Agence Nationale
d'Accréditation et
d'Évaluation en Santé

# BREASTFEEDING

## INITIATION AND CONTINUATION DURING THE FIRST 6 MONTHS OF LIFE

**GUIDELINES**

**MAY 2002**

**Guidelines Department**

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I.S.B.N.

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- *Association des sages-femmes enseignantes françaises*
- *Association nationale des sages-femmes libérales*
- *Association nationale des puéricultrices diplômées d'État*
- *Association pour la promotion de l'expertise et de la recherche en soins infirmiers*
- *Fédération nationale des pédiatres néonatologistes*
- *Regroupement national des sages-femmes occupant un poste d'encadrement*
- *Société française de pédiatrie.*

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# GUIDELINES

## I. INTRODUCTION

These guidelines were produced at the joint request of the French Association for Research into Nursing Care and the French College of Gynaecologists and Obstetricians.

Breastfeeding behaviour has changed very little in France over the last 20 years. About half of all babies are breastfed when they leave the maternity unit. There are no current data on duration of breastfeeding.

These guidelines offer practical advice on promoting and supporting breastfeeding and its continuation for at least 6 months. They do not cover supplements for partial breastfeeding or the introduction of a mixed diet.

### I.1. Definitions and description of breastfeeding

The absence of any definition of breastfeeding in studies makes it difficult to compare strategies for promoting breastfeeding and assessing breastfeeding behaviour in terms of level, practice and duration. The working group proposed the following definitions based on the work of the World Health Organisation (WHO) and the *Interagency Group for Action on Breastfeeding*:

- the term 'breastfeeding' should be reserved for the feeding of a baby or infant with its mother's milk;
- breastfeeding is **exclusive** when the baby or infant receives only breast milk to the exclusion of all other solids or liquids, including water;
- breastfeeding is **partial** when it is combined with any other form of feeding such as formulas, cereals, sweetened or unsweetened water, or any other type of food. Partial breastfeeding is high if the quantity of breast milk consumed provides >80% of the child's requirements, medium if it provides 20-80%, and low if it provides <20%;
- passive feeding (via a cup, spoon or bottle) of expressed breast milk is classed as breastfeeding even though the baby is not feeding at the breast.

In view of the lack of consensus in the literature, these definitions do not cover supplementation with vitamins or mineral salts.

Weaning means stopping breastfeeding completely. Weaning should not be confused with starting to introduce a varied diet.

The following should be included in descriptions of breastfeeding for the use of healthcare professionals when monitoring breastfeeding behaviour and for assessing publications:

- child's age;
- level of breastfeeding (exclusive or partial);
- frequency and duration of feeds;
- other food consumed;
- use of feeding bottles for fluids, including expressed breast milk.

### I.2. Population concerned by the guidelines

These guidelines concern women who have given birth to a healthy child at term. They do not cover practical aspects of breastfeeding twins, other newborns, sick, premature, immature or low birthweight babies.

### I.3. Professionals concerned by the guidelines

Initiation and continuation of breastfeeding time generally require co-ordinated intervention by a number of healthcare professionals.These guidelines therefore concern all the professionals involved during the perinatal period, particularly general practitioners, gynaecologists and obstetricians, paediatricians, midwives, nurses, child carers and child carer auxiliaries. Experienced volunteers can usefully complete the work of care teams particularly by giving support to women who are breastfeeding.

Healthcare professionals applying these guidelines should have received training in the practice and monitoring of breastfeeding during their initial studies, and as part of their continuing professional education. This study does not cover the details of such training.

### I.4. Quality of the literature and grading of guidelines

The conclusions of this study are based mainly on trials carried out in developed countries. Epidemiological evidence for the benefits of breastfeeding is based on observational studies that vary widely, and on the opinions of international experts. There is considerable variation between trials that have measured the efficacy of various interventions on breastfeeding behaviour. They often contain no details of normal management for the population studied or of judgment criteria, and in particular there is no standard definition of breastfeeding or of the level or duration of exclusive breastfeeding.

Guidelines are based on the level of scientific evidence of the supporting studies:

- a grade A guideline is based on evidence established by trials of a high level of evidence (e.g. randomised controlled trials (RCTs) of high power and free of major bias, meta-analyses of RCTs, decision analyses based on properly-conducted studies);
- a grade B guideline is based on presumption of a scientific foundation derived from studies of an intermediate level of evidence (e.g. RCTs of low power, well-conducted non-randomised controlled trials or cohort studies);
- a grade C guideline is based on studies of a lower level of evidence (e.g. case-control studies or case series).

