudia Wronski El Awamry
Registered nurse
IBCLC at the "Baby-friendly Hospital"
Limmattal, Switzerland.

Baby-led Weaning

Baby-led weaning is a common-sense, easy and enjoyable way to help your baby move on to family meals

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What is baby-led weaning?

Baby-led weaning is a way of introducing solid foods that allows babies to feed themselves – there's no need for spoon feeding or purées. The baby sits with the family at mealtimes and joins in when he is ready, feeding himself first with his fingers and later with cutlery.

Baby-led weaning:

- allows babies to explore taste, texture, colour and smell
- encourages independence and confidence
- helps to develop their hand-eye coordination and chewing skills
- makes picky eating and mealtime battles less likely

All healthy babies can begin to feed themselves from about six months. They just need to be given the opportunity.

Why baby-led weaning makes sense

Baby-led weaning is based on the way babies develop in their first year.

Babies' immune and digestive systems aren't ready for other foods until they are about six months old – breast milk (or infant formula) is all healthy babies need until then.

In the past, when babies were started on solid foods at three or four months, they had to be spoon fed with purées. At six months, most babies are able to sit upright, pick up pieces of food, take them to their mouth and chew them – in other words, they can feed themselves.

If you've waited until your baby is six months to introduce solid foods you've skipped the purée stage, so there's no need to start that way.

How do we get started?

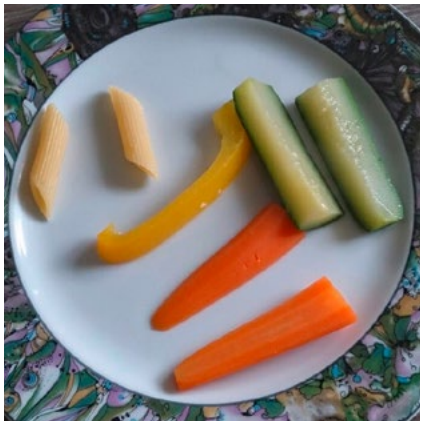
- **Sit your baby upright,** facing the table, either on your lap or in a high chair. Make sure she is able to sit steadily and can use her hands and arms freely.
- **Offer your baby food, rather than give it to her –** put it in front of her, or let her take it from your hand, so that the decision is hers.
- **Start with foods that are easy to pick up –** thick sticks or long strips are best at first. Introduce new shapes and textures gradually so that your baby can work out how to handle them.
- **Include your baby in your mealtimes whenever you can.** As far as possible – as long as it's suitable – offer her the same food as you are eating, so that she can copy you.
- **Choose times when your baby is not tired or hungry,** so she can concentrate. Mealtimes at this stage are for play and learning – she will still be getting all her nourishment from her milk feeds.
- **Carry on offering breast or formula feeds as before –** this is still your baby's main source of nutrition until she is a year old. When she needs less she will reduce her milk feeds herself.
- **Offer your baby water** with her meals so she can drink if she needs to. If she chooses not to, that means she doesn't need to.
- **Don't hurry your baby or distract her** while she is handling food – allow her to concentrate and take her time.
- **Don't put food into your baby's mouth for her or try to persuade her to eat more than she wants.**

Photos: © Katja König

Which foods can I offer my baby?

You can share most healthy family foods with your baby. For example, fruit, cooked vegetables, meat, cheese, well-cooked eggs, bread (or toast), rice, pasta, and most fish are suitable. Start with foods that are easy to cut into sticks or large strips.

Offering your baby a variety of foods will give him the chance to discover different tastes and textures and ensure he gets all the nutrients he needs.



Photos: © A. Cramer

BEFORE **AFTER**

Note that in the beginning the baby only eats small amounts of the offered food.

Foods to avoid

- Added salt and sugar (read labels carefully – many foods, such as baked beans, pies, sauces and gravy, contain a lot of salt)
- "Fast foods" and ready meals
- Honey, shellfish, shark, marlin and under-cooked eggs

Tips

- Don't expect your baby to eat much at first. Many babies eat only small amounts for the first few months of baby-led weaning. For your baby these early mealtimes are about discovering and learning rather than eating.
- Expect some mess! Spread a clean mat under your baby's chair to protect the floor – and so you can hand dropped pieces back to him.
- Keep it enjoyable. That way your baby will be keen to try new foods and look forward to mealtimes.

Won't he choke?

Even when weaning was recommended from four months, parents were encouraged to introduce finger foods at around six months to help their baby develop his chewing skills – the difference with baby-led weaning is that there's no spoon feeding alongside the finger foods. So, provided basic safety rules are observed, choking is no more likely with baby-led weaning than with the conventional method of introducing solids. In fact, allowing babies to control what goes into their mouths may actually help them learn to eat safely.

Keep your baby safe

- Make sure your baby is sitting upright to eat.
- Avoid nuts, whole or in pieces.
- Cut small fruits such as olives and cherries in half; remove any stones.
- Don't let anyone except your baby put food into his mouth.
- Explain how baby-led weaning works to anyone caring for your baby.
- NEVER leave your baby alone with food.

Note

If you have a family history of food intolerance, allergies or digestive problems, or any other concerns about your baby's health or development, you may wish to discuss the introduction of solids with your health advisers.

The "Baby-led" series of books, by Gill Rapley and Tracey Murkett, includes *Baby-led Weaning, Helping your baby to love good food, The Baby-led Weaning Cookbook, Baby-led Breastfeeding* and *Baby-led Parenting.*

For more information see www.baby-led.com and www.rapley-weaning.com

IBCLC

International Board Certified Lactation Consultants are the only internationally approved breastfeeding and lactation specialists having a medical background.

The decision to breastfeed or not to breastfeed has short- and long-term impact on the health of child and mother. However, breastfeeding sometimes turns out to be difficult and perhaps professional, competent assistance is needed.

Contact your IBCLC

A Difficult Start With a Happy Ending

Posterior tongue-tie – an unfamiliar barrier to breastfeeding Author: MD. A. Dittmar

During my entire pregnancy, I had never worried about possible problems with breastfeeding. I was certain that it would work. Unfortunately however, right from the start, my daughter had problems sucking at the breast. The nipple always "slipped" out of her mouth. Even in the delivery room, after the first breastfeed, an experienced midwife told me that my nipple was "too big" and my daughter would not be able to feed from it. She advised me to use a nipple former before putting her to breast. But the feeding problems continued over her first few days of life. After being put to breast, my daughter sucked a few times, but always let the nipple slide out of her mouth quickly again. I had the feeling that she couldn't grasp the nipple correctly. Moreover, my daughter always fell asleep after a short time on the breast. In the hospital (a maximum care center) I felt that I was being poorly advised about this and left totally alone. The only person who really dealt with me and my breastfeeding problems was a night nurse who always had new ideas and suggestions about how feeding could be improved. After three days, I was advised to supplement, since my daughter was losing a lot of weight and there was no sign of any tendency towards improvement. But very quickly, there was more than enough milk.

My postpartum midwife – also very experienced and wonderful – decided to try putting her to breast at home with a nipple shield, - which functioned better. Nevertheless, I had to pump and feed her the expressed milk with the bottle because feeding at the breast alone was insufficient. So I spent my nights with endless attempts to breastfeed: 20 minutes on a side, my daughter fed briefly, fell asleep again, I had to wake her up, then had to pump and feed her with the bottle. All in all, an exhausting undertaking. From the beginning, I always had pain when putting her to breast After about 14 days, feeding at the breast worked well enough (again with a nipple shield and pain) that I was able to fully breastfeed and could return the borrowed breast pump. However, at this point, I noticed, for the first time, strong, stabbing and burning pain in both breasts. These symptoms occurred regularly from then on, independent of breastfeeding. It was particularly bad at night, so that after breastfeeding, I was unable to sleep – sometimes for hours – because of the pain. Meanwhile, when I put her to breast, it felt as if someone were cutting my breasts off. The pain was really unbearably severe. Breastfeeding without crying was hardly possible. There were days when I had real anxiety about feeding her.

Relatively early, my midwife had voiced the suspicion of a vasospasm of the mamille (since the tip of the nipple had turned pale during breastfeeding) or of thrush in the milk duct and referred me to my gynaecologist. A smear test of the mamille was carried out to rule out thrush (at that time I didn't know that fungus in the milk duct cannot be shown through a smear.)

The smear did show high levels of staphylococci and I was prescribed an antibiotic for five days. That didn't bring about any improvement. Apart from my daughter's stomach pains, nothing changed. The pain was even worse. Meanwhile, after observing for a long while, I was certain that I had a vasospasm of the mammilla because the tip of the nipple was always white when there was severe pain. Meanwhile, in addition, strong sensitivity to the cold and a tingling sensation occurred in the breast. When I breastfed with "white nipples", the pain was unbearable. When they weren't white, I was able to tolerate the pain of putting the baby to breast.

