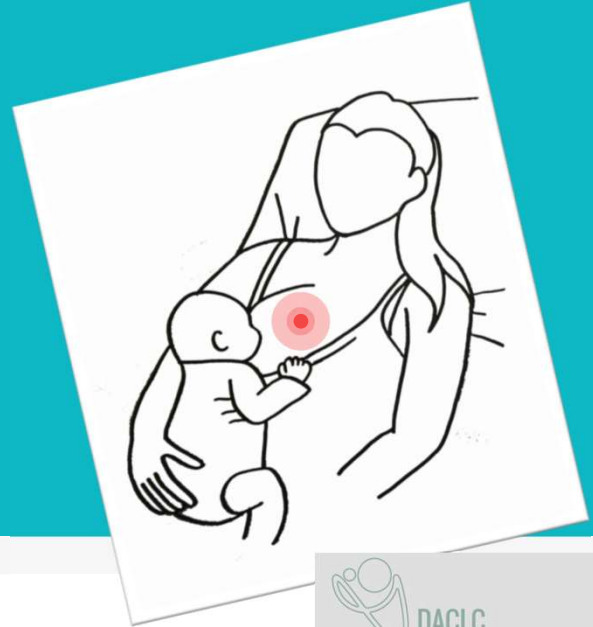


# Management of Chronic Breast Pain from an Ecosystemic Approach



CARMELA BAEZA, MD, IBCLC  
CENTRO RAICES, SPAIN

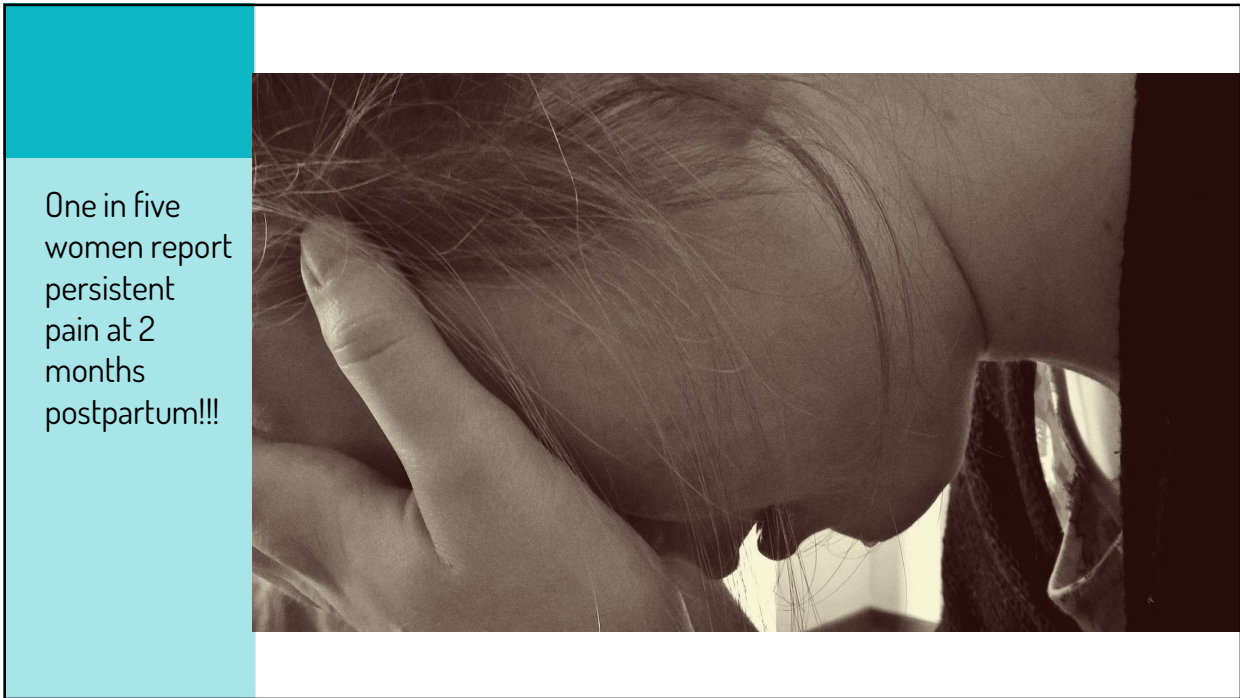


## Disclosure

- ▶ I gladly work with and honor everyone who seeks my services.
- ▶ In this talk I will speak of breasts, since breast (mammary tissue) is where mastalgia occurs, and of women, because all the studies I will refer are done on this population.