In the absence of scientific evidence, the guidelines are based on agreement among professionals.

## II. BENEFITS AND OPTIMUM DURATION OF EXCLUSIVE BREASTFEEDING

The protective effect of breastfeeding depends on its duration and level of exclusivity. Exclusive breastfeeding for 6 months rather than 3–4 months ensures the optimum development of the infant and should be encouraged (grade B). It protects the baby from

gastrointestinal infections and, to a lesser extent, from ENT and respiratory infections. However, some mothers cannot follow this recommendation or will decide not to do so. Introducing supplementary feeds at 4–6 months of age does not confer any particular benefit (grade B).

# III. CONTRAINDICATIONS TO BREASTFEEDING

There are very few medical contraindications to breastfeeding for either the mother (HIV infection, unless the milk is pasteurised) or baby (congenital metabolic disorder, galactosaemia). Mothers should be encouraged to give up smoking as nicotine passes into the breast milk but, even then, breastfeeding is the best choice.

# IV. PRACTICES THAT ENCOURAGE BREASTFEEDING

## IV.1. Factors that influence the decision to breastfeed

Breastfeeding is more common among women from higher socioeconomic groups who have been educated to a higher level.

Mothers choose to breastfeed because they derive emotional satisfaction and feelings of being useful, physical satisfaction, positive self-image and affirmation of their femininity. Mothers who do not breastfeed justify their decision by the importance they attach to their work, the negative social image of women who breastfeed, their upbringing, and a desire for both partners to share the workload, which is made easier by bottle feeding.

In the few studies that analysed the time when the decision was taken to breast- or bottle-feed, more than 50% of mothers took this decision before they became pregnant.

The working group emphasised the importance of health education and the need to promote the place of breastfeeding in society. National and local media campaigns have no direct impact on breastfeeding behaviour. They may encourage the development of an environment which is supportive of breastfeeding, and they may help to change attitudes. Only repeated television advertising seems to have any effect on a subsequent decision to breastfeed (grade C). The working group recommended that appropriate information be given at school to reinforce the intention to breastfeed.

## IV.2. Interventions before delivery to encourage breastfeeding

Healthcare professionals should broach the subject of how the baby will be fed, with particular emphasis on breastfeeding, whenever they see a mother-to-be. Her experience, knowledge and wishes should be assessed, and she should be given advice about how to start breastfeeding. This prenatal advice should also be directed at the father-to-be who will support the mother.
During the perinatal period, information alone, whether given individually or to a group, has a limited impact on the level of exclusive breastfeeding and on duration of

breastfeeding (grade C). In contrast, structured programmes in hospital or in the community, using a group or individual approach and based on a combination of educational methods (discussion group, childbirth preparation classes, brochures, videos, and self-help booklets), do increase the level of breastfeeding at birth and, in some cases, its continuation (grade C).

Studies show that support from mothers who have breastfed successfully, who have been trained in the practice of breastfeeding and who are supervised, can motivate women who have decided to breastfeed and can help them to breastfeed effectively (grade C). This type of intervention was recommended. In women from low socioeconomic groups or from ethnic minorities, contact during the pre- and postnatal period with experienced mothers improves the establishment of breastfeeding and its duration (grade C).

### IV.3. Preparing the breasts for breastfeeding

Physical breast preparation has not been shown to be beneficial, even in women with inverted or non-protractile nipples.

## V. PROMOTING AND SUPPORTING BREASTFEEDING

### V.1. Change of practice and administrative arrangements in maternity units

All the actions aimed at changing practice, based on all or some of the *"Ten steps to successful breastfeeding"* published by the WHO and UNICEF as part of the *Baby Friendly Hospital Initiative* (Table 1), improve the level of breastfeeding on discharge from the maternity unit and prolong exclusive breastfeeding (grade B). These steps should be implemented in maternity units, but they will require major changes in practice and commitment from all professionals. The working group noted that two maternity units in France have achieved the status of Baby Friendly Hospital.