What followed then was a long series of visits to the gynecologist and pediatrician, to the osteopath (to look into the suspicion that my daughter wasn't opening her mouth completely) and to a breastfeeding counsellor, all without any significant improvement. To make matters worse, I had also developed fissures which did not heal for weeks despite all the resources. I was prescribed nifedipine, which was supposed to help the vasospasm. The pain did not change significantly with it. Meanwhile, I had to take pain pills regularly to be able to stand the breast pain, which was almost round-the-clock. The gynecologist and the pediatrician advised me to wean since I had at least breastfed my daughter for ten weeks and that was "sufficient". I was also at the point many times of switching to infant formula because the pain was unbearable. The attempt failed because my daughter refused the pre-HA milk and spit it out.

In my growing despair, I wrote to Mrs. Kebinger, an IBCLC lactation consultant in the Munich area, whose name I had found on the website for the lactation consultants' association. I asked her to recommend competent physicians or breastfeeding counsellors who might be able to help me more. Mrs. Kebinger was wonderful! She wrote an extensive email to me the next day. She referred me to a gynecologist with whom she had already telephoned and with whom I was able to get an emergency appointment the next day. From the exact description of my complaints, the doctor and the lactation consultant were certain that there was both thrush in the milk ducts and an accompanying vasospasm of the mammillae. I received fluconazole tablets for the fungal infection and, in addition, had to use a crème on my breast and in my daughter's mouth. Furthermore, I got pain medication as well as magnesium and calcium for the vasospasm. Within a week, there was already an improvement in the symptoms, which, however, had not improved so much that I could have stopped the pain medication. At this point (about 12 weeks after the birth), my daughter became increasingly restless during breastfeeding, threw her head back and forth, attached and detached and cried continuously. Furthermore, her weight gain became stagnant.

Mrs. Kebinger then visited me at home for the first time. Due to the pain, which had not improved sufficiently, the fluconazole dose was increased again after discussion with the doctor and, for the first time, this brought significant improvement – above all for the pain that occurred independently of breastfeeding. For the most part, I was able to manage without pain medication during the day. The pain associated with putting the baby to breast continued, but was – mostly - bearable. The vasospasm and the paraesthesia (muscle weakness) slowly improved so that I could reduce my other medications. My daughter, however, increasingly began to refuse the breast and my worry grew greater that she would not gain weight and might later even lose a little. The pediatrician that I went to couldn't find anything and recommended, once again, that I go to the osteopath or wean. But the bottle was completely rejected, even when I wanted to feed her with expressed milk. My daughter, who had always been satisfied and happy, now cried a lot, appeared unhappy and was cranky.

Once again it was Mrs. Kebinger, my lactation consultant, who found the right path. She suspected a posterior tongue-tie. My daughter was able to stick her tongue out of her mouth with no problem so, up to now, no pediatrician had suspected a too-short frenulum as a cause for my pain while breastfeeding. I was to make a video of my daughter crying, which Mrs. Kebinger wanted to send to the University Children's Hospital for Professor Dr. Daniela Karall, who is very familiar with this topic, to see. Professor Karall answered promptly. She suspected that there was, in fact, a too short posterior frenulum. At the beginning of the New Year, I was able, at short notice, to travel with my daughter to Professor Karall in Innsbruck. She explained to me that the upwards mobility of the tongue, towards the palate, was hindered, which made it difficult to "empty" the breast. Being able to stick the tongue out does not rule out a posterior tongue tie. After a brief "operation" that took a few seconds and was carried out with no anesthesia, I already began to notice the next day that feeding was slowly getting better. After five days, it occurred to me in the evening that I had not had any pain for the entire day. Sometimes I noticed just a comfortable tickling while feeding – a brand-new experience. I had to laugh! The fissures did still need some weeks, but they healed up. And my daughter's feeding behavior quickly improved. She fed more sustainedly and mostly attached to the breast better, milk did not leak out of her mouth constantly when she was feeding and she cried significantly less. Generally speaking, she appeared much more content and gained weight well. From week to week feeding grew continuously better. Meanwhile, my daughter is a year old and, up to the present, I have breastfed without problems. I am happy that I did not give up – despite the four months of serious pain – and that my daughter and I have had such a lovely breastfeeding relationship for so many months. It is a shame that it took so long to find someone who had some idea about such a complicated case (vasospasm, thrush, posterior tongue tie) and could untangle the threads. I'm all the more happy and thankful that I had the good fortune to find these people. I hope that, through my report, many women with similar problems will have an easier time of it.

Dr. A. Dittmar
Leer, Deutschland

Breastfeeding Support for Syrian Refugee Mothers in Croatia

Insight into the difficult situation fort he helpers of Roda – Parents in Action Author: Ivana Zanze

Roda - Parents in Action (Roditelji u akciji) is a non-profit organisation with over 200 volunteers throughout Croatia. In 2003 Roda developed a peer-to-peer breastfeeding support system and 20 of Roda's breastfeeding counsellors have for the past 13 years been providing support on a telephone helpline, organising workshops for pregnant people and their partners, support groups and have prepared and printed a large number of brochures providing information on breastfeeding.

At the very beginning of the Syrian Refugee Crisis in Croatia, Roda's breastfeeding counsellors began providing volunteer support to refugee mothers with young children, particularly helping them keep breastfeeding, encouraging them and helping them handle feeding issues they met with along their journey. With the support of UNICEF Croatia, in December 2015 Roda trained a team of Emergency Breastfeeding Counsellors (the trainers were IBCLC breastfeeding consultants and Liesel Talley, a nutrition specialist from the United States Centres for Disease Control and Prevention, among others). As a result, the Winter Reception Transit Centre (WRTC) in Slavonski Brod organised daily, 24-hour shifts providing breastfeeding support and assistance at the Centre's Mother-Baby Centre (MBC).

Offering continued, 24-hour support to parents with young children in these circumstances is a challenge, especially given the short time provided to work with the mothers. As a result, implementing effective support needs a large team of people in the field working directly with refugees and able to serve a large number of parents in a short time. Support for mothers with young children during this quick transit is given in a heated Alaska Tent divided into 4 zones - breastfeeding area, changing area, small doctor's office and waiting room. On average a mother with an infant spent up to 30 minutes in this tent. ›

Partner organisations at the MBC alongside UNICEF included Magna and Save the Children. Roda's team had six emergency breastfeeding counsellors, 15 assistants who helped mothers change their children, translators and a team coordinator. Breastfeeding advice was given to 20-40 mothers per day, and the most frequent issues was incorrect breastfeeding advice and information being given to mothers on their journey and poor knowledge about the benefits of breastfeeding during emergencies. As a result the most common reasons for weaning children from breastfeeding was that mothers were told somewhere earlier along the Balkan Route that their milk was not good, that they could not breastfeed because of a temperature, or even because they were told that formula would help "guard against diarrhea." Alongside problems with myths, mothers also had problems accepting on-demand breastfeeding because of the conditions they were travelling in, experienced plugged ducts due to skipping breastfeeding, had decreased milk supply due to unnecessary formula supplements and more. The experiences of Roda's counsellors will be published in a detailed report which will include recommendations for breastfeeding in this and other emergencies.

IVANA ZANZE

is the Executive Director of Roda - Parents in Action and for the past 13 years she has been a volunteer peer-to-peer breastfeeding counsellor and co-chair of Roda's Breastfeeding Program creating all the projects and activities surrounding breastfeeding support at Roda. She is Roda's representative in the Breastfeeding Protection and Promotion Committee at the Ministry of Health, a member of the City of Zagreb's Coordination Commitee for the City of Zagreb Breastfeeding Friendly Program and is an assessor for UNICEF's Baby-Friendly Hospital Program. During the refugee crisis she volunteered at refugee camps in Opatovac and Slavonski Brod and worked with other volunteers from Roda and UNICEF to create and implement the breastfeeding support program at the camps' of Mother and Baby Centres.

The Consequences of Not Breastfeeding in the Refugee Camp in Croatia

Field report based on personal experience: an interview with Martina Tomić Latinac

Little Najad and her "milkmother"

Martina Tomić Latinac is a social pedagogue, mother of two children and has been working at UNICEF for the past 11 years: The past seven years she has been the Head of the Children's Protection Program in the areas of preventing violence, the justice system and emergency situations. She has been coordinating UNICEF's response to the refugee and migrant crisis in Croatia and implemented the Mother and Baby Centre as well as the Breastfeeding Support Program in the transit-guest centres. She has just returned from Greece where she helped to implement similar services and mobile teams to support the most vulnerable children - those travelling alone and having been separated from their families.

Martina, what consequences of not breastfeeding, i.e. using formula, have you come across in your work with the children in the transit camps in Opatovac and Slavonski Brod?

The effects and consequences of not breastfeeding were very similar to those in other emergencies. In Croatia the most common illnesses among non-breastfed infants are diarrhoea and respiratory infections. Sometimes, even from a distance, by just looking at a baby, I could tell if the mother was breastfeeding or not. The breastfed babies looked very healthy and chubby, while the formula-dependent infants who were suffering from diarrhoea often looked thin and lethargic.

Were all the organisations involved in helping the refugees aware of the dangers of feeding babies with formula? What kinds of formula and feeding methods were at parents' disposal during their journey?