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## DEFINITIONS

### CHRONIC

Continuing or occurring again and again for a long time.

How long?

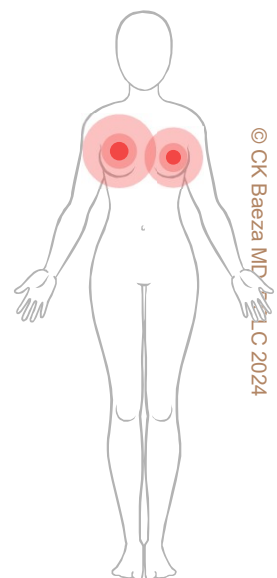
### BREAST

Lactating breast.

Other chest or nearby structures?

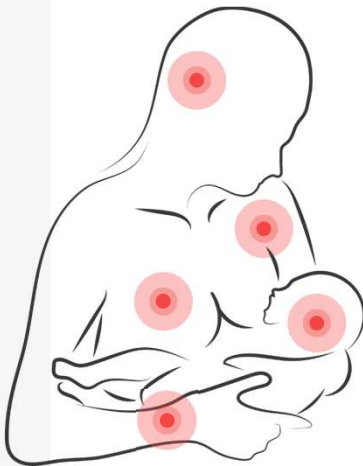
### PAIN

A basic bodily sensation induced by a noxious stimulus, received by nerve endings, characterized by physical discomfort, and typically leading to evasive action.



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## DEFINITIONS



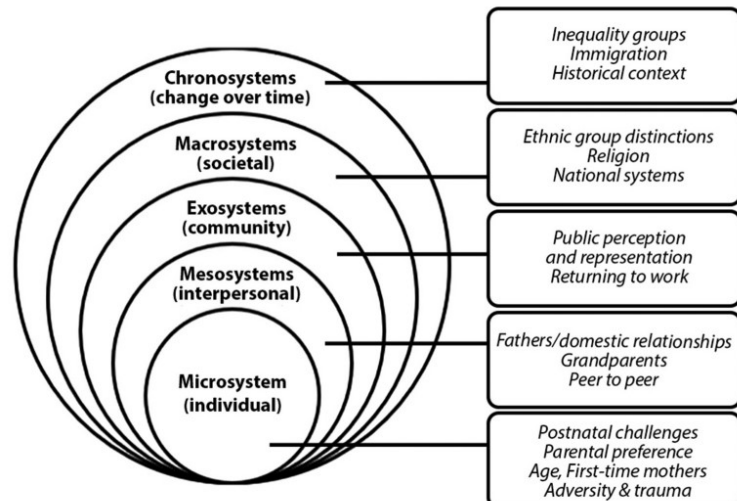
### ECOSYSTEMIC

belief that the parts of something are intimately interconnected and explicable only by reference to **the whole**.

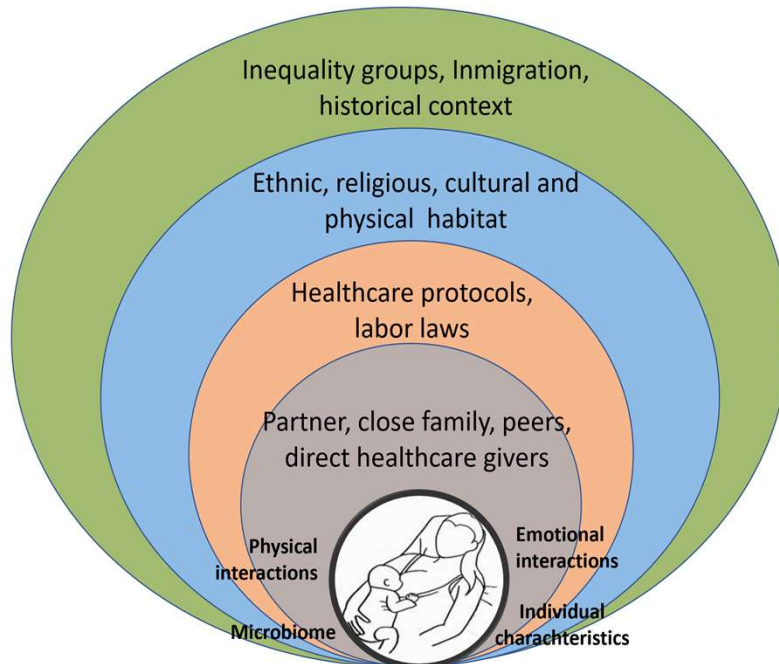


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Bronfenbrenner's **ecological systems theory** has been applied as a theoretical framework for examining the contextual layers of enablers and barriers to continued breastfeeding – also applicable to breastfeeding pain.