**Table 1.** Ten steps to successful breastfeeding, after WHO/UNICEF, 1999

| **Ten steps to successful breastfeeding** |
|---|
| - Have a written breastfeeding policy that is regularly communicated to all health care staff |
| - Train all staff in skills necessary to implement this policy |
| - Inform all pregnant women about the benefits and management of breastfeeding |
| - Help mothers initiate breastfeeding within half an hour of birth |
| - Show mothers how to breastfeed and how to sustain lactation, even if they should be separated from their infants |
| - Feed baby infants nothing but breast milk, unless medically indicated |
| - Practice rooming-in which allows mothers and infants to remain together 24 hours a day |
| - Encourage breastfeeding on demand |
| - Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants |
| - Foster the establishment of breastfeeding support groups and refer mothers to them |

## V.2. Early skin to skin contact and suckling

At birth, all babies should be dried, covered and immediately placed on the mother's chest. Mothers who have early contact with their child communicate more easily with their baby, even when they do not breastfeed (grade C). Essential care for the baby should only be given after an extended and uninterrupted period of contact. Care should be given and the baby examined in a way that encourages mother-child contact and breastfeeding, without compromising the safety of the mother and child.

After birth, the first attempt at suckling is encouraged by this intimate contact. Breastfeeding is not compromised if the baby does not suckle immediately after birth (grade B) as babies vary in their behaviour, and not all are ready to suckle at the same time. Epidural analgesia during labour may delay the suckling reflex, but it does not affect initiation of breastfeeding. If the first feed is delayed, the mother should be given extra help and support.

## V.3. Rooming-in of baby and mother

Routine rooming-in of the baby and mother should be encouraged. When mother and baby are close by day and by night, breastfeeding on demand is easier and the use of formulas is reduced (grade C). Rooming-in encourages attachment between mother and child, even if the child is not breastfed. The mother can learn to recognise the signs that show that the baby is ready to suckle. Furniture in maternity units should be suitable for encouraging breastfeeding (larger bed, variable height, comfortable chair).

## V.4. Position of the baby and taking the breast

Correct positioning of the baby (facing the mother) and correct latching-on by the baby (mouth wide open and tongue on the bottle of the mouth) enables effective suckling and optimum transfer of milk, while preventing painful suckling and nipple lesions (Fig. 1). This is a crucial factor in successfully initiating and continuing breastfeeding.

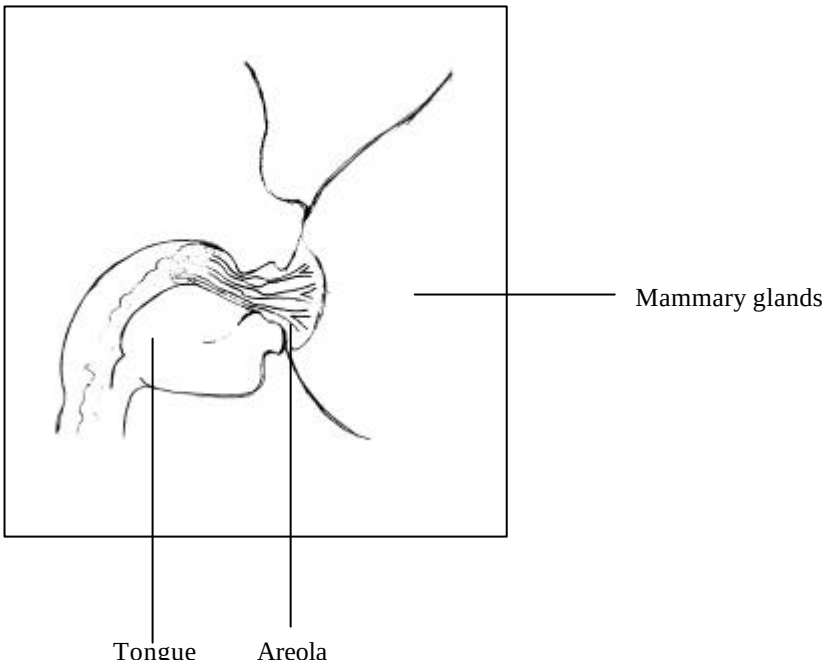


Fig. 1. Position of the baby and attachment to the breast.

The working group recommended that the mother should be helped to try different positions to breastfeed the baby comfortably (sitting, lying down). The mother should learn to recognise the characteristic sucking that means the baby is feeding properly. Healthcare professionals should check that the baby is latching on to the breast correctly and that the baby is feeding properly during the first few attempts to breastfeed.