Unfortunately, among the majority of humanitarian actors and service providers knowledge about infant feeding is very poor and they are not aware how important breastfeeding is (particularly in an emergency) and that breastfeeding is actually a life-saving intervention.

Unsolicited and uncontrolled distribution of bottles, pacifiers and breast-milk substitutes by humanitarian organizations was very common. Once I witnessed a situation where a package for a new-born child in the camp was being prepared by another organization and items like a bottle, a pacifier, tea and powdered formula were immediately seen as 'must-haves' in that package. If a breastfed baby was crying it was immediately assumed that the baby was hungry and that the mother didn't have enough milk... sometimes even by healthcare professionals.

Parents of non-breastfed children on the move did not have access to safe and clean water and were not able to properly wash and sterilize used bottles. In general, formula supplies and conditions for hygienic food preparation were severely limited. Occasionally, throughout the route, parents were receiving untargeted donations of powdered infant formula, very often in a language that they did not understand. I often saw parents preparing/mixing formula and adding too much water or mixing powdered formula with some other powder from another can. Bottles were usually very dirty, directly jeopardizing the life of the children.

It took us some time to establish the system in Croatia in the refugee camps/transit centres where breastfeeding mothers would receive protection, and active support and encouragement and where formula-dependent infants would receive proper identification, protection and support through safe alternatives (e.g. ready-to-use formula and cup feeding).

What was the percentage of breastfed babies younger than 6 months?

Unfortunately, I do not have access to reliable and disaggregated data. We know from the Syrian Family Health Survey, conducted in 2009 prior to the crisis, that the nutritional status of children under five years of age was poor, with an estimated 23 % stunted, 9.3 % wasted and 10.3 % underweight. Exclusive breastfeeding ›

rates stood at 42.6 %, while the proportion of newborns introduced to breastfeeding within the first hour was 42.2 %.

Data on breastfeeding rates throughout the route varied and findings from the assessments done by different organizations were not very reliable due to small sample sizes. But the common impression was that:

a. breastfeeding rates among the Afghan population were higher compared to breastfeeding rates in the Syrian and Iraqi populations; and
b. many mothers stopped breastfeeding or decreased breastfeeding since they started their journey due to lack of privacy, stress, inadequate support and accessibility of formula.

What were the reasons (or myths) for mothers not breastfeeding during the journey?

Unfortunately, there is a widespread misconception that stress or inadequate nutrition of the mother, which are common during large migration movements, can decrease her ability to breastfeed successfully. Lots of mothers who were breastfeeding stopped or decreased breastfeeding during their journey due to inadequate support of breastfeeding and accessibility of formula. Many mothers claimed that they did not have enough milk and that's why they needed to supplement. They did not have the knowledge of how to increase their breast milk production. Some mothers never breastfed because they had received bad advice – I met one mother who was told by a doctor that she couldn't breastfeed because she was RH+.

Lack of privacy also contributed – just imagine yourself trying to breastfeed in an overcrowded dinghy or a train, constantly pushed to hurry up by family members or police officers in transit centres…

What was the role of the Mother Baby Centre and breastfeeding counsellors in the refugee camps?

The primary aim was to ensure and provide a safe and warm space for mothers with infants and young children and to protect, promote and support breastfeeding as the safest and best option to minimise health risks and ensure child survival, growth and development. We wanted to have some quiet, private and relaxing space for breastfeeding in the middle of a very chaotic camp in order to provide advice, encouragement and counselling to mothers about feeding practices. Part of the Mother and Baby Centre was a paediatric clinic, so healthcare was ensured for all the children, with a special focus on children under 6 months. We also wanted to identify non-breastfed babies to make sure that caregivers had access to safe feeding options.

Breastfeeding counsellors played a critical role and in a very challenging environment tried to provide what I call 'breastfeeding first aid' and encouragement.

One special case of a premature baby who arrived in Opatovac and who was left without her mother in a particularly bad condition ended up with you breastfeeding her, as you were a mother of a weaning baby yourself. Please, describe this experience.

I will never forget the day I met Najad. It was October and it had been raining for the past several days. She was so tiny and fragile…. and had already gone through such a terrifying journey and lived a life never meant for any child. She was being carried by her aunt. She was thin, weighed less than 2kg, was pale and cold in wet clothes… only 22 days old!

Najad was born prematurely in Syria and unfortunately her mother died in a hospital shelling. After that tragic event her family took Najad from the hospital and fled Syria.

The decision to breastfeed that girl was personal and spontaneous. I was still breastfeeding my second child who was 13 months old and I was very well aware that breast milk is the best and healthiest option. At that time the IYCF-E program in our Mother and Baby Centre was still not fully operational, especially when it came to the formula-dependent children.

I just spontaneously asked Najad's aunt if I coulc try to breastfeed Najad. I explained to her that I have a baby boy at home who is still breastfeeding and that my breast milk would be a better option for Najad. When I started to unbutton my bra I remember I began to worry – what if she won't accept my breast? She was so small and tiny… what if she doesn't have enough strength? But she did. And she was interested. I helped her with compression.

The second time it was a little bit more challenging – she was fussy and I wasn't sure if I was doing it right. The fact that the room was full of people didn't help either.

After each feeding she wanted to stay longer at my breast. I would stay with her until midnight and then come back in the morning. I used my breast pump to pump out the milk for the night for her. After 2 days she started to breastfeed exclusively. I had an agreement with her aunt that every time Najad needed to eat (and that was every two hours, sometimes even more often) that she was to go to the Mother and Baby Centre and that the staff there would call me to come via walkie-talkie. I was working around the camp and every 1.5-2hrs going to Najad and breastfeeding her. She was placed in the heated container near the Mother and Baby Centre. Sometimes I would just hold her close to my breasts, she was sleeping and eating. She started to poo that 'beautiful yellowy mustard colour' 4-5 times per day and almost every nappy was wet. Her colour and skin changed.

5 days later, a paediatrician from Magna told me 'Martina, your breast milk is a miracle. Just look at her! You saved her!'

We'll I don't know if I saved her, but I definitely helped her. The day we had to say goodbye to each other was a very sad day for all of us. Najad, me, her family…

I am sure that Najad was feeling it too. She was latched onto me for almost the whole day and every time I tried to lay her down she would start crying, demanding to go back to the breast.

Her aunt told me that the Koran says it is acceptable for a child to be breastfed by another woman. Islam recognizes the importance of breastfeeding to the growth and development of a child, and that special bond that develops between a nursing woman and a baby. A woman who substantially nurses a child (more than five times before the age of two years) becomes a 'milk mother' to that child, and that suckled child is recognized as a full sibling to the foster-mother's other children. Najad is now safe and healthy with her family in Germany. One of the best gifts I have ever received was Najad's photo two months later, which read 'Your Syrian daughter!'

without words

Photo: Monica Tesone

Tongue-tie

Evaluation and Support Authors: Márta Guóth-Gumberger, Daniela Karall

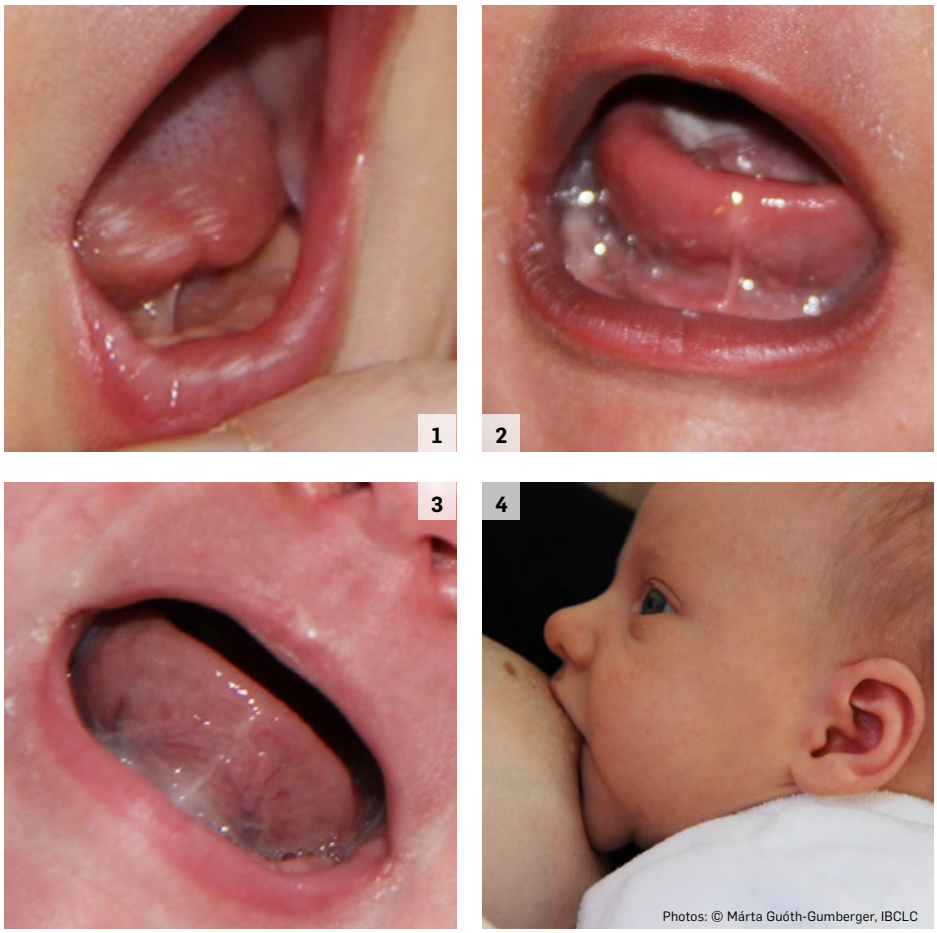


Fig. 1: The anterior tongue-tie begins at the tip of the tongue and causes a heart-shaped tongue tip.