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Ibone Olza and Isabel Fernández del Castillo

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Olza et al 2021

*Chronic pain during breastfeeding is not just a sore breast... it is a woman and an infant, their physical and emotional issues, and the way they come together in that particular breastfeeding relationship in their environment.*



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Think big...

“Just the breast” approaches usually do not work for chronic breast pain during breastfeeding.

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# The Microsystem

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# Helpful tools



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Article

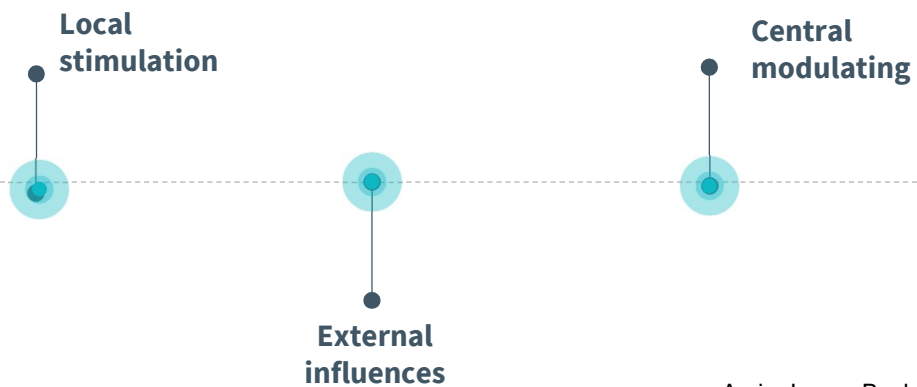
## Nipple pain associated with breastfeeding: Incorporating current neurophysiology into clinical reasoning

March 2015 · Australian family physician 44(3):127-132

Lisa Amir · Lester E Jones · Miranda Buck

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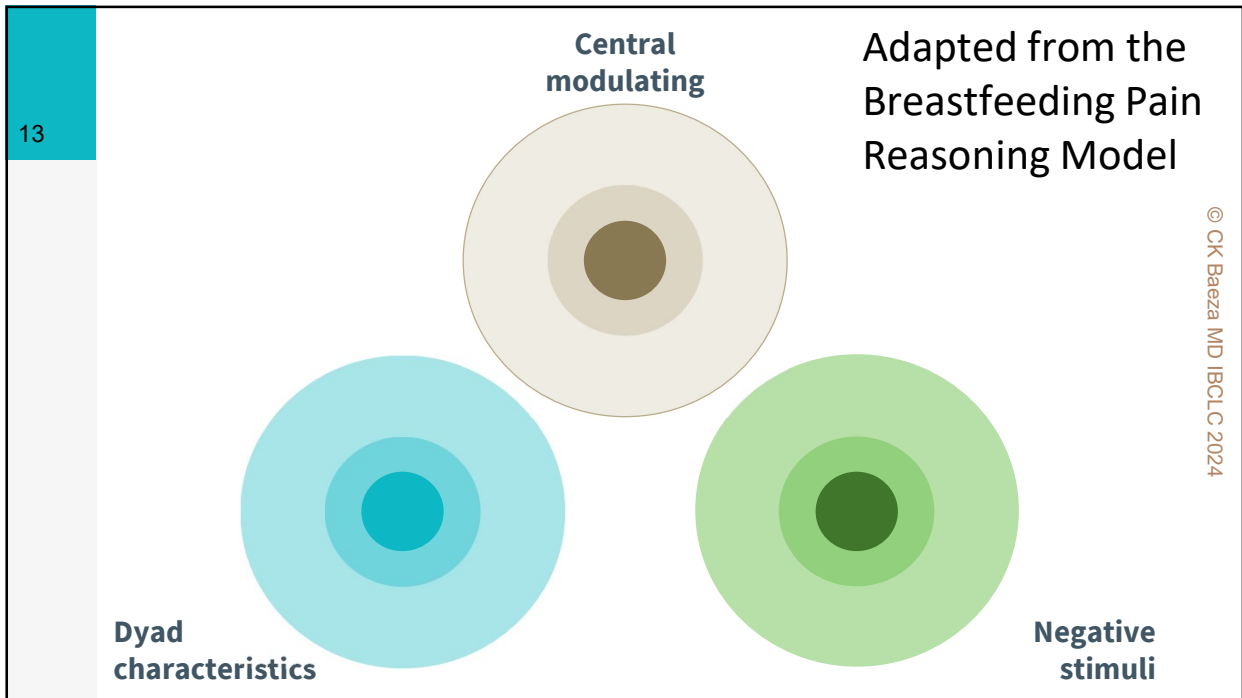
“To outline an integrated approach to breastfeeding pain assessment that seeks to enhance current practice. Our clinical reasoning model resolves the complexity of pain into three categories:



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Amir, Jones, Buck 2015





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**PRACTICE POINTER**

**Identifying the cause of breast and nipple pain during lactation**

Lisa H Amir,<sup>1,2</sup> Carmela Baeza,<sup>3</sup> Jayne R Charlamb,<sup>4</sup> Wendy Jones<sup>5</sup>

Cite this as: *BMJ* 2021;374:n1628  
<http://dx.doi.org/10.1136/bmj.n1628>  
 Published: 13 July 2021

**Mother**

**Pain history**

- Character: aching; sharp; burning
- Severity and duration
- Location: nipple/breast: uni/bilateral; superficial/deep; breast/non breast structure; dermatomal
- Associations/onset/timeline/response to prior intervention

**Other history**

- Recent: fever; malaise; medications (oral and topical); breast lumps or redness; nipple appearance (skin damage, rash, colour change)
- Medical conditions: diabetes; thyroid disease; immune dysfunction; irritable bowel; migraines; fibromyalgia; Raynaud's disease; mental health issues
- Surgery; trauma
- Infections: MRSA; candidiasis

**Examination**

- General appearance; temperature
- Visual inspection of nipple: colour; shape; wounds; white spot; blisters/vesicles; crusting
- Visual inspection of breast/chest: rash; erythema; peau d'orange; engorgement
- Palpation: nipple, breast or chest wall tenderness; lump/mass; firmness

**Mother infant dyad**

**Pregnancy and birth**

- Complications; infections; antibiotics; diabetes; birth method; anaesthesia/analgesia

**Current feeding practices**

- Frequency of breastfeeds; one or both breasts; duration of breastfeeds
- Use of breast pump; type; frequency; duration
- Supplementary feeds: expressed milk; infant formula; other?

**Feeding assessment**

- Positioning of mother and infant's bodies; ease of obtaining latch
- Feed ended by mother or baby; appearance of nipple postfeed (is it misshapen?)

**Mother's behaviour**

- Expressions of comfort or pain; body tension; interaction with infant

**Infant's behaviour**

- Signs of satiety; dissatisfied; struggling

**Infant**

**History**

- Congenital/perinatal issues; gestation; growth (weight gain); illness; nappy rash; teething; nappy output

**Examination**

- Visual inspection: general wellbeing; symmetry of face and neck; nappy area
- Oral examination: thrush; tongue mobility

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Adaptation of a clinical reasoning model for use in inflammatory conditions of the lactating breast: a retrospective mixed-methods study. *Peer J.* 2022; Heron et al.

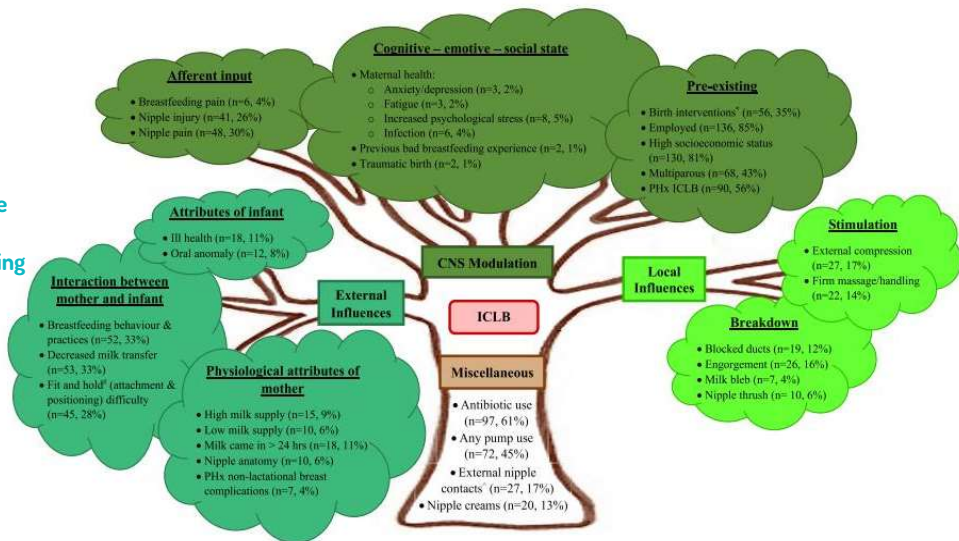
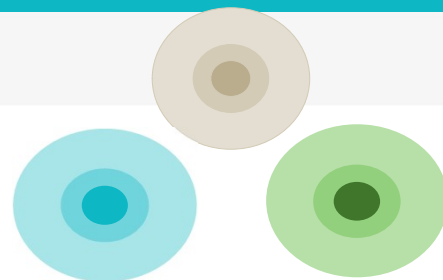