### V.5. Duration and frequency of feeds

The baby can only regulate its nutritional requirements when breastfed on demand. Most breastfed babies need to feed frequently, including at night (often more than the 6–7 feeds generally recommended), particularly as feeding provides comfort, pleasure, and emotional gratification, besides providing nutrition.

Neither reducing the number and duration of feeds nor setting a minimum interval between two feeds has been shown to confer any benefit. Restricting feeds is associated with earlier abandonment of breastfeeding, with a higher frequency of nipple pain and engorgement and more frequent recourse to supplementary feeds with formula (grade C). Babies vary in the frequency, duration and timing of feeds. This means that it needs to be close to its mother 24 hours a day.

There is no evidence to support advising the mother to offer one breast or both at each feed. However, it is important that the second breast is not offered to the baby until suckling has stopped spontaneously, to prevent engorgement.

## VI. USE OF SUPPLEMENTS

### VI.1. When starting breastfeeding

Exclusive breastfeeding is sufficient to satisfy the nutritional and fluid requirements of a healthy baby born at term if it suckles effectively and on demand. There is no risk of hypoglycaemia, and routine blood glucose testing is not necessary.

There is no need to give supplements (water, sweetened water, formula) to a baby that is exclusively breast-fed. The introduction of supplements disrupts the good progress of breastfeeding and leads to earlier weaning (grade C). Indications for supplements are poorly defined, and any decision to use them should be taken on an individual basis with the mother. Before supplements are given, the quality of latching-on and suckling should be checked.

Ready-to-use bottles of formula should not be made available to mothers in their room. The distribution of gift packs containing formula or promotional material for bottle feeding has a negative impact on exclusive breastfeeding; the practice should be discouraged (grade B). Distribution of free samples of formula on discharge from maternity units is prohibited in France.

### VI.2. As breastfeeding continues

Introduction of supplements at 4–6 months, while breastfeeding continues, leads to a significant risk of gastroenteritis and should be discouraged; it does not confer any benefit for the child's growth and development (grade B).

The working group emphasised that a new international standard for growth is being prepared. It is intended to produce a standard model reflecting the growth of babies and healthy children who have been breastfed by their mother. Other forms of feeding can then be assessed in terms of growth, health and development.

## VII. PREVENTING AND SOLVING BREASTFEEDING PROBLEMS

Most breastfeeding problems can be prevented and should not routinely lead to breastfeeding being abandoned.

### VII.1. Nipple pain and lesions

Tenderness is often inevitable at the start of breastfeeding. Nipple pain and lesions (redness, irritation, cracking) are mostly caused by the baby taking the breast incorrectly causing abnormal friction between the nipple and the baby's tongue, gums, lips or palate. Preventing this pain depends on correct positioning of the baby during feeding. It is recommended that healthcare professionals observe the first feeds and correct the baby's and mother's positions.

Daily hygiene (a shower) is sufficient. Cleaning the nipples before and/or after feeds seems to increase the incidence of nipple pain and needlessly complicates breastfeeding.

Persistence of pain despite the baby taking the breast correctly suggests disease, particularly fungal disease. The nipple should be examined before any treatment is given. In the event of nipple lesions, the use of topical creams, nipple shields or breast cups has not been evaluated sufficiently to be recommended.

### VII.2. Breast engorgement

Breast congestion, expressed as an increase in volume and tension and a sensation of heat occurring in the first few days after birth, should not be confused with engorgement. Physiological engorgement is oedema resulting from capillary and lymphatic stasis and an increase in the volume of milk produced. It indicates the beginning of the second stage of milk production and resolves rapidly if the baby is suckling effectively. It becomes abnormal if it is accompanied by fever, shivering, pain or discomfort as the milk flows. It may develop into mastitis if appropriate measures are not taken quickly.

Mothers should be warned of the possibility of engorgement. They should be taught how to prevent and identify signs of engorgement, and what to do if they occur. Engorgement is prevented by early suckling, with no restriction on frequency and duration. No treatment for engorgement has been proved to be effective, apart from expression of breast milk

(manually or using a breast pump). This reduces milk stasis when the child is unable to latch on, or suckles ineffectively. Milk should be expressed before the baby is fed. Although symptomatic treatment (application of cold or heat) has not shown to be effective, it may be given if it relieves the mother. Restricting fluid intake and bandaging the breasts aggravate the mother's discomfort and were not recommended.