Fig. 2: The posterior tongue-tie begins further back on the underside of the tongue. The tip of the tongue remains round.

Fig. 3: A hidden posterior tongue-tie. Tongue tip is round

Fig. 4: The breast is not grasped well with a tongue-tie

A tongue-tie can appear in two different forms: The anterior tongue-tie begins at the tip of the tongue and creates a slight cleft or heart-shape at the tip of the tongue (Fig. 1). The posterior tongue-tie begins further back at the underside of the tongue so the tip of the tongue is round and unremarkable (Fig. 2). The frenulum can be hidden under the mucosa and may not be visible (Fig.3). All of these forms can cause the same restricted tongue mobility and the same resultant problems. Support and treatment are also the same.

Since 2009, we have supported families of tongue-tied babies together. We see anterior tongue-ties relatively rarely and have the impression that, as a rule, these are treated early in many places in German-speaking regions. The many posterior tongue-ties which we see from within a large geographical area, indicate that these are, as a rule, unrecognized and not treated in German-speaking regions. Obviously, careful breastfeeding counselling and appropriate follow-up treatment that is always needed.

We would like to present the assessment and support concept for anterior or posterior tongue-tie, which has crystallized out of our collaboration.

As the most important factors for a diagnosis and the recommendation for a frenotomy, we combine the following aspects **which are possible indicators of tongue-tie.**

The following observations of breastfeeding:

- Breastfeeding frequency of 5-6x or 12-14x/daily
- Difficulty to latch, baby attempts to latch and lets go repeatedly
- Ineffective latch (Only a little breast tissue is grasped. The temple does not move, Fig. 4)
- No sign of milk transfer
- Only short, no sustained sucking
- All in all, a stressful, difficult breastfeeding situation

Typical observations at the breast:

- Nipple pain
- Pinched nipples
- Breast not softer after a breastfeed
- Engorgement, mastitis, abscess

Typical weight patterns are:

- -7 % after the birth (normal), then slowly crossing the percentiles downwards
- -7 % after the birth (normal), then along one percentile for 4-6 weeks (normal), then gradually crossing the percentiles downwards (Fig. 5)

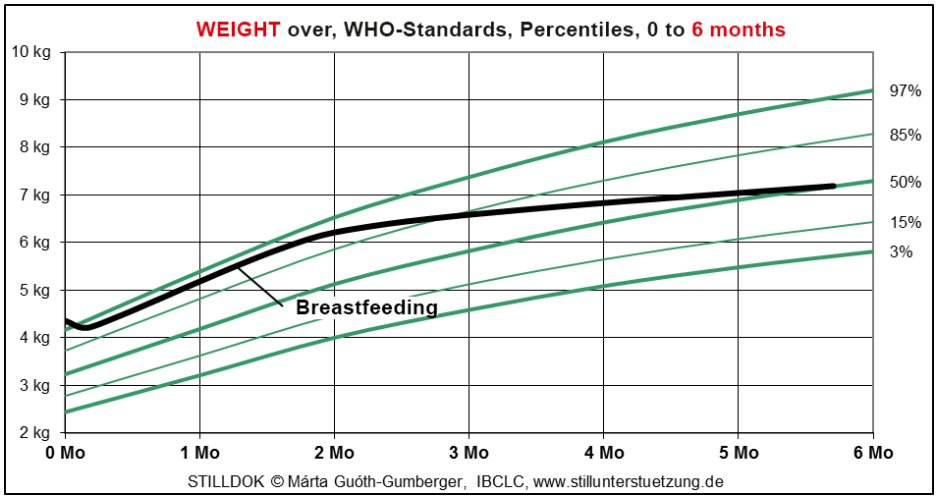


Fig. 5: The pattern of weight gain first runs parallel to the percentile, due to the mother's abundant milk production, then it sinks because the milk production is down-regulated

› -7 % after the birth (normal), then along one percentile (normal), BUT supplementing by bottle or supplementary nursing system (SNS)
› Rarely -7 % after the birth (normal), then along one percentile (normal) and, nevertheless, a tongue-tie.

Milk production:
› sometimes slow to get started,
› Or, after birth (endogenous), appropriate but is later downregulated,
› Sometimes requires pumping to build up or maintain.

Supplementation:
› if supplementing by bottle or supplementary nursing system is necessary at all
› if 100 % expressed mother's milk is fed by bottle or SNS (that means that the baby is not in a position to get the milk himself)

Feeding from the bottle can also be compromised for non-breastfed babies:
› Sometimes a baby with a tongue-tie can feed appropriately from the bottle because the milk flows easily.
› In other cases, the parents "battle" to get the baby to drink enough.
› The baby drinks less well at the end of a feeding.
› He loses milk in the corners of his mouth.
› He cannot maintain a vacuum, so the bottle can be pulled out of his mouth easily.
› The pacifier can also be easily pulled out of his mouth.

Eating solid food can be affected:
› Some babies manage well with the food even with a tongue-tie.
› For others: eating becomes a battle, the parents are concerned, they try to push the baby to eat,
› The baby only eats minute amounts.
› The baby gags
› He cannot keep food in his mouth
› Or, in the long term, he can only manage with finely pureed foods.

The following **behavioral patterns** are also typical: the baby cries a lot, cannot be calmed easily OR he withdraws, is easy to care for. The parents sometimes have the feeling that something doesn't fit here.

If one or more of the above mentioned aspects are observed, it makes sense and is necessary to check the mobility of the **tongue**. All of these points could have other causes, however, but a tongue-tie often contributes to these problems.

Observation of the tongue, photos and video footage and their evaluation provide information about the tongue mobility. The latter are also suitable for training your own eye. A further possibility is to do an exam with a finger. Alison Hazelbaker's screening tool (ATLFF, Assessment Tool for the Lingual Frenulum Function) is a possibility for comprehensively assessing the tongue function. Thereby, the **function** of the tongue is more important than its appearance.

The tongue should be able to perform the following movements in order to enable it to adequately fulfill its tasks for development – sucking at the breast, growing, building up and maintaining the mother's milk production, eating solid foods, cleaning the teeth, forming the jawbone and palate, speaking, licking, etc.

The necessary tongue mobility for normal function comprises:
› Moving the tongue from one corner of the mouth to the other
› Being able to open the mouth wide (when crying or yawning)
› Thereby, easily bringing the tongue at least halfway up (easiest to observe when crying; the mobility is limited when the tongue always remains lying in the mouth and is dimpled, Fig. 6).
› Stretching the tongue over the lower lip,
› Complete spreading of the anterior tongue (important for breastfeeding)
› Suckling strongly with a good negative pressure and maintaining the negative pressure
› Executing a peristaltic wave movement (thereby, the movement of the temple is visible)
› Sucking sustainedly without losing the negative pressure (without clicking sounds – with each clicking sound, the baby loses the vacuum and must latch anew)

›

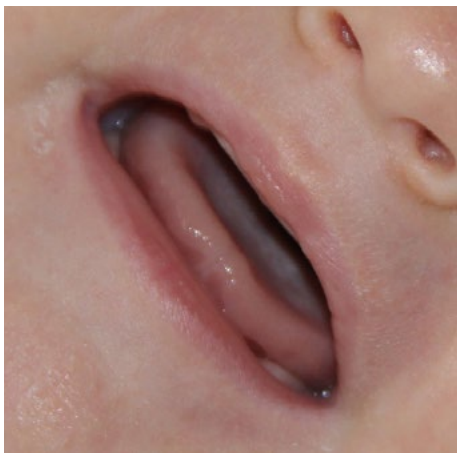


Fig. 6: The tongue lies flat in the mouth when the baby is crying. There is a dimple and the tip of the tongue is round