Figure 2 ICLB reasoning model. Adapted from: 'Pain and Movement Reasoning Model' (Jones & O'Shaughnessy, 2014) and 'Breastfeeding Pain Reasoning Model' (Amir, Jones & Buck, 2015). PHx = Past History. \*Encompasses caesarean mode of delivery, induction, and preterm birth (defined as <37 weeks gestation). <sup>‡</sup>Fit and hold' identified from (Douglas & Keogh, 2017). <sup>§</sup>Encompasses nipple dressings/patches and nipple shields. Full-size DOI: 10.7717/peerj.13627/fig-2

# 1. NEGATIVE STIMULI





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### 1. NEGATIVE STIMULI

**Negative sensation**

**Danger**

Mechanical stimuli

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### 1. NEGATIVE STIMULI

**Inflammatory response: IL1, IL6, If  $\gamma$**

**Peripheral nociceptors**

Mechanical stimuli

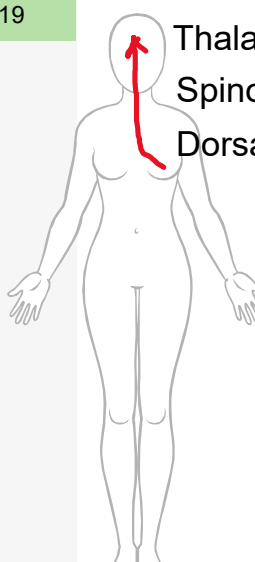
Biochemical stimuli

Skin breakdown

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## 1. NEGATIVE STIMULI



Thalamus  
Spinothalamic tract  
Dorsal horn of the spinal cord

Sending complex danger signals to the brain. With this information, and other input, the brain will say PAIN.



- Mechanical stimuli
- Biochemical stimuli
- Skin breakdown

Information from NIPPLE problem: feeling of NIPPLE pain	Painful latch or pump (trauma) Vasospasm Skin conditions
Information from BREAST problem: feeling of BREAST pain	Dilated ducts, obstruction, engorgement (Inadequate draining of breast bc of latch/suck issue, inadequate pump Infection (mastitis, abscess)
Information from NIPPLE problem: feeling of BREAST pain	Referred neuropathic pain
Information from CHEST problem: feeling of BREAST pain	Muscle pain (unergonomic positions) Joint inflammation (Tietze syndrome)

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# 2. DYAD CHARACTERISTICS

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## 2. DYAD CHARACTERISTICS

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**Nipple:** shape, size, elasticity, scars, previous breastfeeding...  
**Breast:** shape, size, previous conditions, surgery...