### VII.3. Mastitis

Mastitis is inflammation of the breast that may develop into infection. The clinical signs are usually unilateral, ranging from simple localised inflammation of a breast segment with redness, pain and increased local heat, to the much more severe situation of cellulitis with peau d'orange skin. The upper outer quadrant is the most commonly affected. These local signs may precede or be combined with general signs (fever or flu-like symptoms). Engorgement, cracking, and nipple lesions are risk factors for mastitis.

Treatment consists of:
- looking for predisposing factors, observing feeding and assessing breastfeeding practice;
- ensuring an effective flow of breast milk by continuing breastfeeding, optimising breast drainage (suckling with no restriction of duration of frequency) and extracting the milk, especially on the affected side; there is no risk for a healthy child. If suckling is too painful, milk must be expressed (manually or with a breast pump). Stopping breastfeeding exposes the mother to the risk of breast abscess.

Antibiotics are indicated:
- in the event of infectious mastitis (confirmed if possible by culture of milk and antibiotic susceptibility testing)
- if symptoms are severe from the outset
- if there is a visible nipple lesion
- or if symptoms do not improve in 12–24 hours.

If possible, milk should be cultured to confirm the diagnosis and antibiotic susceptibility tests should be done. Any antibiotics prescribed should be compatible with breastfeeding.
Symptomatic treatment consists of applying heat or cold to the breast, which may be done if it brings the mother relief, and rest. The mother should be warned of the possibility of mastitis and how to deal with it.

### VII.4. Inadequate quantity of breast milk

An anatomical or physiological inability to produce enough milk is very rare. Insufficient milk is usually a result of inappropriate breastfeeding behaviour (ineffective and too infrequent suckling), which reduces the amount of milk the baby receives, and milk leaks at other times. In this event, breastfeeding behaviour should be assessed, any problems identified should be corrected, any failure to thrive of the baby should be assessed, and the mother should be given advice and support to restore her confidence in her competence and ability.

The mother should be warned that she may not produce enough milk, particularly when she goes back to work, and she should be advised how to deal with this, e.g. by temporarily

increasing the frequency and duration of feeds, and by asking healthcare professionals or experienced volunteers for support.

## VIII. BEHAVIOURS WHICH PROMOTE AND SUPPORT CONTINUED BREASTFEEDING

Any form of support offered when the mother leaves the maternity unit reduces the risk of exclusive breastfeeding being discontinued before 6 months (grade B). Support strategies include appropriate advice and encouragement from a professional trained in supervising breastfeeding, in addition to providing normal care after birth. This is more effective than repeated telephone calls in countries with a multi-action support programme (grade B).

Postnatal interventions combined with contact before birth does not confer any better benefit than postnatal support alone (grade B).

## IX. RESUMPTION OF EVERYDAY ACTIVITIES

Resumption of work, activities or sport should not be an obstacle to continuing breastfeeding. Mothers resuming activity should be advised of the various ways in which they can continue to breastfeed, i.e. feeding morning and evening, expressing and storing milk, partial breastfeeding, resuming breastfeeding on demand on days off or at weekends and on holiday. They should be informed of the measures included in French labour law to encourage continuation of breastfeeding (breaks during working hours, reduction of the working day or flexible working hours, appropriate places where milk can be expressed). If problems arise, help should be sought from healthcare professionals or volunteers trained in supervising breastfeeding.

## X. BREASTFEEDING AND NUTRITION FOR THE MOTHER

The principles of a healthy, varied and balanced diet, as recommended during pregnancy, apply equally throughout breastfeeding. There is no evidence for or against any specific dietary rules, including the amount of water drunk every day, apart from caffeine and alcohol. Caffeine diffuses into the breast milk. As it metabolizes slowly in babies, consumption of coffee (or caffeine-rich drinks) should be moderate (2-3 cups a day). The concentration of alcohol in breast milk is similar to concentration in serum. Alcohol consumption should therefore be discouraged. If alcohol is consumed occasionally, the amount should be moderate (1 to 2 glasses).