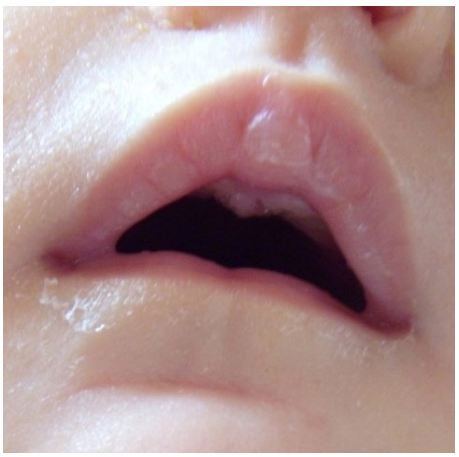


Fig. 7: Pronounced sucking blister because the lips try to hold the breast

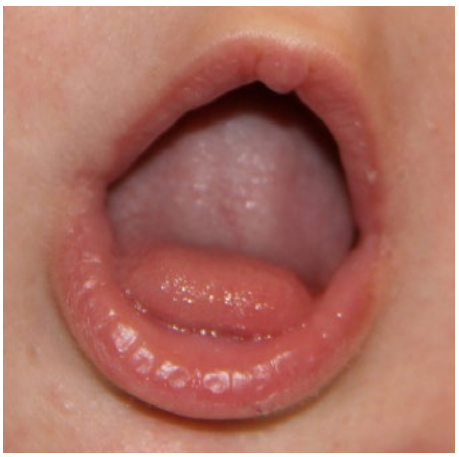


Fig. 8: Tongue in the shape of a children's slide, tip of the tongue is round

Further indications of restricted tongue mobility can be:

- Sucking blisters on the lip (Fig. 7)
- Unusual tongue forms
- Tongue in the shape of a children's slide (Fig. 8)
- Tongue humping
- Trapezoidal edge to the tongue
- Frequent burping
- Frequent gas
- Hiccoughs
- The tongue never plays outside of the mouth

The decision about the diagnosis and recommendation for therapy is, considering all of the above-mentioned aspects and the social situation, always an individual decision. For example, a frenotomy is recommended when the tongue cannot perform two or more necessary functions AND the weight curve is falling OR 300 ml or more a day must be supplemented AND/OR the nipples are sore. The diagnosis will be strengthened when several indicators are observed.

Counselling

Comprehensive breastfeeding counselling is, first of all, about improving breastfeeding management, trying out different positions and, if necessary, about supplementing at the breast or pumping etc. Laid-back breastfeeding or asymmetric attachment with the lower lip first often permit a more favorable sucking behavior, especially with a tongue-tie, but are not always possible depending on the anatomy or the situation as a whole. With indications of limited tongue mobility, closer investigation is necessary. What is realistically feasible for the parents also plays a role: How far away is the closest physician who treats posterior tongue-tie? Is the trip or possible cranial or osteopathic treatment feasible for the parents? Are they prepared to do it after a thorough consultation? If so, the breastfeeding consultant sends the physician a summary of the information with a weight curve.

The assessment, explanation and guidance for the parents require time; the procedure itself is very brief. Breastfeeding before and after is possible and desirable. The head must be held firmly, the tongue is lifted with a sterile spatula (grooved director) and the tongue-tie underneath is divided. The sensation with this is comparable to a bite in the cheek. The babies cry because of being held firmly. Most of them calm down very quickly in arms or at the mother's breast. Some are a bit agitated for a day, some not.

After-Care

After the procedure, the breastfeeding counsellor receives a letter from the physician and provides the family with guidance for continued breastfeeding, improvement of positioning, slow reduction of supplementation, weight control, playful tongue exercises and, where possible, cranial or osteopathic treatment. The cooperation between the breastfeeding counsellor and the physician providing treatment is the basis of good support.

Possible developments after a frenotomy

With careful breastfeeding counselling, treatment and, subsequently, continued breastfeeding counselling with close cooperation between the lactation consultant (IBCLC) and the physician, developments are often very gratifying: continued breastfeeding, transition from 100 % feeding by bottle to exclusive breastfeeding, appropriate development after a long period of insufficient weight gain, reduction of the amount of supplement, changed feeding behavior with solid food, appropriate feeding from the bottle. For many, these changes are marked. For a few, only a little improvement can be observed, above all when there are other serious impairing factors.

Possible long-term developments without a frenotomy

What happens when – for a variety of reasons – a tongue-tie is not treated or is not treated early?

With some few breastfeeding pairs, breastfeeding can be continued. As a rule, that is the case when tongue mobility was only slightly restricted, the mother's milk production is very abundant, sucking is possibly supported by cranial or osteopathic treatment and the mother is able to integrate very, very frequent breastfeeds into her life.

Often, however, the result is weaning and, mostly, the babies gain weight because the amount of the infant formula, unlike mother's milk, is not "down-regulated" through ineffective emptying of the breast. Others are fed pumped mother's milk with a bottle. With still others, the weight gain over months is subtly too little and, worryingly, the baby gets used to limited food intake "as the normal condition." We also saw pronounced failure to thrive, the cause of which was a tongue-tie, paired with other factors, as well as feeding disorders as a secondary problem, with long-term conse-

quences if the baby also has problems with solids due to the restricted tongue mobility. At primary school age, some children are sent by a speech therapist or an orthodontist for a frenotomy due to misaligned teeth.

Approach without a frenotomy

When – for various reasons – treatment of the tongue-tie is not possible, despite a clear diagnosis, all other measures make sense. If appropriate weight gain cannot be secured, infant formula is unavoidable in order to prevent the long-term consequences of insufficient weight gain.

The procedure required in case of tongue-tie and the brief impact on the baby should be weighed to not breastfeeding, the pain of failure to thrive or the psychological pain of not feeling full despite every effort. It is obvious that it is not frenotomy alone that makes the difference, but the combination with careful breastfeeding counselling before and afterwards.

Márta Guóth-Gumberger
IBCLC in private practice with a focus on special breastfeeding situations, including inadequate milk supply, insufficient weight gain, tongue-tie, adoption, cleft lip and palate, as well as author of publications for parents and professionals
www.breastfeeding-support.de

Daniela Karall
Pediatrician at the Medical University Innsbruck, Pediatric Clinic, Habilitation 2004, IBCLC 2006, with a focus on medication while breastfeeding, tongue-tie, both anterior and posterior

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To Cut or Not to Cut?

Is there more to consider in the case of tongue-tie? Author: Myrte van Lonkhuijsen, Netherlands

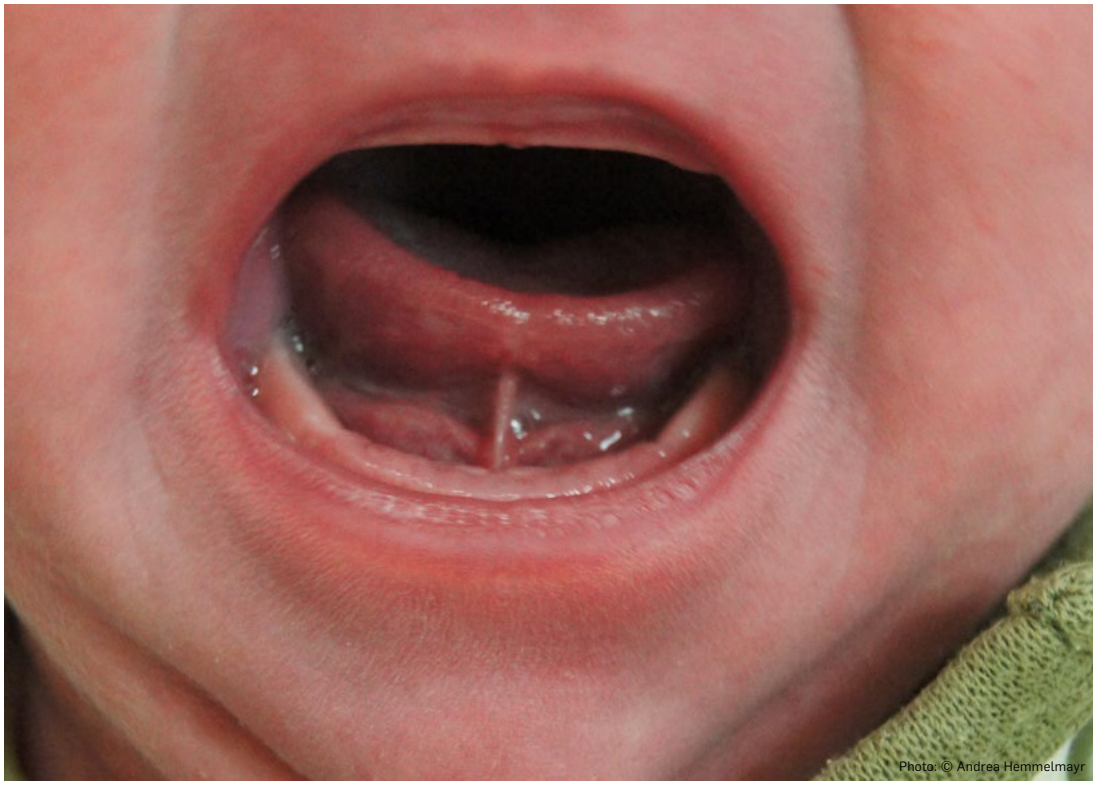


Photo: © Andrea Hemmelmayr

This is not an article on diagnosing tongue-ties or lip-ties. It is not an article on the effects of cutting those ties or the techniques to be or not to be used. It is not even an article that is pro or contra cutting tongue-ties. And it is not an article that has clear answers or evidence-based recommendations.