Mother attributes  
Infant attributes  
Dyad interaction  
Miscellany



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## 2. DYAD CHARACTERISTICS

Mother attributes  
Infant attributes  
Dyad interaction  
Miscellany

**Anatomy:** oral, facial, body  
**Functional capacity:** breathe-swallow-suck capacity

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## 2. DYAD CHARACTERISTICS

Mother attributes  
Infant attributes  
Dyad interaction  
Miscellany

Position, latch  
Relationship, bond  
Time together

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## 2. DYAD CHARACTERISTICS

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Mother attributes

Infant attributes

Dyad interaction

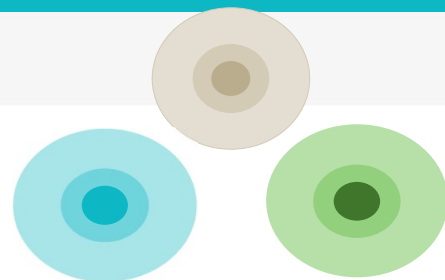
Miscellany

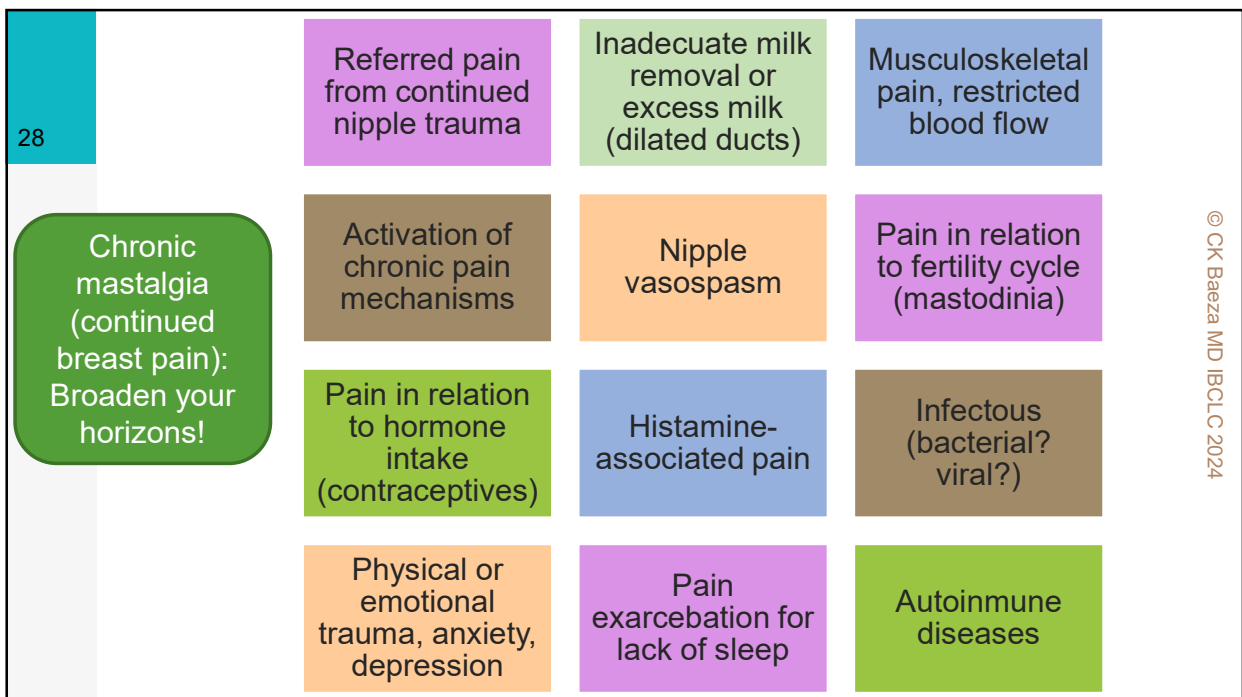
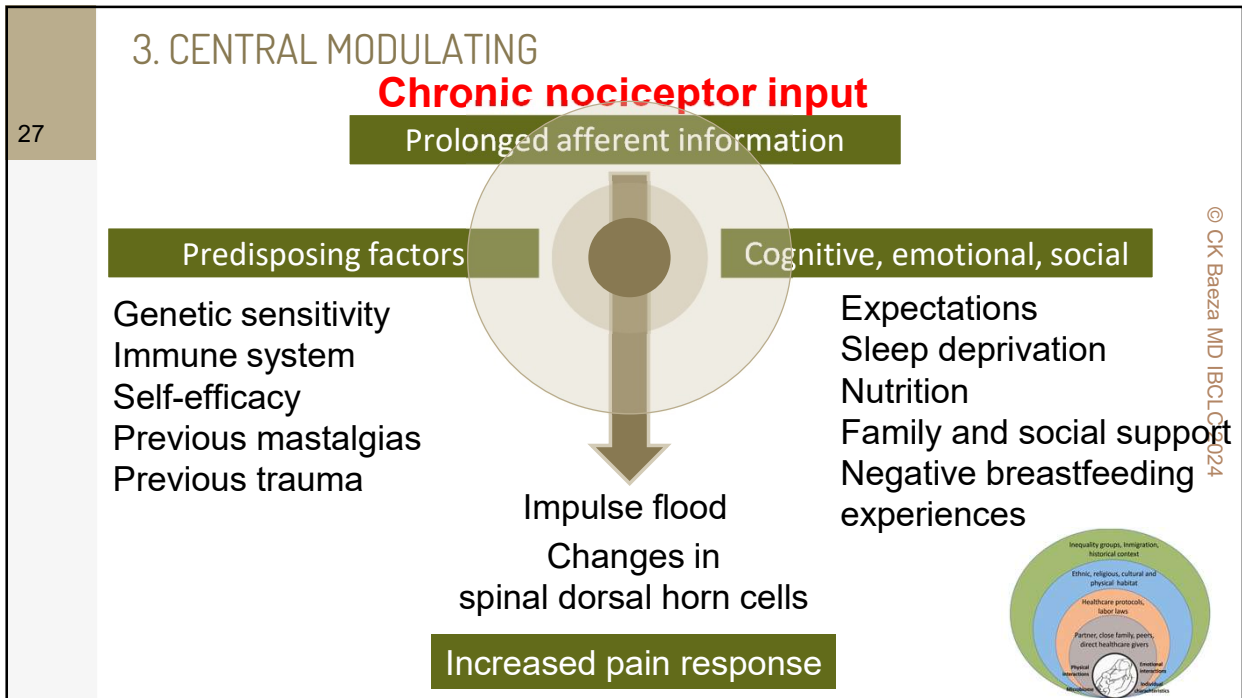
Pump, ointments, breastfeeding aids and gadgets, where feeds take place...