The beneficial effects of breastfeeding are much greater than any adverse effect from dioxins passing into the breast milk. A breastfed baby is exposed to a dioxin level below the WHO threshold for long-term health in individuals. Mothers are advised to reduce their consumption of animal fats and to avoid losing weight too quickly in order to minimise the risk of exposing the child to dioxins.

## XI. BREASTFEEDING AND MEDICINES

Breastfeeding women can take many medicines without any risk. Before any treatment is prescribed, three questions should be asked:

- Do the symptoms or disease really require treatment?
- Is this the treatment with the lowest risk to a breastfed child, for equivalent levels of efficacy?
- Is the potential risk for the baby greater than the benefit it gains from being breastfed?

When specific instructions are given in the Summary of Product Characteristics (SPC) in a physician's desk reference (e.g. *Vidal* in France), such as "breastfeeding allowed", "breastfeeding contraindicated"), they should be followed.

When instructions given in the SPC are less explicit ("breastfeeding not advised", reference to pharmacokinetic data or no information in the appropriate section), the decision to breastfeed or to continue breastfeeding under treatment should be taken on a case-by-case basis, in cooperation with the mother, after she has been informed of any risk involved. The pharmacological activity of the drug and its kinetic profile should be taken into account, together with the drug's side effects, the baby's age, level of breastfeeding, possibility of supervising and monitoring the baby, and mother's level of understanding.

If the baby has unexplained symptoms, the mother should be asked whether she is taking any medicines, being careful not to exclude self-medication.

Care should be taken not to overlook interactions between medicines that the child is receiving through the milk and those given to the child directly, as well as medicines applied to the breast itself.

It may be useful to look at the following websites and reference books:

- AFSSAPS (www.afssaps.sante.fr) (conclusions of the "Reproduction, pregnancy and breastfeeding" working group, which were uploaded in 2003; not all products have yet been evaluated)
- the Food and Drug Administration (www.fda.gov)
- the EMEA via the European Pharmaceutical Regulatory Sector portal (www.eudra.org)
- references in specialist paid-for access databases such as TERIS (Teratogen Information System www.depts.washington.edu) and REPROTOX (Reproductive Toxicology Center www.reprotox.org)
- T.W. Hale's "Medications and mothers' milk".

However, the working group highlighted the problems of accessing foreign Internet sites.

## XII. BREASTFEEDING AND CONTRACEPTION

The couple should be given information about fertility during breastfeeding so that they can choose the most appropriate method of birth control.

- The *Lactational Amenorrhoea Method (LAM)* is a natural method for the first 6 months or at least until the return of menstruation. It assumes exclusive breastfeeding on demand day

and night and continued amenorrhoea, as suckling leads to hyperprolactinaemia. When this method is used, the pregnancy rate for 6 months of breastfeeding is less than 2%. If the conditions for the *LAM* method are not met or if the woman so wishes, another form of contraception should be advised (postnatal consultation recommended during the first 6 weeks postpartum).

- *Hormonal contraception* should not be started before six weeks postpartum, before stage II lactogenesis has occurred (milk coming in).
  - Combined oral contraceptives are not recommended as they can reduce milk production.
  - Progestogen-only pills ("the minipill"), injectable progestogens and progestogen implants can be used without any problem for either breastfeeding or the baby.
- *An intrauterine device* may be used, with no special risk, from 4 weeks postpartum, even if periods have not yet returned.
- *Condoms and spermicides* can be used provided it is understood that they are less effective than contraceptives.

## XIII. CONCLUSIONS AND FUTURE RESEARCH

The working group recommended the implementation of most of the administrative measures proposed, such as extending postnatal leave, as they encourage continued breastfeeding.

After analysing the articles used for the study, the working group proposed the following studies and lines of research:

- at present, breastfeeding levels are those measured during the stay in the maternity unit or during the immediate postpartum period. Data on duration of breastfeeding are needed;
- studies to measure the efficacy of different interventions on breastfeeding behaviour should describe in precise terms both the type of intervention and the normal management of the population studied, and they should state the judgment criteria, particularly the definition of breastfeeding used, level of exclusive breastfeeding, and its duration;
- normal practices for monitoring and care of babies in the delivery room should be defined to encourage early breastfeeding while still ensuring care essential to the safety of both mother and child;
- breastfeeding problems (pain and nipple lesions, breast engorgement and mastitis) need to be better defined, and their prevention and treatment evaluated.