This is an article about what lactation consultants could possibly do beyond just diagnosing and referring. And about how we can help mothers and babies use the strengths of breastfeeding to heal and optimize both feeding and physiological function. If, as I strongly believe, breastfeeding is more than getting food from breast to baby, it can also offer more. And lactation consultants IBCLC can and should be the ones to offer that broader perspective.

Why all the interest

Cutting tongue-ties is not new, or modern at all. In the Dutch translation of the Bible, Moses' tongue-tie is said to be well cut. A figure of speech meaning he could speak really well indeed. And medical texts before 1900 mention the need for cutting the tongue-tie as it could interfere with breastfeeding, which was a serious complication in a time when other baby foods were simply life-threatening alternatives. Then came sanitation, clean water, refrigerators and formula companies. And, for the first time, offering anything other than breastfeeding became a survivable strategy[1]. So cutting tongue-ties lost its urgency.

With renewed interest and recognition of the value of breastfeeding, we now see a renewed recognition of the possible problems that come with a too tight frenulum. Possibly, there is even a higher incidence of babies with a too tight frenulum today. There is some indication that folate/folic acid supplementation is resulting in more tongue- and lip-ties. The exact mechanism is under discussion and the evidence is not widely recognized, but it is a serious possibility. And so getting a too tight frenulum cut in a baby is an option once again.

This is a positive development.

[1] I'm not saying healthy or good, just survivable

why not just cut?

Most scientific studies report an incidence of 5-13 %. But a midwife I spoke to recently said she cuts 50 % of all babies born in their practice. And it is not unheard of to have a baby have his/her tongue-tie cut 'to make sure that that won't cause a problem', without a proper diagnosis or even without any breastfeeding problems present. Parents post photos online on Facebook groups and frequently get the response 'yes that is a tie so go get it cut'. It is a small procedure with little side effects. So is this a problem? I think it is.

The mouth is a very sensitive organ. And, contrary to what was long believed, babies have a lower pain threshold than adults. So, although it may be a minor procedure, it is, nonetheless, a painful, invasive and irreversible one. If it is needed to avoid serious present or future problems, such a procedure should be carried out. But not 'just in case', not without a proper diagnosis and not without trying to avoid doing it.

Really short = really treat

There seems to be less and less debate among healthcare professionals about the need to cut a really short tongue frenulum, and to cut it early. There is more discussion about cutting less-than-obvious tongue-ties and frenula.

There is mounting evidence that doing so does support breastfeeding. Yet other healthcare professions express doubt about the need, safety and effect of such interventions.

So, more and more lactation consultants refer parents to have the tongue-tie cut, and then they are referred for further bodywork by osteopaths, chiropractors, orofacial therapists etc. And all this may, of course, be very beneficial. But it does imply that a lot of support and intervention is needed to breastfeed quite a big group of babies. This does not help toward breastfeeding being experienced as a natural healthy aspect of life with a baby.

Breastfeeding: vulnerable or robust?

Breastfeeding is a vulnerable process in our culture. Something to be guarded, protected. Easily disturbed, easily damaged. We need to protect it from advertisements and help mother and babies get through those sometimes difficult first weeks.

But is breastfeeding truly so fragile that external intervention is needed? Nature is resilient. Survival requires the flexibility to overcome restrictions and obstacles. Over the centuries, babies have been born with difficulty, under less-than-optimal circumstances. They often died, but as often lived and breastfed. And breastfeeding itself, the act of drinking at the breast, may be one of the compensating factors that allowed so many children to recover from less-than-optimal aspects, such as birth trauma or something like a too tight frenulum.

If we can see breastfeeding as an empowering interaction action between mother and baby, maybe it will allow a baby to overcome the restriction of a tight frenulum. Or at least recover optimally once that frenulum has been cut.

Recently I helped a mother breastfeed her child with a receding chin. He was 10 days old and had never really suckled well at breast. When we positioned him optimally, he suddenly got the grip he needed. His mother, a physiotherapist, was cradling his head as he drank and she remarked 'my goodness I can actually feel how his whole skull plates are moving with the intensity of his drinking'.

Muscle stronger than bone

This is a clue to what breastfeeding can offer: optimal stimulus for self-development by the baby. The stimulus to engage the muscles of mouth, neck and torso to develop the alignment of the whole body.

From about 14 weeks' gestation, babies use their tongues, shaping their mouth cavity and training the musculature of the mouth. This is the reason a short frenulum quite often comes with a bubble-palate, narrow mouth and/or receding chin. And these are not solved instantly by cutting the tie.

The muscle tone of the tongue will also be lacking or the baby will have developed the bunched tongue movement we also frequently see. And this too requires time to resolve.

What can breastfeeding offer?

What we need to offer a tongue-tied baby is a body shape that encourages opening of the chest and throat area, a chance to (re) train the tongue in a forward movement, and the relaxation to allow this to develop.

The traditional ways to offer the breast to a baby may not be effective for this aim. If we hold the baby snugly around the mother's body and bring the head to the breast, the baby's pelvis is tucked in, encouraging the shoulders to round and the head to come forward. Try for yourself: tuck your tail in and then try to stretch out your head and open your mouth. Quite tricky isn't it?

Biological nurturing offers a much better body shape for tongue-tied babies. The elongated body encourages opening of the shoulders and a nice lift to the head. And the support offered by mother's body encourages the baby.

If the mother could then support her breast in such a way that the baby gets help in holding the tongue underneath the areola, the baby would be more effective at breast. And, s/he would get the experience and the training needed to extend the tongue and, when relevant, the upper lip.

Before cutting

This is very relevant in cases where the tongue-tie and/or lip-tie are not so pronounced that they need obvious intervention. This might be the case, for example, in a baby with possible birth trauma who is 'curled in' on him/herself and shows little extension of body and head. This has been labeled a 'faux tie'. Offering relaxation on the mother's body in a biological nurturing position, support under the chin during drinking and the comforting experience of milk while training the tongue may be all these babies need to extend and open their mouths. ›

TRAINING

for IBCLCs, medical professionals and physicians on tongue-tie will take place in September: http://www.stillen-institut.com/de/praxistag-bern-2016.html.

If you want to be informed about further training programs, please send an email to info@stillunterstuetzung.de. Breastfeeding counsellors may want to speak to physicians who treat anterior tongue-ties so they can expand their treatment to the posterior tongue-tie.

Aftercare

It is also a vital part in the care after cutting the tie(s). The now-common advice on aftercare implies keeping the wound bed open in order to avoid regrowth of the tissue. This is a relatively traumatic experience for both baby and parents. Imagine having had a dental procedure which has left a wound, and then someone touching that area several times a day in order to keep the wound open!

If breastfeeding can have a similar effect, it is combined with the pain relief of the sweet milk. And the intensity of the suckling movement combined with the duration of a feed is better way than any manual massage.

Yet this requires a different way of offering the breast that allows for the forward stretch of the lower jaw and the extension of the tongue.

Conclusion

This is where lactation consultants IBCLC can make a difference. If we can develop more ways to allow mothers and babies to experience this effect, we support breastfeeding as the robust resilient interaction it can be. And has been, throughout the ages. This may take time, effort and creativity, but it will strengthen and empower women and their babies.

Myrte van Lonkhuijsen
Myrte van Lonkhuijsen, IBCLC since 2000, mother of three daughters. Her experiences with unexpected problems with breastfeeding her third child led to her Interest in breastfeeding with all its complexity. The author works in a private practice in Amsterdam and supports about 400 clients per year

The 9th Lactation and Breastfeeding Congress in Athens is Now History

Author: Andrea Hemmelmayr, IBCLC

In my opinion the congress team of ELACTA and GALAXIAS has the right to be proud of what they have accomplished. The entrance fees could be lowered by 40 % compared to the congress in Copenhagen without having to make cuts in quality with the lecturers or the programme. Speakers from 15 different countries imparted their scientific and practical knowledge to the participants dealing with numerous topics around lactation and lactation consulting. The lectures of Kathrin Genna Watson, Dr. Carlos Gonzales and Dr. Michel Odent turned out to be particular highlights. But also the less-known lecturers and the more locally-known ones have been praised by the congress visitors.

A diverse programme enabled the congress visitors from 33 countries to spend the evenings together as well and to intensely exchange with each other.

In order to be able to organize such a congress in a cost-effective way, it is essential to have a congress venue which is affordable and apart from this numerous staff members who are willing to get involved on a voluntary basis. I would like to express a cordial thank you to the team of GALAXIAS and the ELACTA board members, who made it possible to realise this event.

Breastfeeding

A Guide for the Medical Profession, 8th edition

Review: Vangelis Argiriou

My first book about lactation and breastfeeding as a pediatric resident was the fourth edition of "Breastfeeding: A guide for the medical profession" by Ruth Lawrence. That was in Sweden in 1998.

A decade later and as primary care pediatrician in Greece I came across the sixth edition of the same book when I had to study for the IBCLC exam.