## 3. CENTRAL MODULATING

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### Emotionally...



I feel that if I give up, I am not a good mother.

I did not expect it to be so bad. It's worse than giving birth.

It's going to hurt now, and two hours from now, and three times tonight... I feel hopeless.

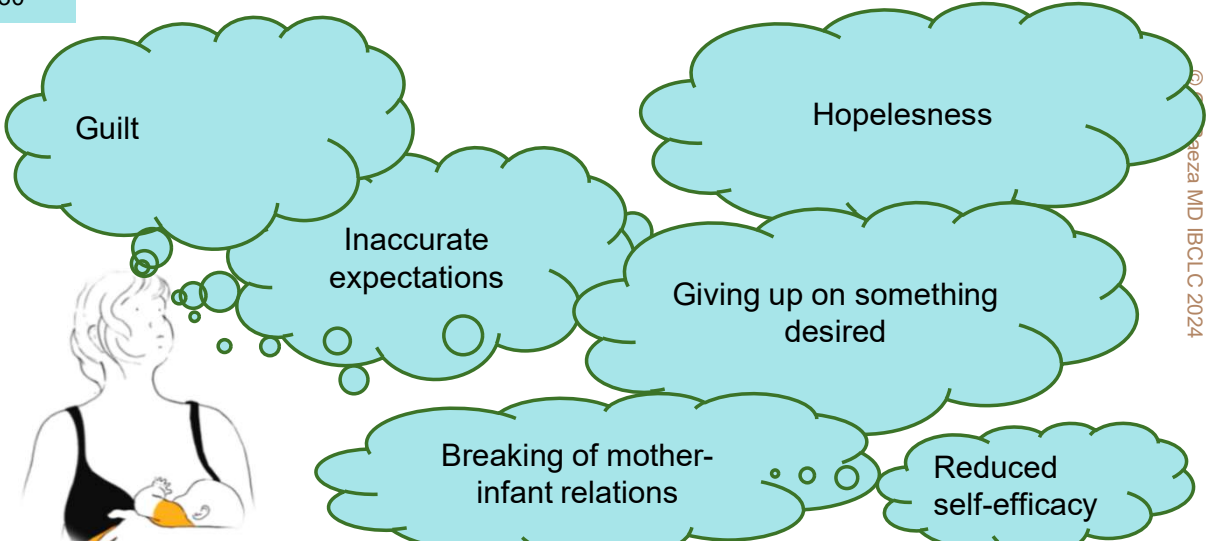
I could stand it while my baby gained weight... but if she's not, what's the point?

I was afraid of my baby before... but now I'm very angry at him. I feel terrible.

I am doing this wrong

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Guilt

Inaccurate expectations

Hopelessness

Giving up on something desired

Breaking of mother-infant relations

Reduced self-efficacy

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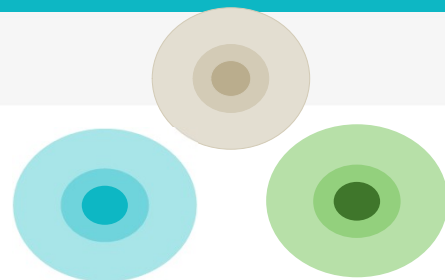
- ▶ Deep psycho-emotional connotations
- ▶ Profound impact during a critical period of life...
- ▶ For both the mother and the infant!!



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## 4. There is the baby...


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### Negative stimuli

- Uncomfortable breastfeeding positions
- Hunger
- Discomfort/frustration caused by parent's instinctive self-protective behavior
  - Interrupted feeds
  - Frequent unlatching
- Treatments (therapies, surgeries, post-op...)



How is baby when mother is in pain?

### Central modulation

- Predisposing factors
  - Intrauterine experience
  - Genetic resilience
- Sources of
  - Cognitive, social, emotional
  - Fear of separation
  - Fear of hunger, frustration at inability to feed.
- Duration of afferent input

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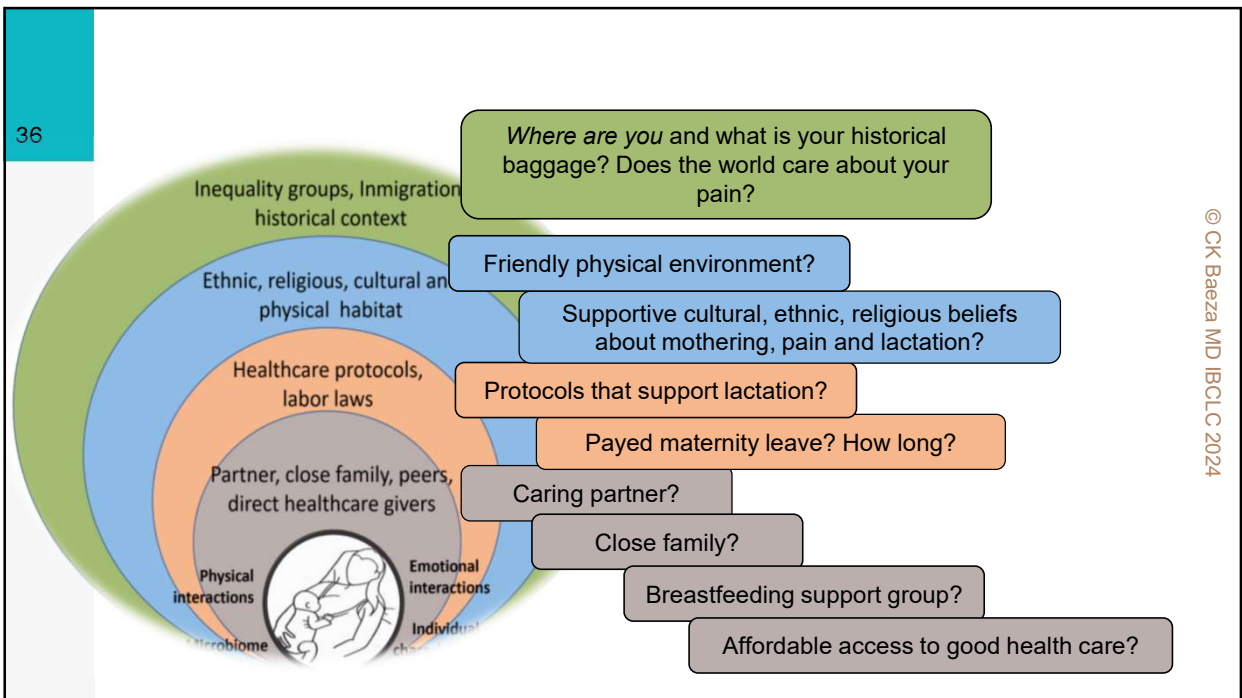


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# 5. And there is the ECOSYSTEM

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## CONCLUSIONS



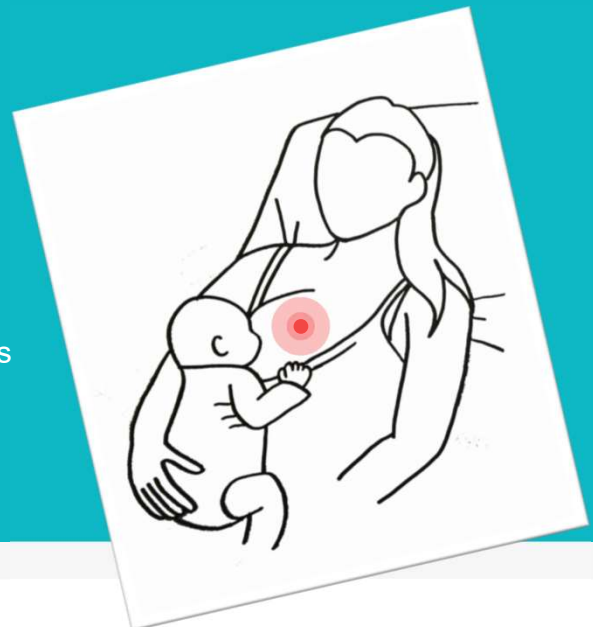
- ▶ Take stock of the dyad's ecosystem
- ▶ Manage mother's painful experience
- ▶ Procure positive feeding experiences for the infant
- ▶ Protect the relationship

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Thank you!  
¡Gracias!

I'll be glad to answer any more questions

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