I became the first Greek male lactation consultant and it was a prouder moment than when I got my medical degree! It gave me practical knowledge to support breastfeeding women and therefore promote a healthier lifestyle for their families.

What we have here is a classical reference book whose basic structure has remained the same:

Chapters 1 to 7 deal with the theory of human lactation and breastfeeding.

Anatomy, physiology, biochemistry and immunology, as well as the psychological impact of breastfeeding along with its benefits for the mother-infant dyad are discussed here.

Chapters 8 to 23 focus more on practical issues such as maternal nutrition, weaning, infant growth and medications. Here the authors approach also the subtle parts of breastfeeding preterm and problematic infants, induced lactation and relactation. Transmission of infections and maternal complications are also analyzed. Specifically the drug chapter has been thoroughly revamped.

My favorite part of the book is the Appendices! Easily accessible information for everyday use, for educating mothers as well as medical staff.

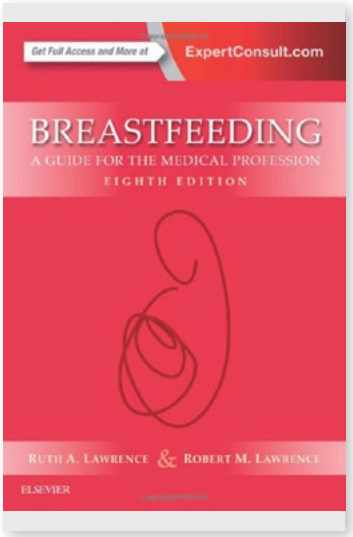
The 21 protocols of the Academy of Breastfeeding Medicine are excellent tools.

I found this Elsevier's soft edition easier to use than the 4th Mosby's paperback. Still I would like to see a more colorful and eye-catching layout.

I should of course mention here that the eighth edition is also secure (and more colorful) in cyberspace. The book's site at ExpertConsult.com is perfectly functional and it is really easy to work, comment and highlight there. I personally enjoyed the online version much more since I could faster scroll through chapters, had a better overview of the boxes and diagrams and could directly tap on the hyperlinks. I definitely recommend the online version even for this reference book.

All in all, many new observations and incredible advances in understanding several previously unknown physiologic and behavioral processes directly linked to or associated with lactation and breastfeeding are beautifully described in this new volume.

The eighth edition remains among the best reference literature for health professionals (midwifes, gynecologists, pediatricians, nutrition specialists etc) providing them with the up to date evidence-based data to take an aggressive stand in promoting, protecting, and supporting breastfeeding.



BREASTFEEDING

A Guide for the Medical Profession

Authors: Lawrence & Lawrence
ISBN : 9780323357760
8. Edition 2015, Elsevier, 57,99 €

Vangelis Argiriou
Greece;
vangelis@argiriou.org

The Rabbit Who Wants to Fall Asleep

A New Way of Getting Children to Sleep

Review: Gudrun von der Ohe

The subheading of the German version is "The Ideal Way of Getting Your Child to Sleep" and a sticker reads "Sensational Worldwide Success". It is also available as an audio book. At the beginning a disclaimer warns the reader that the book is never to be read out loud close to someone driving any kind of vehicle. The next two pages include some advices for reading aloud: The best time for reading; to use the best "fairy-tale voice", when to put an emphasis, when to read with a slow and calm voice; that the name of ones own child can be put in, that instructions – like yawning – are enclosed and that the name of the rabbit "Roger" can be read out as "Roooo geeer" with two yawns. Furthermore it is recommended to read the story from the beginning to the end, even if the child already fell asleep. This all seems kind of irritating – and after thorough reading, it is striking that the book is based on some powerful psychological techniques – presumably on autogenic training or something similar to yoga. The book is recommended for children at the age of 3 to 7.

When looking for reviews, it becomes clear that the book needs to fit to the respective family – some are literally thrilled, others find it unsuitable. It only works if the reader (the parents) wants to follow the path as well. If the parents relax the child can calm down as well. Both the reader and the child have to bear the frequently used "now" – as an order so to speak – used 13 times on the first two pages alone, the same with the following pages. It is likely that bright children favour to fall asleep rather than listen to repeated "now" – however, the author will not have intended it this way. All thoughts should be put in a box until the next morning, so that the child will be free in its mind and ready to fall asleep. Thus the one who is not able to stop thinking failed.

This book contains a nice little story that might help children relax and fall asleep along with the young rabbit Roger. On their way to Uncle Yawn, Roger and his mother meet the Sleepy Snail and the Heavy-Eyed Owl. In front of the house a signpost declares "I can makE aNyoNe faLL asleep". Uncle Yawn uses magic invisible sleeping powder. The tired Roger finds his way back home together with his mother and falls asleep. This reassurance gives the child, that identifies with the rabbit the possibility to fall asleep as well and it will learn to fall asleep more easy.

Every family needs to decide whether this book suits them. All the reviews on "Amazon" reveal the multiple different opinions on this point. I myself can neither recommend nor advise against this book. Everybody should decide on his/her own as the reviews show.

I can only tell from my point of view that it would not have been a solution for me – I personally dislike all these demanding "Fall asleep, NOW" that much, that I probably would have transferred this to my children when reading.

In any case, it will not be helpful for the tired parents of infants. It is not suitable until the children come to an age when they understand the reading and the content of the story – thus, when they are 2 or 3 of age at the earliest, like the author recommends.

This review refers to the German version:

DAS KLEINE KANINCHEN, DAS SO GERNE EINSCHLAFEN MÖCHTE –
eine etwas andere Gutenachtgeschichte

Author: Carl-Johan Forssén Ehrlin
Illustrator: Irina Maununen
ISBN 978-3-442-39303-9;
Goldmann Verlag (Mosaik-Verlag);
2nd edition 2015, 12,99 € (D)
13,40 € (A)

Breastfeeding and the Risk of Dental Caries

An update based on two current systematic reviews Zsuzsa Bauer, Dr. phil.

Photo: pressmaster / 123RF

The World Health Organization (WHO) recommends exclusive breastfeeding up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond (WHO, 2004). At the same time many dentists recommend for the prevention of caries to waive frequent breastfeeding and especially breastfeeding at night after teeth eruption took place. Mothers who successfully breastfeed their children up to toddler stage or kindergarten age often feel uncertain about whether to continue breastfeeding or not. The question is which scientific evidence exists regarding the relationship between caries risk and breastfeeding.

The latest systematic review on breastfeeding influencing the emergence of early childhood caries was published in the year 2000 (Valaitis et al., 2000). This review included 28 relevant primary studies. The authors found out that the results of the primary studies were contradictory and of poor quality. They concluded that there is no reliable evidence for a strong link between breastfeeding and early childhood caries. In the systematic review of Kramer and Kakuma (2012) about the ideal duration of exclusive breastfeeding, there was on the other hand no consistent evidence found regarding the protective effect of breastfeeding against caries. Since these reviews have been published dozens of similar studies were conducted. At the end of 2015 two systematic reviews were published practically at the same time, including meta-analyses, with the objective to sum up the results of all primary studies that were published until then.

The article of Tham and colleagues (2015) was published in the supplement of the journal Acta Paediatrica about the influence of breastfeeding on the health of both the mother and the child, coordinated by WHO. The authors of this study work as epidemiologists at different Australian research institutes. The other systematic review (Avila et al., 2015) was published in the journal PLOS ONE by a Brazilian research team for paediatric dentistry. Both articles are Open Access and thus available on the Internet (see Sources).

Systematic reviews have the highest quality of evidence. In the 1970s the so-called Cochrane Collaboration developed these reviews aiming to provide a synthesis of current literature relevant to a defined research question. Nowadays ›

systematic reviews are part of the research with their own methodology, which is constantly being improved. Regarding significance and reliability they are far superior to conventional narrative reviews, since the latter include only an arbitrary selection of the literature and use non-transparent assessment methods. Regardless of these high standards, even systematic reviews can provide different results for the same question, e.g. depending on the concrete formulation of the question, on the amount of literature research, on the definition of inclusion and exclusion criteria, and on the criteria for concluding. Besides, also spontaneous decisions play a role - e.g. during the review of relevant literature. Consequently, systematic reviews are as well subject to subjective views and decisions. Thus, if two systematic reviews appear at the same time and post the same question it is especially interesting to learn about the results.

Sometimes systematic reviews are supplemented by a meta-analysis. In a meta-analysis the results of the individual original studies, that are included in the systematic review, are quantitatively summarised with the help of statistical methods in order to define the effects in a more reliable and precise manner. However, many systematic reviews cannot be supplemented by meta-analyses, as the included studies are too heterogeneous and thus not comparable to each other. In many cases some of the included studies can be used for a meta-analysis. The remaining studies are only presented qualitatively.

Methodology and Results of the two Reviews

Whereas Avila and colleagues formulated a narrow research question (breastfeeding versus bottle feeding), the question of Tham and colleagues was generally formulated (association between breastfeeding and caries). This issue also includes the subtopic "breastfeeding versus bottle feeding", but can also take other research works into account that do not have bottle feeding as a comparison. Furthermore, Tham and colleagues analysed the effect of breastfeeding during specific time frames and of specific breastfeeding practices.

Avila and colleagues browsed seven different literature databases and even grey literature* for relevant primary studies. Tham and colleagues just browsed the three largest literature databases and did not take grey literature into account. Both of the two reviews only included English literature which restricts their reliability a bit.

Table 1: The relative risk of early childhood caries depending on breastfeeding

Period	Comparison groups	Included in meta-analysis	Relationship between breastfeeding and caries	Visual illustration of the risk	Pooled odds ratio (OR)
0-12 months	Any kind of breastfeeding compared to no breastfeeding	Two studies	Breastfed children have a decreased caries risk		0.5
	Breastfeeding with longer duration compared to shorter duration, if the studies having "no breastfeeding" as comparison group are excluded.	Three studies	Breastfeeding does not show a strong protective effect		0.92
>12 months	Breastfeeding versus no or less frequent breastfeeding	Two studies	Breastfeeding increases caries risk		1.99
	Breastfeeding at night	Five studies	Breastfeeding at night multiplies caries risk.		7.14

Das Odds Ratio (OR) ist ein Schätzer für das relative Risiko. Ist das Ergebnis 1 oder nahezu 1, dann gibt es keinen Unterschied zwischen den beiden Gruppen. Ist das OR < 1, dann tritt Karies bei gestillten Kindern mit geringerer Wahrscheinlichkeit auf. Ist das OR > 1, dann ist die Karies-Wahrscheinlichkeit bei gestillten Kindern höher. (Bildlizenzen, 123 RF: Baby: #17346167; Kleinkind: # 30896947;)

* **Note:** Grey Literature refers to publications other than the common commercial or academic publications, i.e., among others, masters and doctoral thesis, conference abstracts and poster, publications by government authorities and departments. In academic journals "positive" or rather significant results are preferred to studies devoid of significant effects. The result is a so-called publication bias and effects are overrated in meta-analyses. By including grey literature into meta-analyses this bias can be reduced.

Avila and colleagues included only 7 primary studies into the analysis whereas Tham and colleagues included 63 articles in total into their analysis. Interestingly enough, even for their subtopic "breastfeeding versus bottle feeding" Tham and colleagues included more articles than Avila et al., namely 12. However, the two author groups included different studies into their analysis, except for one article which was mentioned in both reviews. According to Tham and colleagues six studies revealed no existing difference regarding caries prevalence of bottle fed versus breastfed children, four studies revealed a lower caries prevalence of breastfed children. There were, however, two studies that showed a higher risk of caries for breastfed children in contrast to bottle fed children. Tham et al. only summarised the results of these studies in their review and did without a conclusion. The authors of the Brazilian task force complained about the heterogeneity of the studies and due to poor control no reliable overall conclusion could be drawn. They criticised above all that essential controls were missing. Crucial factors that influence emergence of caries and which were not controlled in the primary studies contained social class, oral hygiene, sugar content of bottle food, ethnic affiliation, preventive visits to the dentist, fluoridation of drinking water as well as breastfeeding at night. If these confounders are not controlled for, they skew the results in one direction or the other – depending on the comparison group in which they more frequently occur. Also, according to Avila et al., when diagnosing caries, the lack of blinding with respect to the mode of feeding, weakens the relevance of the primary studies. However, Avila et al. concluded that even under these restrictions the included studies militate in favour of a protective effect of breastfeeding compared to bottle feeding.

When the Australian review surveyed the relationship between breastfeeding and caries within defined time frames and under specific breastfeeding behaviour, the results were much clearer. Due to the reduced heterogeneity, a quantitative analysis could be conducted as well. In five studies the relationship between breastfeeding and caries within the first 12 months was investigated. Children who were breastfed to a greater extent during the first year of life had significantly less caries than the comparison group. However, this significant protective effect of breastfeeding occurred only in the two studies in which the comparison group was ***never*** breastfed. In the three studies that compared longer and shorter durations of breastfeeding no significant protective effect could be measured (see table 1).

The results showed to be especially unfavourable when the association between breastfeeding and caries was analysed after the first birthday. In seven studies breastfeeding from the 12th month was compared to less or no breastfeeding at all. Dental caries occurs more frequently in children who were breastfed after the 12th month than children who were not (any longer) breastfed. In five studies the association with more versus less breastfeeding at night was analysed. The pooled odds ratio was 7.14, meaning that the relative risk of caries multiplied for children who were breastfed (more frequently) at night. Six other primary studies, which due to their study design could not be included in the quantitative analysis, focused on breastfeeding at night, breastfeeding on demand, and falling asleep while breastfeeding in early childhood. All of these breastfeeding practices were associated with an increased prevalence of caries. ›

The sucking urge is maintained until toddler stage.

Photo: Prometheus / 123RF

Summary and Relevance for Practice

Until today science research does not provide reliable results regarding the relationship between breastfeeding and caries. Research on this issue will be continued on the basis of better controlled studies. Taking current evidence into account, compared to bottle feeding breastfeeding might have a protective effect against dental caries. This also ties in with the awareness of formula having a higher cariogenic potential than breast milk. Besides it is supposed that breast milk and skin contact during breastfeeding support the development of a healthy oral flora. The biomechanics of breastfeeding is also more advantageous than that of bottle feeding, for the most part of breast milk is swallowed without pooling around the teeth (Paglia, 2015). However, it might be possible that breastfeeding is just a surrogate endpoint for a healthier lifestyle and that the lower caries prevalence of breastfed children is explained by the better health awareness of the parents (Heinrich und Kühnisch, 2015).

After the eruption of the milk teeth, continued breastfeeding supposedly increases caries risk. Depending on the number of teeth, caries risk is higher with more teeth having erupted. Extended breastfeeding, frequent breastfeeding and especially breastfeeding at night in early childhood seem to further increase caries risk. However, it is not yet sufficiently certain that the increased caries risk can in fact be attributed to breastfeeding, because important determining factors including sugar intake and oral hygiene were not sufficiently controlled in the studies.

When considering the results in isolation, it would be necessary to advise the families to breastfeed less when the child turns one and to do without frequent breastfeeding and especially breastfeeding at night after teeth brushing. For families with poor eating habits and oral hygiene weaning might protect the child against caries.

However, experience shows that the child's sucking urge is maintained until toddler stage and sometimes even until kindergarten age. Often the sucking urge is especially pronounced when falling asleep. The question is whether it is better to wean (partially) and to satisfy the sucking need by using the thumb, a pacifier or a feeding bottle. Due to it's high probability of increasing caries risk the feeding bottle does not come into question; the thumb and pacifier are unfavourable for jaw development. Extended breastfeeding is a proven remedy against tooth misalignments (Peres et al. 2015). Furthermore, breastfeeding durations lasting longer than a year also provide health benefits. Studies conducted in developing countries show the mortality risk to double in the second year of life if children were no longer breastfed (Sankar et al. 2015). In early childhood breastfeeding also facilitates intimate moments between mother and child; these moments are, of course, particularly important.

There is a number of other factors linked to the development of caries. It is possible to exert influence on these factors without limiting breastfeeding: The colonisation of cariogenic bacteria in the child's mouth may be prevented by a perfect oral hygiene of the relatives and particularly the mother as well as the avoidance of salivary contact (Behrend et al. 2002). A healthy diet of the family and especially of the infant - low in sugar - and a good dental care beginning once the first tooth erupted help reconciling extended breastfeeding on demand and at night with healthy milk teeth.

Dr. phil. Zsuzsa Bauer
Has been working in research and journalism on biomedicine as well as nursing science for many years. Her current focus is on publications in the field of breastfeeding support.

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Looking for:

Percentile-OUTLIERS

This study is looking for reports on children who changed their weight percentile *and nevertheless developed well*.

What is this Study for?

Since their introduction weight curves are an issue of (great) concern both to parents as well as healthcare professionals. Weight curves can be helpful indeed. In consultations with parents the following topic is repeated again and again: The child grows well, despite changing percentiles, sometimes with crossing one or more percentile, which concerns everybody involved to a greater or less extent – depending on which of the current technical literature is taken into account.
If healthcare professionals are asked to talk about thriving children who deviate from percentiles they know just from hearsay, facts are missing.

The study Percentile Outliers will try to bring more clarity on the issue of 'thriving despite deviating from percentile' and to detect individual healthy development paths and provide space for them.

- Information is needed both from parents and from medical professionals
- Current reports are as important as older experiences.
- The extent of the deviation, whether the percentiles were changed downward or upward is not a criterion, but how the parents handled it and how the child's development progressed.
- Participation:
  - Reports on the constitution via personal information / descriptions in a written text or just in key points*.
    (It would be nice if there are any records available, but they are not a requirement.)
  - Online survey: https://de.surveymonkey.com/r/QMWNKZN?sm=1Le7Tt3anuc9C4%2f2rlAr8w%3d%3d

* The reports will be treated confidentially and made anonymous. Name and address are needed for the recognition, or either the handwritten report or the signed report.

Thank you for your help!

A.C. Deuber-Gassner

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